DRAFT FINAL
LOW LEVEL RADIATION BURIAL SITE
WASTE CHARACTERIZATION SURVEY

United States Department of Agriculture

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ACRONYMS AND ABBREVIATIONS

AEC	Atomic Energy Commission
AFSC	US Army Field Support Command
ARS	Agricultural Research Service
BARC	Beltsville Agricultural Research Center
C-14	Carbon-14
CABRERA	Cabrera Services Inc
CFR	Code of Federal Regulations
Ci	Curie
Cl-36	Chlorine-36
DAW	Dry Active Wastes
EDD	Electronic Data Deliverable
EE/CA	Engineering Evaluation/Cost Analysis
EM	Electromagnetic
EPA	U.S Environmental Protection Agency
FIDLER	Field Instrument for the Detection of Low-Energy Radiation
ft	foot
GM	Geiger Muller
GPR	Ground Penetrating Radar
GPS	Global Positioning System
H-3	Tritium
HEPA	High Efficiency Particulate Air
IDW	Investigation Derived Waste
LLRBS	Low-Level Radiation Burial Site
LLRW	Low-Level Radioactive Waste
MAG	Magnetometry or magnetometer
MCL	Maximum Contaminant Level
MDE	Maryland Department of the Environment
mg/kg	Milligrams per kilogram
mg/m^3	Milligrams per cubic meter
MSL	Mean Sea Level
NaI	Sodium Iodide
Ni-63	Nickel-63
NRC	Nuclear Regulatory Commission
OSHA	Occupational Safety and Health Administration
PA	Preliminary Assessment
pCi/g	Pico-Curies per gram
pCi/L	Pico-Curies per liter
PID	Photo Ionization Detector
PPE	Personal Protective Equipment
QA	Quality Assurance
QC	Quality Control
RBC	Risk-Based Concentration
RI	Remedial Investigation
SDG	Sample Delivery Group
SI	Site Inspection
Sr-90	Strontium-90
SVOC	Semi Volatile Organic Compound
TC	Terrain Conductivity
TCLP	Toxicity Characteristic Leaching Procedure
USDA	United States Department of Agriculture
VOC	Volatile Organic Compounds

1.0 EXECUTIVE SUMMARY

Cabrera Services, Inc. (CABRERA) has conducted a Waste Characterization Survey (WCS) of the Low Level Radioactive Waste Burial Site (LLRBS) at the Henry A. Wallace Beltsville Agricultural Research Center (BARC), in Beltsville, Maryland. The work was conducted for the United States Department of Agriculture, Agricultural Research Service under contract with the U.S. Army Field Support Command (AFSC). The research center is a 6,600 acre facility, where research on plant and animal sciences lead to generation of low level radioactive wastes that were disposed in an NRC-licensed on site disposal pit.

The period of use of the LLRBS was from 1949 until 1987. The LLRBS consists of two contiguous fields. The North Field included approximately 39 pits containing low level radioactive wastes. The South Field does not appear to have been used. The pits were believed to be about 10 ft wide by 12 ft long by 10 ft deep with 5 feet of clean cover.

The WCS includes geophysical surveys to map the size and location of burial cells; gamma and beta walkover surveys; groundwater sampling to assess contaminant migration away from the disposal area; and excavation, characterization and packaging of waste materials at 10% of the pits for eventual off-site disposal.

The disposal site is situated in the Atlantic Coastal Plain Province, which is characterized by gently rolling hills and broad valleys. Topography at the disposal site slopes to the east and southeast at 10 to 15 percent toward a small stream whose waters eventually flow into the Anacostia River.

The geology consists, from youngest to oldest, of Quaternary alluvium and terrace deposits underlain by Lower Cretaceous unconsolidated sediments of the Patuxent Formation. Beneath the Patuxent Formation is a saprolite layer which overlies the crystalline bedrock of the Baltimore Mafic Complex. The terrace deposits are about 20 feet thick at LLRBS, while the Patuxent Formation is about 25 feet thick The Patuxent Formation consists of well-sorted fine sand with gravel lenses and minor clay lenses in this area. These sediments dip to the southeast, parallel to the regional groundwater flow. Groundwater is approximately 25 feet deep, in the Patuxent Aquifer, and the depth to bedrock is about 55 feet.

Field activities for the WCS began in November 2005, and the final shipment of waste was made in March 2007. Geophysical surveys were completed in December 2005, and consisted of electromagnetic profiling and ground-penetrating radar. Geophysics could not precisely delineate the boundaries of individual pits, although it was useful in mapping the outside boundaries of the disposal area. Geophysics has demonstrated that no pits had been created in the South Field. Each of the fields is about three-quarters of an acre in size.

A gamma walkover survey was completed over the site, and a small reference area was established for comparison purposes. A beta walkover survey was also completed over selected portions of the site.

Excavation of the four burial pits (Pits 1, 14, 26 and 34) took place during the spring and summer of 2006. Excavation progressed with a combination of a hydraulic excavator and hand digging.

Lay down areas lined with 10 mil polyethylene were established near each pit, where cover materials were segregated from disposed waste. Wastes were bagged and transported to a Waste Segregation Building located in the southern portion of the North Field, where the various waste streams were segregated (including liquids in containers, dry solid waste, scintillation vials, sealed sources, animal remains, and soil), then drummed for eventual transport and disposal off site. Handheld radiological instruments were used continuously during the segregation process.

After excavation activities had exposed native soil on the walls and floor of each pit, soil samples were collected from five locations and two depths (10 samples) to characterize the soil located immediately below the waste. The pit was then backfilled, and a Geoprobe collected continuous soil core starting at the floor of the pit, and advancing as deep as the water table, where water samples were collected (filtered and unfiltered).

The gamma walkover surveys did not detect anything of significance, except for three radioactive rock specimens (natural uranium and thorium ore) that are believed to have been discarded from someone's personal rock collection, as they were not used in research by the USDA. Beta surveys did not indicate any activity exceeding background levels.

In the Reference Area, located southwest of the North Field and established in an area believed not to have been affected by disposal activities, arsenic was detected in all 16 soil samples at concentrations exceeding the EPA Region 3 Risk Based Concentration (RBC). Lead-210 and Radium-226 were detected in 25% of soil samples at levels slightly exceeding NRC guidelines. Two permanent monitoring wells designated as background wells did not have any non-radiological analytes that exceeded Region 3 drinking-water RBCs. Of radiological analytes, only tritium was detected, but at concentrations well below the USEPA Maximum Concentration Level (MCL).

In the pits, the only recurring non-radiological analyte in soil was arsenic, occasionally at concentrations of up to 30 times the Region 3 RBC. Non-radiological analytes in soil included Lead-210, Carbon-14, Radium-226, and Thorium-230, but rarely at concentrations exceeding NRC guidelines. Non-radiological analytes in groundwater in temporary wells beneath the pits included arsenic, chromium and vanadium (TAL metals), and benzene, chloroform, and trichloroethylene(RCRA VOCs). Arsenic and chloroform occurred at concentrations of from 70 to more than 2,000 times their respective RBCs. Radiological analytes in groundwater include Radium-228, Thorium-230, but rarely at concentrations exceeding about 2 times their respective RBCs.

The following quantities of waste were generated during the WCS: 147 drums of soil; 49 drums of solid debris; 10 drums of soil mixed with waste; 17 drums of liquid scintillation vials; 7 fiber boxes of animal remains; and 825 gallons of waste water that was pumped from Pits 26 and 34 (which was leachate). The total activity of all excavated materials, based on composite sampling results, is 7.49E-03 Curies.

Twenty eight (28) drums of liquid scintillation vials, two (2) drums of bulked liquids, and 3 radioactive sources/devices have been shipped from the site for processing and disposal. Cost

effective disposal options are being investigated for the remaining wastes. It is anticipated that the waste will be disposed at US Ecology's Idaho site.

2.0 INTRODUCTION

The U.S. Army Field Support Command (AFSC) has contracted Cabrera Services, Inc. (CABRERA) to conduct a Characterization Survey in support of site decommissioning activities of a Low Level Radiation Burial Site (LLRBS). The work is being conducted for the United States Department of Agriculture (USDA), Agricultural Research Service (ARS), Henry A. Wallace Beltsville Agricultural Research Center (BARC), in Beltsville, Maryland. Hereafter, the BARC Low Level Radiation Burial Site will be referred to as the LLRBS or the Site (Figure 1).

This field investigation was conducted in accordance with planning documents that included a Site Safety and Health Plan (CABRERA, 2006); a Field Logistics Plan (CABRERA, 2005a); a Sediment and Erosion Control Plan, required by the Maryland Department of the Environment (MDE) (CABRERA, 2005b); and a Characterization Survey Work Plan (CABRERA, 2004). Tasks defined in the work plan include the following:

- Geophysical surveys in the North Field to delineate the footprint of individual burial cells, and in the South Field to confirm the widely-held belief that no burials have taken place there
- Gamma and beta walkover surveys to map potential near-surface radiological materials
- Groundwater sampling and analysis of selected wells around the Site to assess migration of contaminants away from source materials
- Excavation, radiological characterization, segregation, and packaging of soils and waste materials in 4 of the 50 documented waste cells (one of the cells designated during this field program was extended to an adjacent area prior to completion of the field program)
- Sampling surface and subsurface soil along the floor of each excavation (from 0 to 2 ft below the excavation floor), and installing a temporary well in each pit to sample groundwater
- Backfilling all excavations with clean fill and restoring the site to pre-characterization survey conditions

3.0 SITE DESCRIPTION

3.1 Project Location

The BARC Superfund site comprises 6,600-acre parcel of property in northwestern Prince George's County near Beltsville, Maryland (Figure 1). In 1910, the USDA purchased a 475-acre farm in order to conduct agricultural research. The facility expanded to a maximum of 12,000 acres and is now at its present size of 6,600 acres. Research at BARC involves soil, water, and air conservation, plant sciences, animal sciences, commodity conversion and delivery, and human nutrition. In addition, research is done on pesticides, herbicides, insecticides, and fungicides. On-site laboratories are equipped with numerous chemicals, solvents, cleaners, and low-level radioactive chemicals for laboratory studies. Solid wastes generated at BARC included manure, waste bedding, animal carcasses, vegetative cuttings, wood, paper, scrap metal, laboratory waste, construction debris, and pesticide-, herbicide-, insecticide-, and fungicide-derived wastes.

The LLRBS is located approximately one-quarter mile north of the Cherry Hill Road overpass of the Capital Beltway (I95/495) in Beltsville, Maryland (Figure 1), northeast of Washington D.C. Primary access is through BARC via US Route 1/Baltimore Avenue. Secondary access to the LLRBS is a gravel road that leads from Cherry Hill Road to a cluster of BARC maintenance buildings and continues along the western side of the BARC. This access is fenced and locked.

3.2 Disposal Site Background

The LLRBS was established on June 23, 1949, and was used for the disposal of low-level radioactive waste (LLRW) until 1987. The LLRBS is permitted under a USDA-wide license originally issued by the Atomic Energy Commission (AEC), and later by the Nuclear Regulatory Commission (NRC). Records indicate the last liquid burial at the LLRBS was on September 17, 1984. From September 24, 1985 until disposal activities ended in 1987, all burials were dry solids packed in 55-gallon drums (ENTECH, 2000).

The LLRBS is made up of a total of 50 designated waste burial pits, of which, only 39 were reportedly used. Figure 2 presents two conflicting historical maps depicting the pit locations, indicating why there is uncertainty in both the location and contents of the burial pits. The pits are reported to be approximately 10 ft wide by 12 ft long by 10 ft deep and are separated approximately 6 ft horizontally from one another. Each pit was reportedly backfilled to surface grade with at least 5 ft of clean fill. Two contiguous fenced fields, the North Field and the South Field, make up the LLRBS, each of which is approximately 150 ft by 200 ft. The South Field was reportedly never used for disposal of any waste materials, although individual pits had been designated (Apex, 1993). Buried materials include radioactive isotopes and scintillation fluids (isotopes and organic fluids); contaminated metal, glass, and plastic objects; contaminated animal carcasses; and animal wastes. USDA records do not reveal the types of organic liquids contained in the scintillation vials, nor is any indication of volume included. Typically, organic liquids associated with scintillation fluids include the aromatic solvents; toluene and xylenes. Types of containers disposed, according to files, are cardboard boxes of 1 to 4 cubic ft, 1- to 5-gallon containers for liquids, plastic milk jugs, plastic carboys, solvent bottles, fiberboard drums, and 55-gallon drums. Liquid containers were placed in cardboard boxes, usually four to a box.

No known records exist listing the specific types of containers used for the early burials. Records from the 1980s indicate contaminated, non-flammable glass and plastic (vials, pipettes,

needles, scalpels, etc.) were buried in cardboard boxes. Animal carcasses, bedding, and excreta were sealed in polyethylene bags and placed in boxes. Liquid wastes were packed in plastic containers and placed in cardboard boxes. Animal remains, generally contaminated with tritium (H-3) and carbon-14 (C-14), were routinely incinerated beginning in the early 1980s, in one of two incinerators located at the BARC. It is possible that incinerator ash, which tested positive for radioactivity, could have been sent to the LLRBS; however, no known records exist regarding ash disposal.

3.3 Physical Setting

The BARC facility is situated in the Atlantic Coastal Plain Province, and in this area, it can be described as gently rolling with broad valleys. The elevation varies from about 60 ft above mean sea level (MSL) where Indian Creek flows beneath Interstate 95/495 to 268 ft MSL in the extreme western portion of the facility on Cherry Hill Road near the LLRBS. Topography slopes to the east and southeast at 10 to 15 percent toward the nearest perennial stream, the Little Paint Branch, located approximately 2,000 ft east of the site boundary. Downstream, Little Paint Branch feeds into Paint Branch, 1.4 miles to the south, eventually draining into the Anacostia River. There are extensive wooded tracts in the central and eastern portions of BARC, while open agricultural fields are prevalent in the western section.

There are many perennial and intermittent streams, wetlands, and surface water bodies within BARC boundaries. Drainage features include Paint Branch and Little Paint Branch, which flow from north to south and are located in the western portion of the facility. Indian Creek also flows north to south parallel to Edmonston Road; and Beaver Dam Creek flows east to west in the south-central portion of BARC. All of these drainage features eventually flow southward into the Anacostia River (approximately 6 miles from the facility), which empties into the Potomac River at Washington, D.C.

There are no wetlands adjacent to LLRBS. The nearest wetlands are approximately 2300 feet to the east, on the banks of the Little Paint Branch.

3.4 Geology

The USDA Natural Resources Conservation Service soils maps for Prince George's County describe numerous soil associations and groups of soils within the facility. Many of these units are described as comprising silty loam, loamy sand, and sandy loam of variable slope, drainage characteristics, and susceptibility to erosion. Surface soils are underlain by highly variable deposits ranging from gravels to clays, some as old as Cretaceous.

The geology at BARC consists of Lower Cretaceous sediments of the Potomac Group, which consists of the Patuxent, the Arundel, and the Patapsco Formations, in decreasing age. The Patuxent and Patapsco Formations are composed primarily of sand and gravel, and comprise the most prevalent water bearing aquifers in Prince George's County. The Arundel is mostly clay, and creates artesian conditions in the underlying Patuxent Formation in some locations. Recharge of the Patuxent Formation occurs where it outcrops in the western portions of BARC. This wedge of sediments made up of the Patuxent, Arundel, and Patapsco Formations dips to the southeast, parallel to the regional groundwater flow (Apex, 1991).

At the LLRBS, the geology consists, from youngest to oldest, of Quaternary alluvium and terrace deposits underlain by Lower Cretaceous unconsolidated sediments of the Patuxent Formation.

Beneath the Patuxent Formation is a saprolite layer which overlies the crystalline bedrock of the Baltimore Mafic Complex.. Soil textures beneath the site are well-sorted sand and gravel with minor clay lenses. This sand and gravel sequence overlies several feet of clay, below which are the igneous and metamorphic rocks of the Piedmont Province.

3.5 Hydrogeology

The site lies within the outcrop area of the Patuxent Formation, a part of the Potomac Group. The depth to groundwater is approximately 25 feet and the depth to bedrock is approximately 55 feet. The predominant soil texture is fine sand. Based on the results of three monitor wells, the mean hydraulic conductivity is estimated to be 6.5E-4 cm/sec (Apex, 1993). Using the estimated average aquifer thickness of 30 feet and effective porosity of 30 percent, the average transmissivity beneath the site is estimated to be 1.78 cm^2/s. Using the average gradient of 0.021 ft/ft, the average groundwater flow velocity is estimated to be 5.4 m/yr.

The Patuxent Formation is used as a drinking water supply in Prince George's county. Nine water supply wells on BARC property tap the Patuxent Aquifer (Apex, 1993).

3.6 Land Use

The BARC facility is best characterized as minimally developed, and is surrounded by land that is largely urbanized and densely populated. Inside the facility's boundaries, land use is agriculture, forest, and urban, with more than 800 buildings including laboratories, greenhouses, barns, office buildings, and some residences. A major portion of the facility is currently being used for crops, grazing livestock, and orchard research projects, primarily in the central and western portions of BARC. The central and eastern portions of the facility are primarily covered with mixed deciduous/evergreen forest. The urbanized portions of BARC are scattered throughout the property.

Land use outside of the facility boundaries is largely mixed urban and lightly developed, primarily forested parcels. There is widespread residential development along the western, southwestern, and northwestern boundaries of BARC. Commercial development is prevalent along U.S. Route 1 and the Beltsville Industrial Center, north of Sunnyside Avenue. Other major transportation routes that either border or pass through BARC are Interstate 95, Interstate 95/495, the Baltimore-Washington Parkway, and the B&O Railroad.

3.7 Previous Investigations

There have been a series of environmental investigations at BARC that were not specific to, but included investigation of the LLRBS starting with a Preliminary Assessment/Site Inspection (PA/SI) in 1991 (Apex, 1993), and continuing through a Remedial Site Investigation (RI) being conducted by ENTECH, Inc., that began in July 1997, and continues with ongoing groundwater monitoring. The results of these investigations are described in more detail in the Engineering Evaluation/Cost Analysis (EE/CA), and the relevant information is summarized below:

- PA/SI, May 1991; 44 potentially contaminated sites were identified (Apex, 1991), including the Low Level Radioisotope Burial Site; the LLRBS was not included in the SI, and so no analytical data resulted from this effort;
- Hydrologic Characterization and Monitoring of the LLRBS (Apex, 1993); study included 8 soil borings to bedrock with split spoon samples taken every 5 ft (for lithology,

radiological and organic contaminants); 3 monitoring wells were installed for potentiometric groundwater data;

- Environmental Monitoring Summary Report of the LLRBS, March 1994; 5 additional monitoring wells were installed to complement the initial 3 wells, forming 3 clusters (shallow/deep) and two additional side-gradient shallow wells (Figure 3);
- U.S. Environmental Protection Agency (EPA) Region III Technical Assistance Team Sampling, February 1996; sampling of the 8 monitoring wells (analysis for volatile organic compounds [VOCs], semi volatile organic compounds [SVOCs], metals, gross alpha, gross beta, and gamma isotopes, and selected radionuclides);
- Aerial Photographic Site Analysis: BARC, January 1997;
- A Streamlined Risk Evaluation (ENTECH 1998).

Conclusions from these investigations are summarized below:

- The stratigraphy at the LLRBS consists of silty sand and gravel terrace deposits overlying well-sorted sand and gravel of the Patuxent Formation; the hydrology can be described as a single, unconfined aquifer over bedrock varying in thickness from 20 to 30 ft, with southeasterly groundwater flow along topography.
- There are no radiological or chemical constituents in soils upgradient or downgradient of the LLRBS above background levels;
- There is a chloroform groundwater plume downgradient from the LLRBS, but concentrations have been declining to the extent that there are no longer exceedances of the USEPA Maximum Contaminant Level of 80 µg/L;
- The EPA Technical Assistance Team concluded that there is a tritium source zone that likely originates from the LLRBS (contradicting the March 1994 Apex Environmental Report);
- The northern field was active from 1952 to 1987 (based on 11 sets of aerial photos taken from 1937 to 1993);
- There is no evidence that the southern field was ever used for disposal, although it was used for drum storage of non-hazardous investigation-derived waste (IDW);
- Residual radioactivity modeling performed as part of the Streamlined Risk Evaluation (Entech, 1998) indicates that the best long-term solution for the LLRBS will include removal of the source material.

4.0 FIELD PROGRAM

Field activities, as described in the Characterization Work Plan (CABRERA, 2004), were initiated in November 2005, by clearing and grubbing the site, implementing erosion control measures, setting up both a field office and a waste handling facility, and establishing a Construction Zone, within which construction activities or intrusive work would be performed. Radiologically-Controlled Zones were established during the excavation of each pit. The center of each pit was marked by BARC personnel. The pit locations are shown in Figures 3 and 4.

4.1 Gamma Walkover Survey

A gamma walkover survey was conducted in accordance with guidance contained in the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM, 2000). The survey was conducted over 100% of the LLRBS ground surface. The survey was conducted using a Bicron Field Instrument for the Detection of Low-Energy Radiation (FIDLER), which is equipped with a sodium iodide (NaI) scintillation detector. The instrument was coupled to a Trimble Pro XRS global positioning system (GPS) with sub-meter accuracy. The GPS was checked daily against a designated quality control point to verify functionality and to demonstrate compliance with accuracy requirements specified in the Work Plan. Each traverse covered a width of approximately one meter, and one traverse was separated from the next by about one meter. Measurements were recorded electronically at the rate of one measurement per second, permitting average grid radiological activities to be calculated and the extent of the affected area to be defined.

4.2 Beta Walkover Survey

A beta walkover survey was conducted over selected portions of the site. The survey was conducted using a Ludlum Model 44-89 Geiger-Mueller (GM) detector. The survey did not include an integrated GPS system, and traverses were located manually by pacing and using a cloth measuring tape. The GM detector was held as close as possible to the ground surface without actually touching the surface.

4.3 Geophysical Survey

A geophysical survey was conducted prior to the initiation of excavation activities to identify, within the limitations of the technologies employed, the footprint of each of the burial pits. This was accomplished with a combination of ground penetrating radar (GPR), magnetometry (MAG), and electromagnetic terrain conductivity (TC) profiling. Investigation efforts were concentrated in the North Field, but included additional, less-detailed surveys in the South Field to corroborate aerial photography findings that no burial has ever occurred in that location.

The GPR system was a GSSI SIR 3000 with 400 megahertz antenna. In the North Field, GPR traverses were conducted in both east-west and north-south orientations, with a traverse separation of five feet. In the South Field, five north-south traverses were completed.

The TC survey was completed with a Geonics EM-31 terrain conductivity meter. The EM31 measures changes in the ground conductivity permitting one to infer subtle changes in geology or the presence of manmade disturbances. Electromagnetic data were collected along traverses five feet apart in the North Field. In the South Field, five east-west, and four north-south TC traverses were completed.

The MAG survey was conducted using a Geometrics Portable Cesium Magnetometer, Model G-858. Local variations in magnetic measurements are attributable to anomalies near the surface caused by ferrous metal objects, either buried or above the ground. Magnetic data were collected at the rate of 10 readings per second along traverses five feet apart in the North Field. In the South Field, five east-west, and five north-south TC traverses were completed.

4.4 Excavation of Burial Pits

A combination of a hydraulic excavator and manual digging was employed. An aluminum modular trench box to stabilize the pit sidewalls during excavation was available, but was used sparingly because it was determined that benching the sides of the excavation was more efficient.

4.4.1 Lay Down Areas

Lay down areas were required for each pit and were constructed of 10-mil polyethylene suitable for temporarily staging soils and wastes generated from the excavation process. The cover over each pit (presumed to be covered by five ft of uncontaminated fill) was segregated from excavated waste materials in the lay down areas. Segregated cover materials, when verified uncontaminated through sampling, were used to backfill excavations after sampling was completed.

4.4.2 Excavation Methodology

The top five ft of soil from each pit was removed in small lifts (i.e., less than one foot increments) using the excavator. Soil removal via the excavator stopped when waste material was visually identified. The cover material from above the waste material was staged separately for potential use as backfill. At this point, the pit was benched to permit field technicians to safely enter the pit. Personal protective equipment as stipulated in the Site Safety and Health Plan were worn during waste handling processes due to the potential presence of sharps (e.g., broken glass, razors, and syringes), volatile organic chemicals, and other hazards. Technicians delineated the lateral boundaries of the waste material by hand. Surveys for gamma/beta emitting radionuclides and total organic vapors were performed as each lift was removed to assist in identifying the potential for contaminant migration from the waste contents. The radiological survey assessed the presence of radiological items that might create unexpected exposure rates of potential occupational-exposure significance that were not reported in the background documents reviewed (e.g., radiation sources). Radiological surveys were performed using a Geiger Mueller survey meter and a NaI detector. These instruments are ideal in applications where accurate dose rate measurements of low radiation levels are required. Monitoring of organic vapors was performed using a photoionization detector (PID). Field instruments used during the characterization study included:

- PID
- Bicron MicroRem meter
- Packard Tri-Carb 1900 Liquid Scintillation Counter
- Ludlum 2221 with 44-110 Detector
- Ludlum 2221 with 44-20 Detector
- Ludlum 2929 with 43-10-1 Detector
- Ludlum 2360 with 44-94 Detector
- Ludlum 2241-3 with 44-9 Detector
- Ludlum 2224-1 with 43-93 Detector

The excavator continued to remove soil and waste, allowing for manual removal of the various wastes and waste containers by the field technicians as the excavator exposed them. The

excavator removed thin layers of soil below the top of waste (two- to four-inch increments) in an effort to expose buried objects and waste containers with low risk of puncture. Material was removed from the pit until native soil was encountered, whereupon the excavation was terminated.

After waste materials were exposed, those items were excavated by hand and placed in plastic bags and then into 55 gallon drums. Bagged and containerized wastes were removed from the excavation with the assistance of the excavator, thus minimizing the potential for rupture of undamaged containers. Active excavation areas were protected from overland flow of surface water from precipitation events. Accumulated waste water was pumped to a mobile storage tank for characterization and disposal.

4.4.3 Waste

4.4.3.1 Waste Segregation

Segregation of wastes was performed to divide the waste into discrete waste types for representative composite sampling. A sorting area, located in the Waste Segregation Building (Figure 3), was established to reduce the potential for cross-contamination. A waste container, suitable for each waste type and labeled with a unique identifier including the particular waste type and pit number, was placed on the plastic liner in the sorting area. Waste was segregated by hand in the sorting area following removal from the pit, to the extent practical, using the judgment of the field technicians. The basic physical waste categories that were established are:

- Dry active wastes (DAW) - gloves, paper, metals, plastics, laboratory glassware, and other wastes generated during the process of performing laboratory analyses, but excluding scintillation vials containing scintillation cocktail.
- Bulk Solids. Bulk solids and bulk soils were segregated to the extent possible. Bulk solids included non-soil, debris materials, other than DAW wastes.
- Bulk Soils. Bulk soils included materials judged to be soil and included waste/debris that was not readily separable from soil.
- Scintillation Vials (with cocktail). Liquid scintillation vials containing liquid scintillation cocktail were segregated. Empty vials, when identifiable, were grouped with DAW.
- Bulk Liquids. Bulk liquids consisted of liquids in containers.
- Sealed Sources. Sealed sources were placed in a separate container.

4.4.3.2 Waste Characterization

After waste contents had been segregated by waste type, placed into containers, screened and weighed, composite samples were collected from each waste type container for each pit. Wastes were only processed inside the waste handling facility while under negative pressure and filtered by the high efficiency particulate air (HEPA) system. The following instruction pertains to the collection of composite samples:

- Dry Active Wastes: Representative samples of DAW were collected in a proper container and weighed.

- Bulk Solids: Representative samples of bulk solids were collected in a proper container and weighed.
- Bulk Soils: Representative samples of bulk solids were collected in a proper container and weighed.
- Scintillation Vials (with cocktail): A representative number of liquid scintillation vials were opened, tested for pH, and poured into a composite container of similar pH liquids.
- Bulk Liquids: Representative samples of bulk liquids were collected from each container and composited with samples from several other containers and weighed.
- Sealed Sources: Sealed sources were sent for analysis and/or disposal.

4.5 Sampling of Burial Pits

After the waste materials had been removed, a gamma walkover survey and a beta walkover survey along the floor of the pit were performed to demonstrate that no more radioactive materials were present.

The shallow subsurface soils below the pit were then characterized using a hand auger to collect samples from four or more representative locations from 0 to 1 foot depth (four samples) and 1 to 2 feet depth (four samples). Samples were submitted to an offsite laboratory for the suites of analyses as listed in Table 3-1 (at the end of this section.

To characterize the deeper subsurface vadose zone soils and groundwater below each pit, a Geoprobe™ direct push sampling system was mobilized following backfilling of all pits and site restoration. The Geoprobe collected continuous core samples (in four foot lengths) from the center of each pit starting at the former floor of the excavation until reaching the groundwater interface. Filtered and unfiltered groundwater samples were collected from temporary Geoprobe wells. Each four-foot core section was scanned with the GM detector, and one soil sample was collected from each of the four-foot sections at the location in each core section exhibiting the highest radiological activity.

4.6 Health and Safety Monitoring

Onsite personnel were required to participate in a medical surveillance program in accordance with Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) l910.120 (f), which requires an annual physical to document that personnel are medically cleared for anticipated site duties. Required documents are the employee's most recent medical clearance and respirator clearance forms. A first aid kit was maintained onsite in an easily accessible location. A portable eyewash station was also readily available during the investigation.

Due to the presence of animal waste, potential radioactive dust and organic chemical wastes in the buried materials, all workers in the vicinity of the exhumed waste wore Level B personal protective equipment (PPE). Monitoring for volatile organics with a PID was conducted during all intrusive tasks to ensure that the action levels requiring PPE upgrade were not exceeded, and to evaluate organic vapors associated with potential chemical waste.

A real-time airborne particulate meter was in continuous operation during all intrusive activities. Instruments were placed in an area downwind from the activity to determine if airborne

concentrations of particulates exceeded action levels (0.3 milligrams per cubic meter [mg/m^3]). No action levels were exceeded during the field investigation.

Monitoring for combustible gases or vapors was performed within and adjacent to intrusive activities using a combustible gas indicator/oxygen meter.

Monitoring equipment was calibrated at the beginning of each day in accordance with the procedures and frequency recommendations provided by the equipment manufacturers. Daily calibration and maintenance of the PID was documented on daily forms. Breathing zone readings were noted on daily field logs.

All field activities were conducted in accordance with the approved Site Safety and Health Plan (CABRERA, 2006)

Table 4-1 Analytical Methods

Sample Type	***Radioactive***	***Chemical***						
Parameter Method[1]	Beta and gamma Isotopic[4]	VOCs Method[1] 8260B	SVOCs Method[1] 8270C	Pesticide/PCBs 8081A/ 8082[1]	TAL metals 6010B and 7471[1]	Herbicides 8150A	Cyanide (total and amenable) 9010a/9012; TCLP	Moisture Content; pH; TOC (9060A)
Characterization								
Water Samples	14	14	14	14	14	14	14	14
Waste Profiling[6]	14	14	14	14	14	14	14	14
Rinsate Blanks[2]	na	na	na	na	na	na	na	na
Trip Blanks[3]	na	8	na	na	na	na	na	na
Pit Surveys								
Water – (includes QA)	10	7(u)*	7(u) and 7(f)*	7(u) and 7(f)	7(u) and 7(f)	7(u) and 7(f)	na	na
Soil – (includes QA)	~64	59	59	59	59	59	na	48
Soil – Reference (includes QA)	15	15	15	15	15	15	na	12
Water- Reference (includes QA)	7	7	7	7	7	7	na	na
Rinsate Blanks[2]	5	5	5	5	5	5	na	na
Trip Blanks[3]	na	16	na	na	na	na	na	na
* (f) = filtered sample; (u) = unfiltered sample.								

Notes:

1. Test methods referenced are from USEPA "Test Methods for Evaluating Solid Waste: Physical/Chemical Methods", version 2 (SW-846).
2. The number of rinsate blanks shown assumes that one field crew will collect all samples for chemical and radiological analysis from each pit in one day.
3. One trip blank for each cooler shipped containing VOC samples.
4. Analyses will include a gamma spectroscopy scan for ^{226}Ra, ^{210}Pb, ^{137}Cs, and other gamma emitting isotopes, and liquid scintillation or low-background gas-flow proportional counting for presence of beta contamination (^{3}H, ^{14}C, ^{90}Sr, ^{36}Cl, and ^{63}Ni).
5. A 10% (Duplicate) criterion and 5% lab control samples is being applied.
6. Waste profile samples will be composites from similar waste materials extracted from the burial sites (scintillation fluids, dry active wastes, soil, etc.).
7. Samples collected for VOC screening or laboratory analysis will not be composited.

5.0 RESULTS

The characterization survey results are presented below, and include the geophysical survey, the Gamma and Beta Walkover Surveys, the analytical results from site media sampling (surface and subsurface soil along the floor of each excavated pit, groundwater, solid and liquid wastes, and quality assurance/quality control [QA/QC] samples). The complete laboratory analytical report, including more than 50 sample delivery groups (SDGs), chain of custody documentation and electronic data deliverables (EDDs) is included in Appendix A. QA/QC documentation of instrumentation used during the field program is included as Appendix B. Photo documentation of site activities is included in Appendix C, which includes annotated photographs of site preparation, construction of the waste segregation building, pit excavation, Geoprobe drilling, and environmental sampling. Appendix D contains the geophysical survey report, which is summarized in Section 5.1, below. Appendix E contains the gamma walkover survey data. Appendix F contains Cabrera's daily and weekly field reports summarizing site activities. Appendix G contains shipping manifests for waste materials transported to offsite disposal facilities.

5.1 Geophysical Surveys

The results of the geophysical surveys are presented in Appendix D, which contains text and figures presenting the GPR, magnetic, and terrain conductivity results.

The geophysical data do not indicate conclusively the boundaries of the historical burial pits. However, areas of magnetic and electromagnetic anomalies and GPR transects indicating disturbed soil, are discernable in the North Field, representing pit locations. At the South Field, there were no significant magnetic or electromagnetic anomalies or "chaotic reflections" from GPR, indicating that no burial pits exist there.

5.2 Gamma and Beta Walkover Surveys

A gamma walkover survey was conducted of the north and south fields, as well as the floors of each pit upon completion of excavation activities.

The results of the gamma walkover survey are presented on Figure 5. Appendix E contains the field data for the gamma walkover survey. Anomalous results of the gamma walkover survey were produced by three rock specimens located in two areas along the southern fence line of the North Field (Figure 5). The rock specimens were analyzed in the field utilizing a portable NaI gamma spectroscopy system. These rocks contained natural radioactive species from the uranium and thorium decay chains complete with radioactive progeny. The concentrations of uranium and thorium indicate that the rocks are high quality ore specimens not indigenous to the region. BARC personnel indicate they were not used in research activities by the USDA. The specimens are believed to be from someone's personal collection that was disposed on the ground surface inside this controlled access area, and have been set aside for disposal.

A second area with somewhat elevated results occurred along the floor of Pit 34C. The pit was open when the gamma walkover survey was completed in the North Field on July 15. The source of the elevated gamma activity in Pit 34C was never identified.

A beta walkover survey was conducted over selected portions of the site, which include the reference area, the footprint of the foundation of the Waste Segregation Building prior to its

construction, and the floors of the waste pits. The beta walkover survey data did not indicate any beta activity at the ground surface exceeding background levels.

5.3 Reference Area

A reference area was established west of the South Field in an area deemed to be free of radiological contaminants (Figure 3). A gamma walkover survey was conducted there to establish background radiological activities. Soil samples were collected from six locations for comparison with samples to be collected in excavations of burial pits.

5.3.1 Surface Soil Sampling of Reference Area

Tables 1 and 2 present a summary of detections for non-radiological and radiological analytical results, respectively, of 16 soil samples collected from 4 locations within the reference area. Surface soil samples have an “a” or “b” designation, representing 0 to 1 and 1 to 2 feet below ground surface(bgs). Tables 3 and 4 present a summary of all analytical results (detections and non-detections) for these samples. Figure 6 shows the soil sample locations in the Reference Area.

Of non-radiological analytes, only arsenic exceeded the EPA Region 3 RBC (of 1.9 milligrams per kilogram [mg/kg]). Arsenic exceeded the RBC in all 16 of 16 samples in the Reference Area, the maximum concentration was 7.2 mg/kg in BLT-REF-SO-01a-03.

Radiological detections exceeding NRC guidelines for surface soil contamination for unrestricted release (NUREG 1757, Appendix B, Table B.2) include Lead-210 and Radium-226, each with 2 exceedances of 8 samples submitted for analysis, although exceedances were only slightly above NRC guidelines.

5.3.2 Reference Area Characterization

5.3.2.1 Subsurface Soil

No subsurface soil samples in the Reference Area were submitted for analysis.

5.3.2.2 Water

Tables 5 and 6 present a summary of detections for non-radiological and radiological analytical results, respectively, of 4 groundwater samples from 2 locations collected from MW-09 and MW-10, permanent monitoring wells north of the North Field fence line (as shown in Figures 3 and 4). These two wells were used as background wells. Samples were either filtered (“f”) or unfiltered (“u”). Also included on Tables 5 and 6 are analytical results from 3 rinsate samples. Tables 7 and 8 present a summary of all analytical results (detections and non-detections) for these samples.

None of the non-radiological analytes was detected above the Region 3 tap water RBC for samples collected from monitoring wells. However, for rinsate samples, non-radiological detections exceeding the Region 3 RBC for tap water include benzene, bromodichloromethane, chloroform, chromium and iron. However, only bromodichloromethane and chloroform exceeded the RBC by more than a factor of 1.5.

The only detection of radiological analytes was tritium, and tritium concentrations were well below the maximum contaminant level (MCL) (which is 20,000 picocuries per liter [pCi/L]).

Figure 6 shows sampling locations in the reference area and soil analysis results that exceed regulatory guidelines.

5.4 Excavation of Burial Pits

Each burial pit was excavated until natural soil materials were encountered, and the floor of each excavation was sampled in at least four locations from two depths, to be designated as "a" (0 to 1 ft below the floor of the excavation), and "b" (depth of 1 to 2 ft). Excavated materials were segregated (waste versus cover materials) into temporary stockpiles. Wastes were transported to the Waste Segregation Building to be sorted, containerized, and sampled. Following backfilling, a GeoProbe was positioned over the pit and advanced sampling tools past the floor of the excavation and collected deeper samples, indicated as "c", "d", "e", etc. These samples were collected from depths of from 0 to 4, 4 to 8, 8 to 12, etc. ft below the floor of the excavation until groundwater was encountered. The sample interval exhibiting the most-elevated reading (determined from Geiger-Mueller or PID readings or by visual inspection) from each 4-ft interval of soil core was submitted for laboratory analysis. Water was collected from the temporary well created by the hollow GeoProbe casing with a peristaltic pump and was either filtered ("f") or unfiltered ("u"). Sample designations were of the form:

BLT-P01-SO-05a

where **BLT** indicates the site (Beltsville); **Pit** number (1, 14, 26 or 34); **Medium** ("SO" = soil, "MW" = monitoring well, "TW" = temporary well, "WS" = waste, solid, "WL" = waste, liquid); **Sample Number** (01 through 99); and **Other** discriminator (e.g., "a", "g", "f", "u", discussed above). Figure 4 shows all sample locations for the burial pits that were excavated.

5.4.1 Pit 1

5.4.1.1 Soil Sampling of Excavation Floor

Tables 9 and 10 present a summary of detections for non-radiological and radiological analytical results, respectively, of 8 soil samples collected from the floor of Pit 1 (sample locations BLT-P01-01 through BLT-P01-04 with either an "a" or "b" designation, representing 0 to 1 and 1 to 2 ft below the floor of the pit). Tables 11 and 12 present a summary of all analytical results (detections and non-detections) for these samples. Figure 7 shows sample locations for Pit 1.

The only detections of non-radiological analytes that exceeded EPA Region 3 RBCs were for arsenic, which was reported in 8 of 8 samples at concentrations of up to 3.95 mg/kg versus an RBC of 1.9 mg/kg.

Two radiological detections exceeded the NRC screening value for surface soil contamination levels (NUREG-1757, Vol. 1, Table B-2). These exceedances occurred in sample BLT-PO1-SO-01b and -04a for Lead-210, with concentrations of 1.32 and 1.24 picocuries per gram (pCi/g), respectively, versus an NRC screening value of 0.9 pCi/g. It should be noted that the DCGL for Lead-210 is 1.62 pCi/g.

5.4.1.2 Sub-Pit Characterization

5.4.1.2.1 Soil

The soil beneath the pit is represented by samples BLT-P01-SO-05c through BLT-P01-SO-05f and BLT-P01-SO-06g in Tables 9 through 12 (detections and summary of results, as noted in

Section 5.4.1.1, and in Figure 6). The "c" thru "g" sample designations represent depth intervals of 0 to 4, 4 to 8, 8 to 12, 12 to 16 and 16 to 20 ft below the floor of the pit, although the laboratory sample was collected from that portion of the 4-ft soil core with the highest radiological activity or highest PID reading (or was based on visual inspection if no other discriminator could be determined).

The only detections of non-radiological analytes that exceeded EPA Region 3 RBCs were for arsenic, which was reported in 3 of 4 samples at concentrations of up to 5.8 mg/kg compared to an RBC of 1.9 mg/kg.

No radionuclide exceeded the NRC screening value for surface soil contamination levels (NUREG-1757, Vol. 1, Table B-2). Figure 8 shows the soil analysis results from Pit 1 that exceed regulatory guidelines.

5.4.1.2.2 Water

Tables 13 and 14 present a summary of detections for non-radiological and radiological analytical results, respectively, of 3 groundwater samples from two locations collected adjacent to or below the floor of Pit 1. Samples from the two locations were either filtered ("f") or unfiltered ("u"). Two samples were collected from temporary wells installed with a GeoProbe through the floor of the excavation after the pit was backfilled. The other included samples (BLT-P01-SO-6l and BLT-P01-MW-99) were an equipment rinsate and a trip blank, respectively. Tables 15 and 16 present a summary of all analytical results (detections and non-detections) for these samples.

The only non-radiological detections exceeding the Region 3 RBC for tap water are arsenic, iron and vanadium, which were detected in one sample (BLT-P01-TW-01u) at concentrations of up to about 10 times their respective RBCs. However, the filtered sample had much lower concentrations of these two analytes, indicating that the exceedance occurred in a (likely) turbid sample from a temporary well.

Radium-228 concentration was 13.9 pCi/L in filtered and 29.7 pCi/L in unfiltered groundwater beneath Pit 1. The concentration of thorium-230 was 7.2 pCi/L in filtered groundwater and 26 pCi/L in unfiltered groundwater. Figure 9 shows the groundwater analysis results (from all pits) that exceed regulatory guidelines.

5.4.1.3 Waste Characterization

Table 76 presents the results of Cabrera's inventory of radioactive materials excavated from Pit 1, which is based on six waste samples composited from 40 drums of soil and 2 drums of miscellaneous debris (metal, glass, ceramic, and plastic items). The total activity in Pit 1 is calculated to be 6.34E-05 Curies (Ci), based on the analytical results from the contract laboratory (Table 76). Analytical results for the six composited waste samples are presented on Tables 17 through 21 (Summary of Detections and Summary of Results for waste solids and waste liquids, Pit 1).

All detections of non-radiological analytes were below the maximum contaminant threshold concentration by the Toxicity Characteristic Leachability Procedure (TCLP) to be classified as a hazardous waste for the characteristic of toxicity. However, Aroclor-1260 was detected in three

samples (BLT-P01-WS-04, BLT-P01-WS-05, and BLT-P01-WS-06) at concentrations of up to 377 times the Universal Treatment Standard (UTS) for PCBs.

Radiological detections in the drummed wastes exceeded NRC guidelines for surface soil contamination for unrestricted release (NUREG 1757, Appendix B, Table B.2) for only three radionuclides: Lead-210, Radium-226 and Carbon-14, although measured concentrations are not of concern for shipping to a waste facility. The maximum concentrations for these radionuclides were less than 15 times their respective NRC screening values. Detections in sample BLT-P01-WS-05 of Europium-152 (1.24 pCi/g) and Cobalt-60 (0.589 pCi/g) are thought to be fugitive fragments of sources used in early research at BARC.

5.4.2 Pit 14

5.4.2.1 Soil Sampling of Excavation Floor

Tables 22 and 23 present a summary of detections for non-radiological and radiological analytical results, respectively, of 18 soil samples collected from the floor of Pit 14, represented by samples with either an “a” or “b” designation (0 to 1 and 1 to 2 ft below the floor of the pit). Tables 24 and 25 present a summary of all analytical results (detections and non-detections) for these samples. Figure 10 shows sample locations for Pit 14.

All detections of non-radiological analytes were well below EPA Region 3 RBCs except for arsenic, which exceeded the RBC of 1.91 mg/kg in 13 samples at concentrations of up to 4.37 mg/kg.

The only radionuclide that exceeded the NRC screening value for surface soil contamination levels (NUREG-1757, Vol. 1, Table B-2) was Carbon-14 in sample BLT-P14-SO-03b with an activity of 15.7 pCi/g vs. a screening level of 12 pCi/g.

5.4.2.2 Sub-Pit Characterization

5.4.2.2.1 Soil

The soil beneath the pit is represented by samples BLT-P14-SO-05c through BLT-P14-SO-05f in Tables 22 through 25 (detections and summary of results, as noted above). The “c” thru “f” sample designations represent depth intervals of 0 to 4, 4 to 8, 8 to 12, and 12 to 16 ft below the floor of the pit, although the laboratory sample was collected from that portion of the 4-ft soil core with the highest radiological activity or highest PID reading (or was based on visual inspection if no other discriminator could be determined).

All detections of non-radiological analytes were well below EPA Region 3 RBCs except for arsenic, which exceeded the RBC of 1.91 mg/kg in 2 of 4 samples at concentrations of up to 6.62 mg/kg.

No radionuclide exceeded the NRC screening value for surface soil contamination levels (NUREG-1757, Vol. 1, Table B-2). Figure 11 shows soil analysis results from Pit 14 that exceed regulatory guidelines.

5.4.2.2.2 Water

Tables 26 and 27 present a summary of detections for non-radiological and radiological analytical results, respectively, of 3 groundwater samples from 2 locations collected below the floor of Pit 14. Samples from 1 location were either filtered ("f") or unfiltered ("u"). Also presented are water rinsate samples collected from field-decontaminated sampling equipment (BLT-P14-SO-061, BLT-P14-SO-06j, and BLT-P14-SO-06k-02). Tables 28 and 29 present a summary of all analytical results (detections and non-detections) for these samples.

Non-radiological detections exceeding the Region 3 RBC for tap water include benzene, chloroform, arsenic, chromium, iron and vanadium, which occurred at concentrations of from 1.3 to 445 times the respective RBC. Arsenic was detected in BLT-P14-TW-01u at a concentration of 17.8 µg/L vs. an RBC of 0.04 µg/L. The filtered aliquot did not detect arsenic, indicating that turbidity may have contributed to elevated arsenic in the unfiltered aliquot. Thus, the arsenic detection is probably not representative of aquifer conditions.

Thorium-230 was detected in both unfiltered ("u") temporary wells at up to 27.9 pCi/L, versus an MCL of 15 pCi/L. Figure 8 includes groundwater analysis results from Pit 14 that exceed regulatory guidelines.

5.4.2.3 Waste Characterization

Table 77 presents the results of Cabrera's inventory of radioactive materials excavated from Pit 14, which is based on 6 waste samples composited from 39 drums of soil and 5 boxes of bones sorted and stored in fiber boxes. The total activity in Pit 14 is calculated to be 2.98E-04 Ci, based on the analytical results from the contract laboratory (Table 77). Analytical results for the six composited waste samples are presented on Tables 30 through 34 (Summary of Detections and Summary of Results for waste solids and waste liquids, Pit 14).

All detections of non-radiological analytes were below the maximum contaminant threshold concentration by TCLP.

The only radiological detections that exceeded the NRC screening value for surface soil contamination levels (NUREG-1757, Vol. 1, Table B-2) were Carbon-14 and Strontium-90. Carbon-14 was detected in 5 of 6 samples at concentrations of up to 30.3 pCi/g vs. a guideline of 12 pCi/g. Strontium-90 was detected in sample BLT-P14-WS-06 at a concentration of 1.9 pCi/g versus a guideline of 1.7 pCi/g.

5.4.3 Pit 26

5.4.3.1 Soil Sampling of Excavation Floor

Tables 35 and 36 present a summary of detections for non-radiological and radiological analytical results, respectively, of 18 soil samples collected from the floor of Pit 26, represented by samples with either an "a" or "b" designation (0 to 1 and 1 to 2 ft below the floor of the pit). Tables 37 and 38 present a summary of all analytical results (detections and non-detections) for these samples. Figure 12 shows sample locations for Pit 26.

All detections of non-radiological analytes were well below EPA Region 3 RBCs except for arsenic, which exceeded the RBC of 1.91 mg/kg in 15 of 18 samples at concentrations of up to a maximum of 9.05 mg/kg.

The only radiological detections that exceeded the NRC screening value for surface soil contamination levels (NUREG-1757, Vol. 1, Table B-2) were Lead-210 and Carbon-14. Lead-210 was detected in samples BLT-P26-SO-04a and -04b at concentrations of 2.19 and 6.45 pCi/g vs. a guideline of 0.9 pCi/g. Carbon-14 was detected in samples BLT-P26-SO-02a and 02b at 15.4 and 210 pCi/g, respectively, versus a guideline of 12 pCi/g.

5.4.3.2 Sub-Pit Characterization

5.4.3.2.1 Soil

The soil beneath the pit is represented by samples BLT-P26-SO-05c through BLT-P26-SO-05f in Tables 35 through 38 (detections and summary of results, as noted above). The "c" thru "f" sample designations represent depth intervals of 0 to 4, 4 to 8, 8 to 12, and 12 to 16 ft below the floor of the pit, although the laboratory sample was collected from that portion of the 4-ft soil core with the highest radiological activity or highest PID reading (or was based on visual inspection if no other discriminator could be determined).

All detections of non-radiological analytes were below EPA Region 3 RBCs except for arsenic, which exceeded the RBC of 1.91 mg/kg in sample BLT-P26-SO-05c (0 to 4 feet below the floor of the pit) with a concentration of 2.15 mg/kg.

Four samples were collected from below the floor of Pit 26 was BLT-P26-SO-05c through -05f). However, none of these samples were submitted for radiological analysis. Figure 13 displays soil analysis results from all samples that exceeded regulatory guidelines in Pit 26.

5.4.3.2.2 Water

Tables 39 and 40 present a summary of detections for non-radiological and radiological analytical results, respectively, of 2 groundwater samples from 1 location collected below the floor of Pit 26. Samples were either filtered ("f") or unfiltered ("u"). Tables 41 and 42 present a summary of all analytical results (detections and non-detections) for these samples.

Non-radiological detections exceeding the Region 3 RBC for tap water include benzene detected at 0.48 µg/L, chloroform detected at 10.6 µg/L, and trichloroethylene detected at 0.487 µg/L.

No radiological detections exceeded the MCL for drinking water. Figure 8 includes groundwater analysis results from Pit 26 that exceed regulatory guidelines.

5.4.3.3 Waste Characterization

Table 78 presents the results of Cabrera's inventory of radioactive materials excavated from Pit 26, which is based on 3 (solid) waste samples composited from 16 drums of debris, 10 drums of solid waste, 9 drums of soil, and 7 drums of liquid scintillation vials. There are also 3 (liquid) waste samples (2 of which are composite samples of surface water and leachate that accumulated in the open excavation overnight and which was pumped into two 275-gallon DOT poly tanks). The total activity in Pit 26 is calculated to be 1.92E-03 Ci, based on the analytical results from the contract laboratory (Table 78). Analytical results for the three composited solid waste samples are presented on Table 43 through 48 (Summary of Detections and Summary of Results for waste solids and waste liquids, Pit 26).

All detections of non-radiological analytes except benzene, chloroform and chromium were below the maximum contaminant threshold concentration by TCLP. These three analytes

exceeded the TCLP maximum concentration for the toxicity characteristic by as much as 1500 times in samples BLT-P26-WL-02 and BLT-P26-WL-03. However, one solid waste sample (BLT-P26-WS-01) exceeded the UTS for six VOCs and one SVOC by as much as a factor of 300 times.

Radiological detections in the drummed wastes and bulk liquids that exceeded the guidelines for surface soil contamination for unrestricted release (NUREG 1757, Appendix B, Table B.2) were for carbon-14, chlorine-36, and tritium with concentrations of up to 1000 times the guidelines (e.g., carbon-14 in sample BLT-P26-WL-02).

5.4.4 Pit 34

5.4.4.1 Soil Sampling of Excavation Floor

Tables 49 and 50 present a summary of detections for non-radiological and radiological analytical results, respectively, of 8 soil samples collected from the floor of Pit 34, represented by samples with either an “a” or “b” designation (0 to 1 and 1 to 2 ft below the floor of the pit). Tables 51 and 52 present a summary of all analytical results (detections and non-detections) for these samples. Figure 14 shows sample locations for Pit 34.

All detections of non-radiological analytes were below EPA Region 3 RBCs except for arsenic, which exceeded the RBC of 1.91 mg/kg in 4 of 6 sample locations at concentrations of up to 6.78 mg/kg.

Radiological detections that exceeded the NRC screening value for surface soil contamination levels (NUREG-1757, Vol. 1, Table B-2) included Lead-210 and Radium-226. Lead-210 was detected in 2 of 8 samples at concentrations of up to 4.69 pCi/g vs. a screening level of 0.9 pCi/g (the DCGL for Lead-210 is 1.62 pCi/g). Radium-226 was detected in one sample at a concentration of 0.74 pCi/g vs. a screening level of 0.7 pCi/g (the DCGL for Radium-226 is 1.34 pCi/g).

5.4.4.2 Sub-Pit Characterization

5.4.4.2.1 Soil

The soil beneath the pit is represented by samples BLT-P34-SO-05c through BLT-P34-SO-05g and BLT-P34-SO-06g in Tables 49 through 52 (detections and summary of results, as noted above). The “c” thru “g” sample designations represent depth intervals of 0 to 4, 4 to 8, 8 to 12, 12 to 16, and 16 to 20 ft below the floor of the pit, although the laboratory sample was collected from that portion of the 4-ft soil core with the highest radiological activity or highest PID reading (or was based on visual inspection if no other discriminator could be determined).

All detections of non-radiological analytes were below EPA Region 3 RBCs except for arsenic, which exceeded the RBC of 1.91 mg/kg in all 4 of 5 samples with a concentration of up to 59.6 mg/kg (in sample BLT-P34-SO-05g).

The only radionuclide that equaled or exceeded the NRC screening value was Radium-226 in sample BLT-P34-SO-05f, with an activity of 0.7 pCi/g versus a screening level of 0.7 pCi/g (the DCGL for Radium-226 is 1.34 pCi/g). Figure 15 shows soil analysis results from Pit 34 that exceed regulatory guidelines.

5.4.4.2.2 Water

Tables 53 and 54 present a summary of detections for non-radiological and radiological analytical results, respectively, of 3 groundwater samples from 2 locations collected below the floor of Pit 34. Samples were either filtered ("f") or unfiltered ("u"). Also included on Tables 53 and 54 is one rinsate sample. Tables 55 and 56 present a summary of all analytical results (detections and non-detections) for these samples.

Non-radiological detections exceeding the Region 3 RBC for tap water include arsenic, iron and vanadium. All exceedances except arsenic occurred at concentrations of less than 4 times the respective RBC. Arsenic occurred at a concentration of 34.7 µg/L in sample BLT-P34-TW-01u, which is nearly 900 times the RBC (which is 0.04 µg/L). We note that this sample was unfiltered and likely turbid, and that the filtered aliquot did not detect arsenic.

The only radionuclide that exceeded the MCL for drinking water was Thorium-230 in sample BLT-P34-TW-01u, with an activity of 17.7 pCi/L versus a MCL level of 15 pCi/L. Figure 8 includes groundwater analysis results from Pit 34 that exceed regulatory guidelines.

5.4.4.3 Waste Characterization

Table 79 presents the results of Cabrera's inventory of radioactive materials excavated from Pit 34, which is based on 5 (solid) waste samples composited from 30 drums of debris, and 34 drums of soil. In addition, there is 1 composite (liquid) waste sample from 10 drums of liquid scintillation vials, 1 composite (liquid) waste sample from a 275 gallon blue poly tank filled with surface water and leachate that accumulated in the open excavation overnight and which was pumped into a 275-gallon DOT poly tank, and 1 composite sample from animal remains that were sorted and stored in a single fiber box. The total activity in Pit 34 is calculated to be 3.57E-03 Ci, based on the analytical results from the contract laboratory (Table 79).

Analytical results for the 5 composite solid waste samples, 2 composite liquid waste samples and 1 composite sample from animal remains from Pit 34 are presented on Tables 57 through 62 (Summary of Detections and Summary of Results for waste solids and waste liquids, Pit 34).

The only non-radiological analyte detected at levels exceeding the maximum concentration for the toxicity characteristic by TCLP was benzene in sample BLT-P34-WL-02 with a concentration of 3,430 µg/L vs. a TCLP threshold concentration of 500 µg/L. However, two of the solid waste samples (BLT-P34-WS-01 and -02) exceeded the UTS for five VOCs and two PCBs by a factor of as much as 800 times. In addition, one of the liquid waste samples (BLT-P34-WL-02) had UTS exceedances of 10 VOCs, 2 SVOCs, and 2 metals by a factor of as much as 120 times.

Radiological detections in the drummed wastes that exceeded the guidelines for surface soil contamination for unrestricted release (NUREG 1757, Appendix B, Table B.2) were for lead-210, carbon-14 and tritium. Lead-210 was detected in 1 sample at a level of 0.92 pCi/g, slightly exceeding the surface soil screening guideline of 0.9 pCi/g. Carbon-14 was detected in 3 of 5 samples at concentrations of up to 31.5 pCi/g, exceeding surface soil screening guidelines of 12 pCi/g. Tritium was detected in 1 sample at a concentration of 397 pCi/g, exceeding the surface soil screening guideline of 110 pCi/g.

5.4.5 Pit 34C (Extension of Pit 34)

5.4.5.1 Soil Sampling of Excavation Floor

Tables 63 and 64 present a summary of detections for non-radiological and radiological analytical results, respectively, of 12 soil samples collected from the floor of Pit 34C, represented by samples with either an "a" or "b" designation (0 to 1 and 1 to 2 ft below the floor of the pit). Tables 65 and 66 present a summary of all analytical results (detections and non-detections) for these samples. Figure 16 shows sample locations for Pit 34C.

All detections of non-radiological analytes were below EPA Region 3 RBCs except for arsenic, which exceeded the RBC of 1.91 mg/kg in 13 of 13 samples at concentrations of up to a maximum of 8.08 mg/kg.

Radiological detections that exceeded the NRC screening value for surface soil contamination levels (NUREG-1757, Vol. 1, Table B-2) included Lead-210, Radium-226 and Thorium-230. Lead-210 was detected in 1 of 12 samples at a concentration of 8.04 pCi/g vs. a screening level of 0.9 pCi/g (the DCGL for Lead-210 is 1.62 cPi/g). Radium-226 was detected in all samples with a maximum detected concentration of 7.53 pCi/g vs. a screening level of 0.7 pCi/g (the DCGL for Radium-226 is 1.34 cPi/g). Thorium-230 was detected in all samples with a maximum detected concentration of 7.53 pCi/g vs. a screening level of 1.8 pCi/g.

5.4.5.2 Sub-Pit Characterization

5.4.5.2.1 Soil

One soil sample was collected from deeper than 2 ft below the floor of the pit in Pit 34C. This sample, BLT-P34C-SO-06g, contained 1.95 pCi/g Ra-226 compared to an RBC of 0.7 pCi/g and a DCGL of 1.34 pCi/g. This sample also contained 1.95 pCi/g of Th-230, compared to a screening level of 1.8 pCi/g. Figure 17 shows soil analysis results from Pit 34C that exceed regulatory guidelines.

5.4.5.2.2 Water

No groundwater samples were collected under Pit 34C, but one rinsate sample is included in Tables 67 and 68. All detections of non-radiological analytes were below EPA tap water RBCs, except benzene, which occurred at a concentration of 1.6 µg/L vs. a tap water RBC of 0.34 µg/L. Figure 8 includes groundwater analysis results from Pit 34C that exceed regulatory guidelines.

5.4.5.3 Waste Characterization

Table 80 presents the results of Cabrera's inventory of radioactive materials excavated from Pit 34C (the extension of Pit 34), which is based on 2 (solid) waste samples (and BLT-34C-WS-03, a duplicate) composited from 10 drums of debris, and 35 drums of soil. In addition, there is 1 composite (liquid) waste sample (and BLT-P34C-WL-02, a duplicate) from 7 drums of liquid scintillation vials. The total activity in Pit 34 is calculated to be 1.69E-03 Ci for Pit 34C, based on the analytical results from the contract laboratory.

Analytical results for the 2 composite solid waste samples and 1 composite liquid waste sample from Pit 34C are presented on Tables 69 through 74 (Summary of Detections and Summary of Results for waste solids and waste liquids, Pit 34C).

All detections of non-radiological analytes were below the maximum concentration for the toxicity characteristic by TCLP. However, the UTS was exceeded in two solid waste samples (and the duplicate) for five VOCs.

Radiological detections in the drummed wastes that exceeded the guidelines for surface soil contamination for unrestricted release (NUREG 1757, Appendix B, Table B.2) were for lead-210, radium-226, thorium-230 and carbon-14. Lead-210 concentrations were detected in both solid waste samples (and duplicate) at levels up to 93 pCi/g, exceeding the surface soil screening guideline of 0.9 pCi/g. Radium-226 and thorium-230 concentrations were detected in both solid waste samples (and the duplicate) at levels of up to 117 pCi/g, exceeding surface soil screening guidelines of 0.7 and 1.8 pCi/g, respectively. Carbon-14 was detected in one of the solid waste samples and one of the liquid waste samples at levels up to 65 pCi/g, exceeding the surface soil screening guideline of 12 pCi/g.

5.4.6 Miscellaneous Wastes

In the Waste Segregation Building, other wastes not specific to any of the excavated burial pits were generated. These included: 4 additional drums of liquid scintillation vials segregated from the waste debris, 1 drum of sharps, 2 drums of bulked liquids, and three sealed sources (two Radium-226 sources, and one nickel-63 sources). There were also 23 drums of dry active waste (consisting of soiled PPE).

5.5 Waste Manifests

As of this date, two waste shipments of radioactive or mixed wastes have been made. One shipment was to Permafix on December 19, 2006, and included 28 drums of liquid scintillation vials and 2 drums of bulk liquids (VOCs, radioactive materials). The second shipment was to Chase Environmental on March 18, 2007 which received three sealed sources: 2 radium-226 sources and 1 Nickel-63 source.

6.0 CONCLUSIONS

6.1 Waste Streams

Waste generated during the site investigation can be classified into one of three major waste categories:

- Radioactive wastes (NRC or agreement state regulated)
- Hazardous wastes (EPA Regulated), and
- Mixed (Radioactive and Hazardous) wastes.

Each of these three main categories can be further broken down into more specific groups based on the disposal or regulatory status of each. These are:

- **Mixed Waste, Liquid Scintillation vials (LSVs).** LSVs are commonly generated in research. There are established treatment and disposal outlets for them. The investigation generated 28 drums of LSVs.
- **Mixed Waste, Liquids bulked from various containers.** Excavations uncovered many laboratory reagent bottles usually in the form of one gallon or one liter amber bottles. Contents were tested for compatibility and bulked into plastic 55gallon drums. The investigation generated two drums of bulked liquids that were shipped offsite for treatment and disposal as mixed waste.
- **Mixed Waste, F039 liquid (multisource leachate, water) pumped from the excavations.** Removal of water from the excavations generated three 275-gallon containers of F039 waste. The liquid also exhibits low levels of radioactive material contamination and is therefore classified as a mixed waste.
- **Mixed Waste, solid, both debris and soil-like material.**
- **Radioactive Waste, sources.** Segregation operations uncovered three radioactive sources/devices, including two radium-226 sources and a nickel-63 electron capture device
- **Radioactive waste, soil and debris.** The investigation generated more than 200 containers (drums and boxes) of soil and debris. The majority of the wastes generated were either mixed wastes or hazardous waste due to organic contaminants found throughout the soil column. Their presence was detected in all the soil and debris wastes removed from disposal cells that contained vials or laboratory reagent wastes.

6.2 Disposal Options

6.2.1 Current Radioactive Waste Disposal Options

The following sections evaluate the currently available options for disposal of radioactive material.

6.2.1.1 Licensed Commercial Disposal Sites

There are three licensed disposal sites in the United States. They are: US Ecology, Hanford, WA; Energy Solutions, Barnwell, SC; and EnergySolutions, Clive, UT.

US Ecology, Hanford, WA (sometimes referred to as Richland, WA). US Ecology operates the low level waste disposal facility in Washington State. The facility is on 600 acres leased by the state within the USDOE Hanford reservation. The site is a fully licensed (Washington State License) 10CFR61-compliant disposal facility. It operates as the regional disposal facility under the regulations set forth in the Low Level Waste Policy Act of 1980, and the Low Level Waste Amendments Act of 1985. As the regional facility, they only accept waste from the Northwest Compact and under agreement from the Rocky Mountain Compact. Low level waste from outside of these two compacts cannot be shipped there. Waste from BARC is not eligible for disposal at US Ecology, Hanford.

EnergySolutions, Barnwell, SC (Formerly Chem-Nuclear). EnergySolutions operates the low level waste disposal facility in Barnwell, SC. The site is a fully licensed (SC License) 10CFR61 compliant disposal facility. The site is currently open to waste from the entire U.S.; however, SC is imposing a series of increasingly restrictive limits on the quantity of waste that can be accepted. In order to ship to the site, the generator must first have a contract with the site operator. The site is limited to 40,000 ft^3 of out of compact waste this year and 35,000 ft^3 next year. There is currently legislation pending to allow the site to continue operating at 40,000 ft^3 per year beyond 2008, but that has not been approved. Currently, the site is scheduled for closure beyond 2008. All out of compact shipments must get approval prior to shipment. Currently approvals can take from 3 days to 9 months depending on the shipment type requested. The site will approve high value shipments like irradiated hardware or sealed sources quickly. There are significant fees associated with high activity low volume shipments. High volume, low value shipments may have to wait until near the end of their fiscal year (June 30) for any remaining volume to be allocated.

Unless a generator has waste that exceeds class A (e.g., sources or irradiated hardware) the cost to dispose at Barnwell is prohibitive. BARC waste that exhibits radioactive and hazardous waste components is not eligible for disposal at Barnwell.

EnergySolutions, Clive, UT. The majority of licensed low-level waste disposal in the country goes to EnergySolutions in Clive. They can accept most Class A wastes and are licensed for Class A waste only. Class B or C wastes and sources are not accepted for disposal at the Clive facility. The profile process is proscriptive and requires extensive sampling of waste streams prior to approval.

In addition to being licensed for disposal of radioactive material, the Clive facility is also permitted for the treatment and disposal of hazardous waste. It is the only licensed and permitted commercial waste disposal facility in the country, and their fee structure reflects this. They do not publish prices, but historically the price for disposal of mixed waste is three to ten times more than their normal waste price. The majority of the waste from BARC is acceptable at the Clive facility, although disposal fees would likely be significant.

6.2.1.2 Non Licensed Disposal Sites

The most cost effective disposal option is usually non-licensed disposal. Most, if not all, of the soil and debris waste from the BARC site may be a candidate for non-licensed disposal. In theory, waste that is excepted from licensed disposal can go to any site. The reality is that there are very few sites that will accept waste from a site where there is even the suspicion of radioactive contamination. Currently **US Ecology** (Idaho) and **Waste Control Specialists**

(WCS, Texas) operate RCRA-permitted disposal sites that will accept material with radionuclides above background levels if the material is exempt or excepted from licensed disposal. If a waste contains licensed material it must be disposed at a licensed facility (in accordance with 10CFR20) unless an exemption is applicable. Certain materials are excepted from license disposal in the regulations, (e.g., source material at less than 0.05% by weight [in accordance with 10CFR40.13]). Nonspecific exemptions are allowed under 10CFR20.2002. The waste from the BARC site will be a candidate for non-licensed disposal if it is granted an exemption under 10CFR20.2002.

US Ecology and WCS are usually the most cost effective options for disposal of high volume environmental cleanup type wastes contaminated with very small quantities of radioactive material. Again, as neither is licensed for disposal of radioactive waste; the waste must meet some exception criteria in order to be eligible for disposal at either facility. Because they are not licensed facilities, their disposal costs tend to reflect current hazardous waste disposal rates. Costs for drummed wastes are higher than for bulk wastes.

WCS operates under Texas regulation. Texas currently does not have language in their regulations that duplicates 10CFR20.2002, so any exemption submittal would have to be approved by both the NRC and the State of Texas before BARC waste could be shipped there.

6.2.2 Processing facilities

Processing facilities are an option for smaller quantities of material that do not lend themselves to cost effective profiling and shipment to disposal.

Permafix and NSSI, Houston, TX. Although both Permafix and NSSI are permitted treatment, storage and disposal facilities for hazardous waste, and are licensed to receive and process radioactive material, they are not disposal companies. They provide treatment services that make hazardous wastes acceptable for disposal, or they have outlets to dispose of hazardous wastes (e.g., flammable liquids) with exempt quantities of radioactive material. All of the mixed waste generated at the BARC site in the form of LSVs and bulked liquids were shipped to Permafix for treatment and disposal.

Energy Solutions, Oak Ridge; Toxco, Oak Ridge; RACE, Memphis TN; EMC/Thomas Gray and Assoc. Turlock, CA, CEG/Alaron, Wampum, PA. All of these facilities provide a number of waste processing and disposal options for smaller waste streams (individual sources, etc.) In general they perform consolidation and volume reduction of wastes through compaction, decontamination and survey for release, incineration, or some combination of these. The three sources/devices found during the investigation were shipped to the Alaron facility in Wampum, PA.

6.2.3 Summary of Treatment and Disposal Activities to Date

A total of less than 25 mCi of activity has been removed from the excavated pits (including the two radium-226 and one nickel-63). More than 75% of the activity is due to radium-226 and tritium. The tritium activity was largely in groundwater pumped from Pits 26 and 34 during dewatering operations. Another 20% of the activity is from carbon-14 and nickel-63, each with about 10% of the total. The remaining 5% is from lead-210, chlorine-36, and strontium-90.

To date twenty eight (28) drums of LSVs, two (2) drums of bulked liquids, and 3 radioactive sources/devices have been shipped from the site for processing and disposal. The LSVs and the bulked mixed waste were shipped to the Permafix facility in Gainesville, FL for treatment and disposal. Two Ra-226 sources and a Ni-63 electron capture device were shipped to Alaron Corporation and were received under their source recycling license.

Cost effective disposal options are being investigated for the remaining wastes. It is anticipated that the waste will receive a 10CRR20.2002 exemption and be disposed at US Ecology's Idaho site.

Table 83 summarizes the materials excavated during the field investigation.

6.3 Impacted Soil and Groundwater

CABRERA excavated approximately 10% of the 50 known burial pits at the LLRBS. Based on the work completed thus far, it is anticipated that the nature and extent of the waste in the remaining pits will be highly variable. Waste materials that have been encountered include laboratory trash (gloves, paper, metals, plastics, laboratory glassware, and other wastes generated during the process of performing laboratory analyses), LSVs, radioactive sources, bulk soils containing small amounts of waste or debris not readily separable from soil, animal remains, and bulk liquids in their original containers. Disposed materials often contained both radionuclides and hazardous wastes at concentrations that exceed NRC and/or EPA screening criteria for groundwater and soil.

Radionuclide concentrations found in soil and water were generally within regulatory limits. In soil and debris the observed activity in composite samples ranged from zero to a maximum result of 223 pCi/g for C-14 in BLT-P26-WS-01. The results of laboratory analyses on soil, water, waste liquid, and solid waste (both non-radiological and radiological) were presented in Chapter 5.0.

6.3.1 Non-Radiological Contaminants

Non-radiological soil contaminants include the organic chemicals chloroform, benzene, bromodichloromethane, and trichloroethylene and the metals arsenic, chromium, and vanadium.

The maximum concentration of chloroform was 762 µg/kg in Sample BLT-P26-SO-02b, collected from approximately one foot below Pit 26. The RBC for chloroform is $1x10^7$ µg/kg. The maximum concentration of benzene was 625 µg/kg in Sample BLT-P34-SO-05c, collected from approximately 2 feet below Pit 34. The RBC for benzene is 52,000 µg/kg. The maximum concentration of bromodichloromethane was 379 µg/kg, in Sample BLT-P34-SO-05c, collected from approximately 2 feet below Pit 34. The RBC for bromodichloromethane is 46,155 µg/kg. The maximum concentration of trichloroethylene was 474 µg/kg in Sample BLT-P34-SO-05c, collected from approximately 2 feet below Pit 34. The RBC for trichloroethylene is 7,150 µg/kg.

Arsenic was the most common non-radiological contaminant, often exceeding EPA Region 3 RBC concentrations, even in the Reference Area. The maximum arsenic result in soil was 59.6 mg/kg in Sample BLT-P34-SO-05g from approximately 18 feet beneath Pit 34. The RBC for arsenic is 1.91 mg/kg. The maximum concentration of chromium in soil was 68 mg/kg, compared to an RBC of 3066 mg/kg. The maximum concentration for vanadium was 90 mg/kg in Sample BLT-P34-SO-05g. The RBC for vanadium is 307 mg/kg.

Groundwater that was sampled from beneath the pits had levels of benzene, trichloroethylene, and chloroform that were slightly greater than the RBCs. The maximum aqueous benzene concentration was 1.6 µg/L, which was beneath Pit 34C. The RBC for benzene is 0.34 µg/L. The maximum trichloroethylene concentration was 0.487 µg/L, compared to the RBC of 0.026 µg/L. The maximum aqueous chloroform concentration measured was 10.6 µg/L, compared to the RBC of 0.15 µg/L.

6.3.2 Radiological Contaminants

Radiological contaminants tritium and carbon-14 are found in low concentrations throughout the waste where LSVs were present, with Strontium-90, Chlorine-36, and Radium-226 occurring less frequently.

The maximum tritium concentration in subsurface soils was 140 pCi/g, which is slightly higher than the NRC guideline screening level of 110 pCi/g. The result was from Sample BLT-P14-SO-061, collected from the bottom of Pit 14. All other results for tritium in soil were 30 pCi/g or less.

The maximum concentration of radium-226 was 7.53 pCi/g, collected from the base of Pit 34C. Seven of 13 soil samples collected from Pit 34C exceeded the NRC guideline level of 0.7 pCi/g. Two of 8 samples collected from the reference area also exceeded the NRC guideline level for radium-226.

The maximum carbon-14 concentration in soil samples was 210 pCi/g in Sample BLT-P26-SO-03a, collected from the bottom of Pit 26. Two other samples for carbon-14, another one in Pit 26 and on in Pit 14 had C-14 concentrations of approximately 15 pCi/g. These three results exceed the NRC guideline level of 12 pCi/g, while all other results were below that level.

The maximum strontium-90 concentration in soils was 0.278 pCi/g, compared to the NRC guideline level of 1.7 pCi/g. The maximum concentration of chlorine-36 in soil was 0.11 pCi/g compared to a guideline level 0.36 pCi/g.

The only radionuclides that exceeded RBCs in water samples were radium-228 and thorium-230. The maximum radium-228 concentration in unfiltered groundwater was 29.7 pCi/L, compared to a field-filtered aliquot of the same sample which contained 13.9 pCi/L of radium-228. The MCL for radium-228 is 5 pCi/L. Thorium-230 was encountered in groundwater beneath Pits 1, 14, and 34 at concentrations ranging from 18 pCi/L to 28 pCi/L, compared to an MCL concentration of 15 pCi/L.

The maximum tritium concentration in groundwater beneath the pits was 1,030 pCi/L, compared to the NRC Derived Concentration guideline level of 20,000 pCi/L.

7.0 REFERENCES

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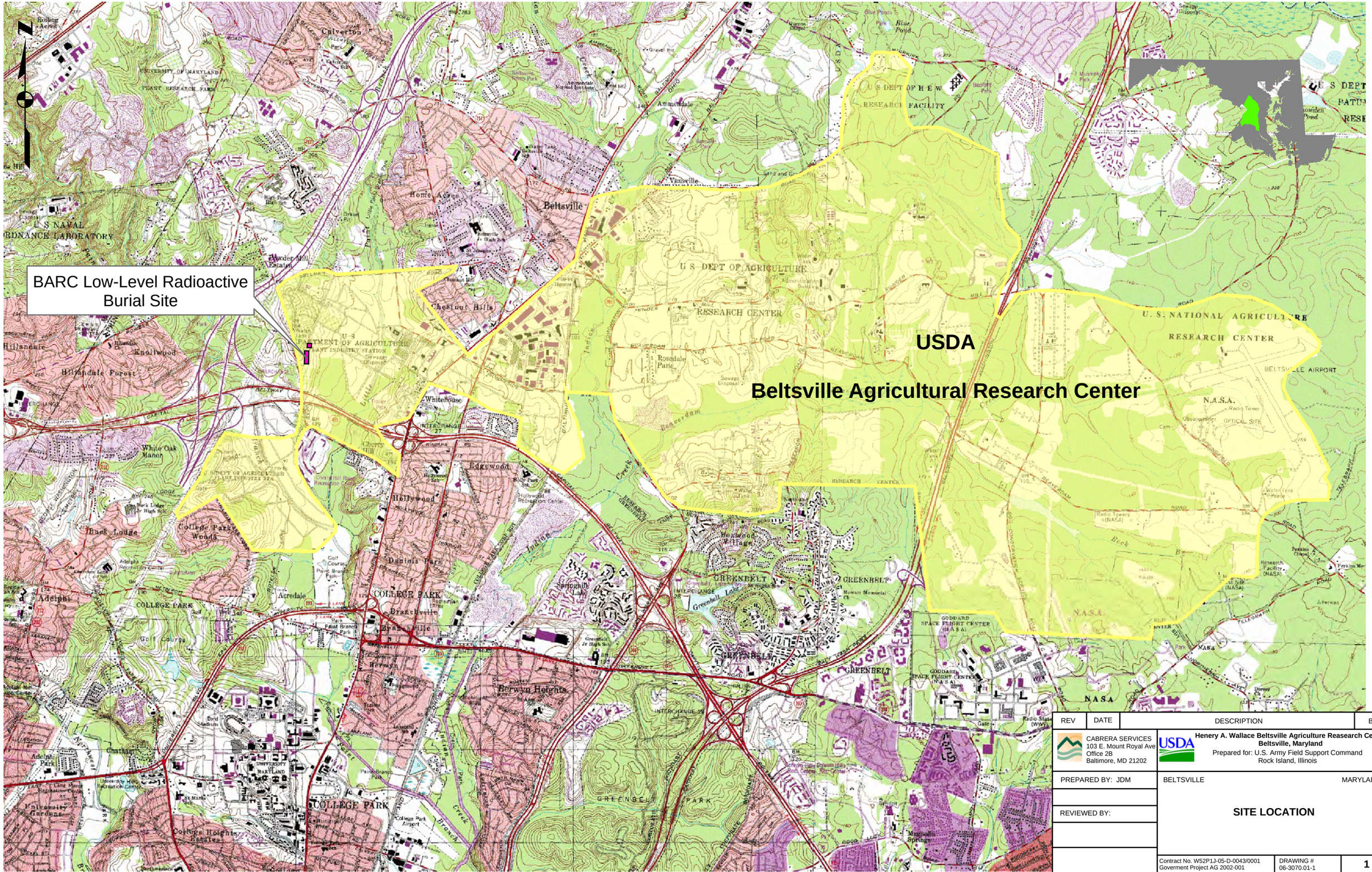
FIGURES

1. Site Location
2. Historical Pit Locations in the North Field
3. BARC Low-Level Radiation Burial Site – North and South Fields
4. North Field Sample Locations
5. Gamma Walkover Survey Results
6. Analytes Exceeding Regulatory Guidelines, Reference Area Soils
7. Pit 1 Soil Sample and Temporary Well Locations
8. Analytes Exceeding Regulatory Guidelines, Pit 1 Soils
9. Analytes Exceeding Regulatory Guidelines, Temporary Wells
10. Pit 14 Soil Sample and Temporary Well Locations
11. Analytes Exceeding Regulatory Guidelines, Pit 14 Soils
12. Pit 26 Soil Sample and Temporary Well Locations
13. Analytes Exceeding Regulatory Guidelines, Pit 26 Soils
14. Pit 34 Soil Sample and Temporary Well Locations
15. Analytes Exceeding Regulatory Guidelines, Pit 34 Soils
16. Pit 34C Soil Sample and Temporary Well Locations
17. Analytes Exceeding Regulatory Guidelines, Pit 34C Soils



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BELTSVILLE MARYLAND

SITE LOCATION

Contract No. W52P1J-05-D-0043/0001
Goverment Project AG 2002-001

DRAWING # 06-3070.01-1

1

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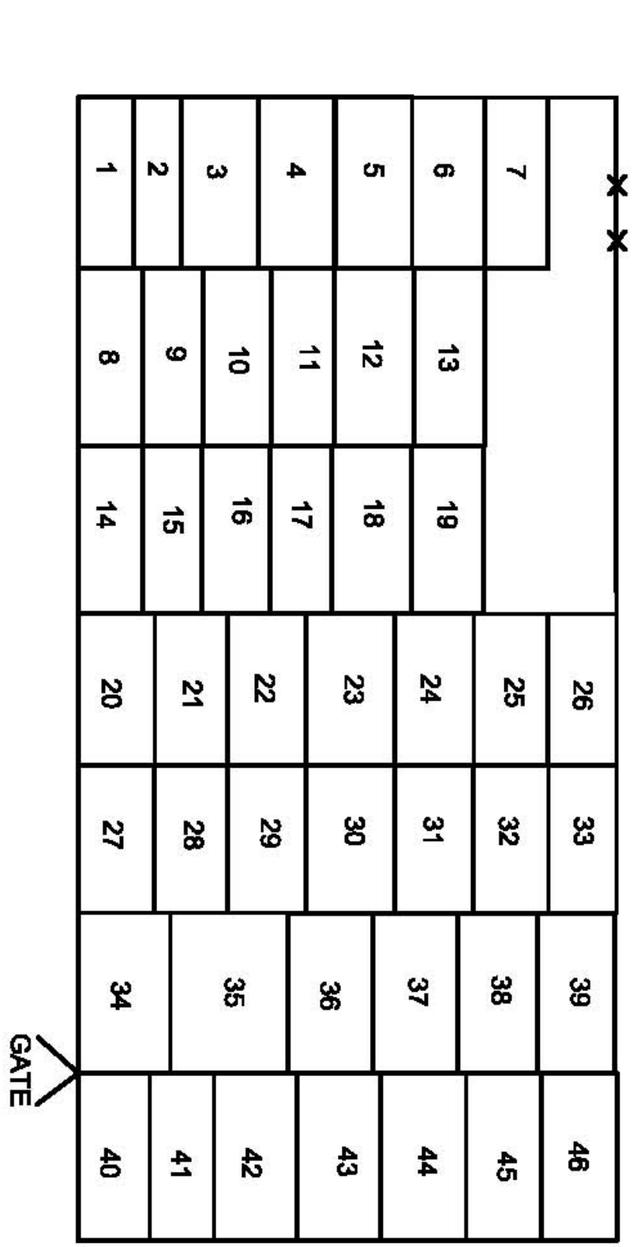
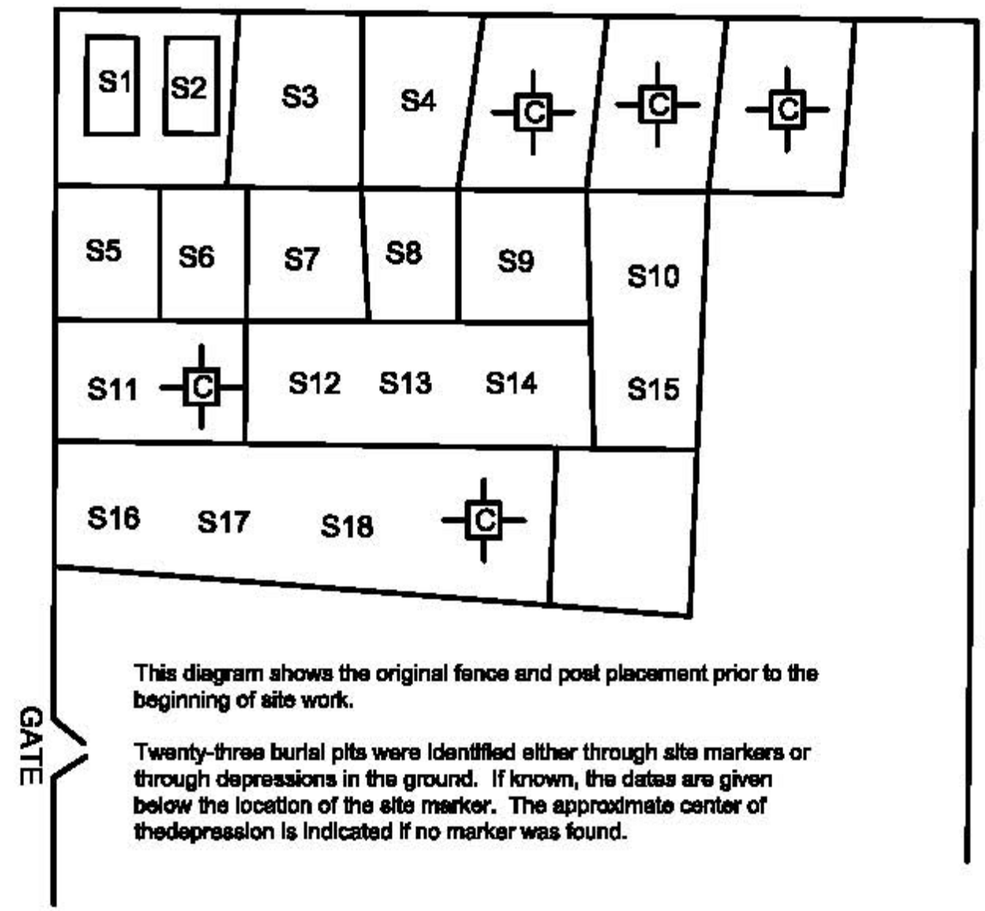
DATE: MAY 2007



Note: Not to scale. Entech provided to Cabrera via fax on 1/10/03

S1 = 4/6/51
S2 = 8/4/53
S3 = 5/13/59
S4 = 4/3/61
S5 = 8/67
S6 = 9/68
S7 = 5/70
S8 = 11/70
S9 = 4/71
S10 = 11/71
S11 = 7/72
S12 = 8/72
S13 = 11/72
S14 = 12/72
S15 = 3/73
S16 = 2/73
S17 = 3/15/73
S18 = 9/7/73



This diagram shows the original fence and post placement prior to the beginning of site work.

Twenty-three burial pits were identified either through site markers or through depressions in the ground. If known, the dates are given below the location of the site marker. The approximate center of thedepression is indicated if no marker was found.

Source: Letter dated 8/11/1989 from J.F. Patterson of RSO, Inc. to B. Flook, Agricultural Research Service

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Prepared for: U.S. Army Field Support Command
Rock Island, Illinois

PREPARED BY: JDM

REVIEWED BY:

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HISTORICAL PIT LOCATIONS IN THE NORTH FIELD

Contract No. W52P1J-05-D-0043/0001
Goverment Project AG 2002-001

DRAWING # 06-3070.01-2

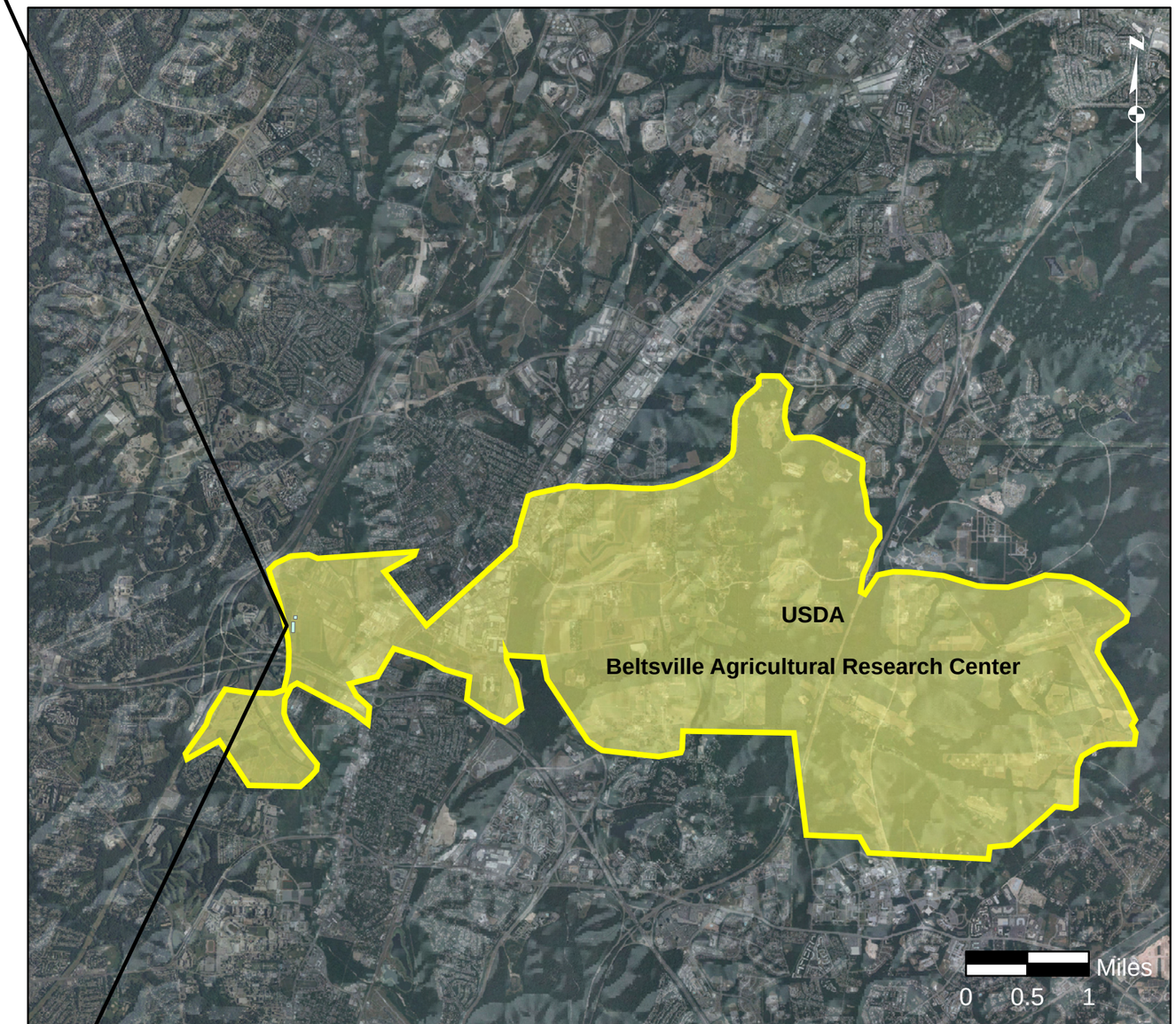
2

SCALE:

DATE: MAY 2007

NOTES:

Reference Area sampled between April 27, 2006; to July 19, 2006
Pit #1 excavated on April 19, 2006; Backfilled April 25, 2006
Pit #14 excavated on May 03, 2006; Backfilled May 10, 2006
Pit #26 excavated on May 16, 2006; Backfilled May 22, 2006
Pit #34 excavated on June 15, 2006; Backfilled July 11, 2006
Pit #34C excavated on July 13, 2006; Backfilled July 16, 2006



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REVIEWED BY:

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BARC LOW-LEVEL RADIOACTIVE BURIAL SITE
NORTH & SOUTH FIELDS

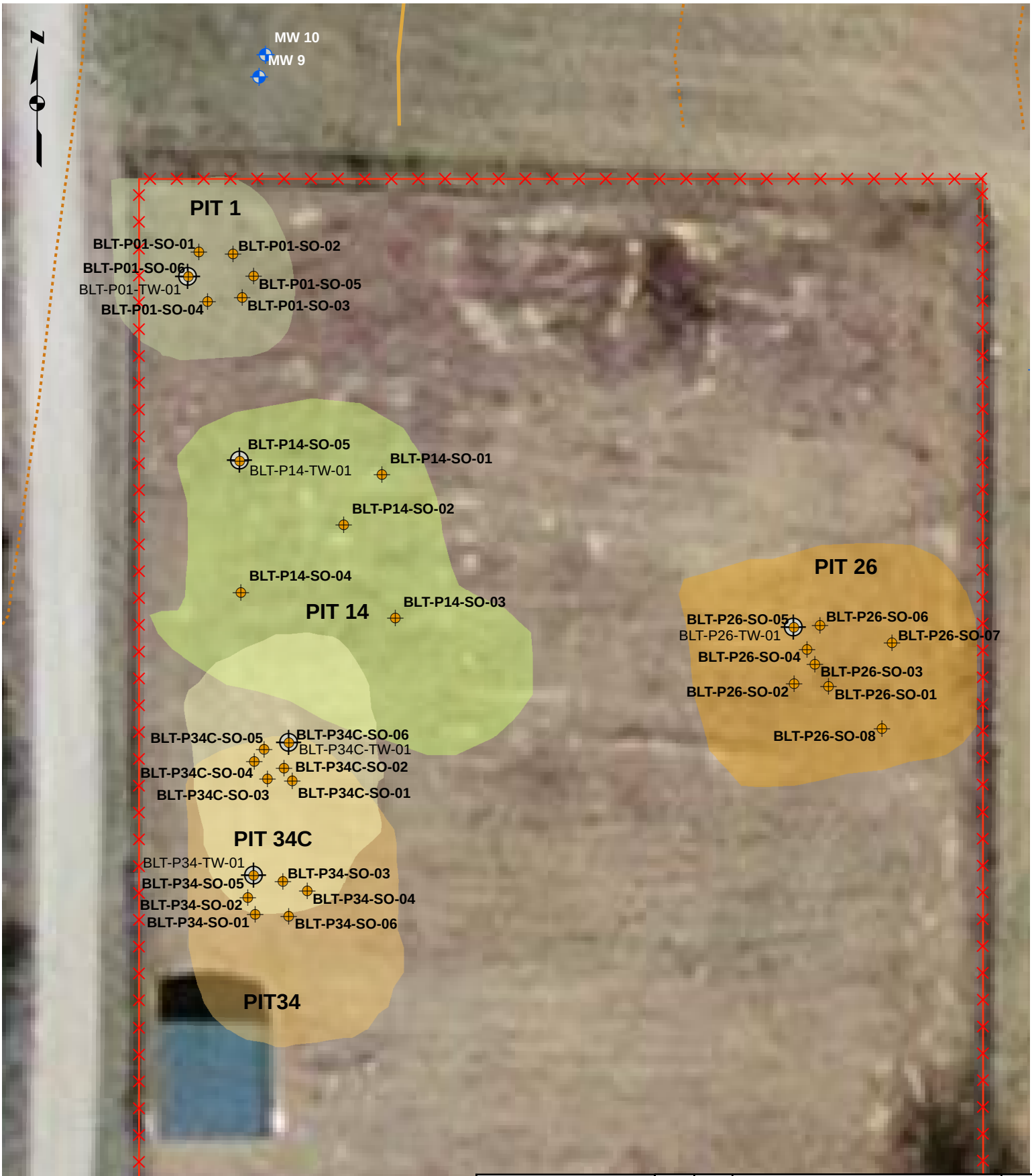
Contract No. W52P1J-05-D-0043/0001
Goverment Project AG 2002-001

DRAWING # 06-3070.01-3

3

SCALE:

DATE: MAY 2007



NOTES:

Pit #1 excavated on April 19, 2006; Backfilled April 25, 2006
Pit #14 excavated on May 03, 2006; Backfilled May 10, 2006
Pit #26 excavated on May 16, 2006; Backfilled May 22, 2006
Pit #34 excavated on June 15, 2006; Backfilled July 11, 2006
Pit #34C excavated on July 13, 2006; Backfilled July 16, 2006

North Field

South Field

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NORTH FIELD

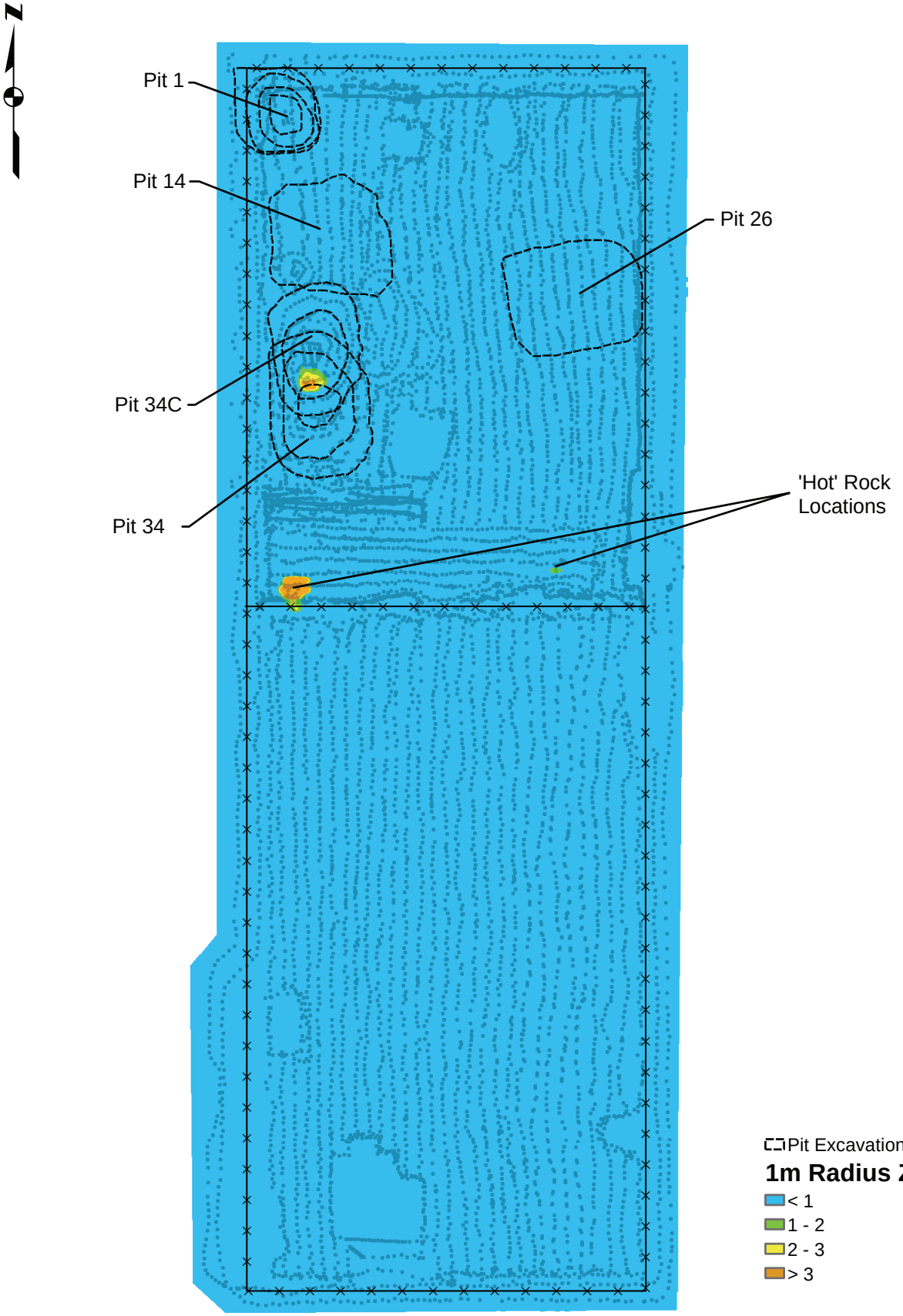
Contract No. W52P1J-05-D-0043/0001
Goverment Project AG 2002-001

DRAWING # 06-3070.01-4

4

SCALE: 0 10 20 Feet

DATE: MAY 2007



Legend

Pit Excavation

1m Radius Z Score Interpolation

- < 1
- 1 - 2
- 2 - 3
- > 3

NOTES:

Pit #1 excavated on April 19, 2006; Backfilled April 25, 2006
Pit #14 excavated on May 03, 2006; Backfilled May 10, 2006
Pit #26 excavated on May 16, 2006; Backfilled May 22, 2006
Pit #34 excavated on June 15, 2006; Backfilled July 11, 2006
Pit #34C excavated on July 13, 2006; Backfilled July 16, 2006

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PREPARED BY: JDM

REVIEWED BY:

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GAMMA WALKOVER SURVEY
1m RADIUS Z SCORE INTERPOLATION

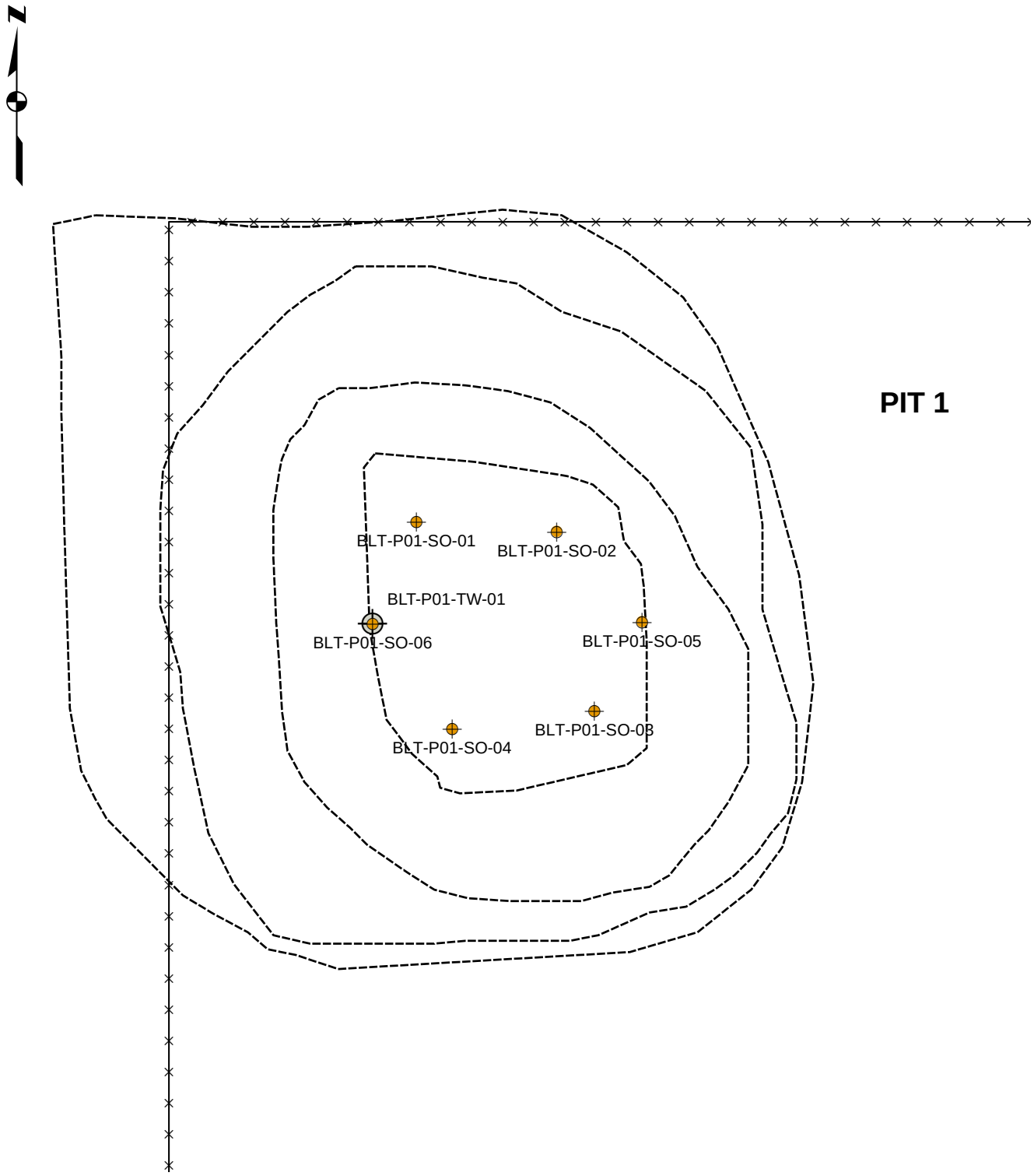
Contract No. W52P1J-05-D-0043/0001
Goverment Project AG 2002-001

DRAWING # 06-3070.01-5

5

SCALE: 0 5 10 Feet

DATE: May 2007



Legend

- Pit 1 Soil Sample Points
- Temporary Monitoring Well

NOTES:

Pit #1 excavated on April 19, 2006; Backfilled April 25, 2006

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PIT 1 SOIL SAMPLE & TEMPORARY WELL LOCATIONS

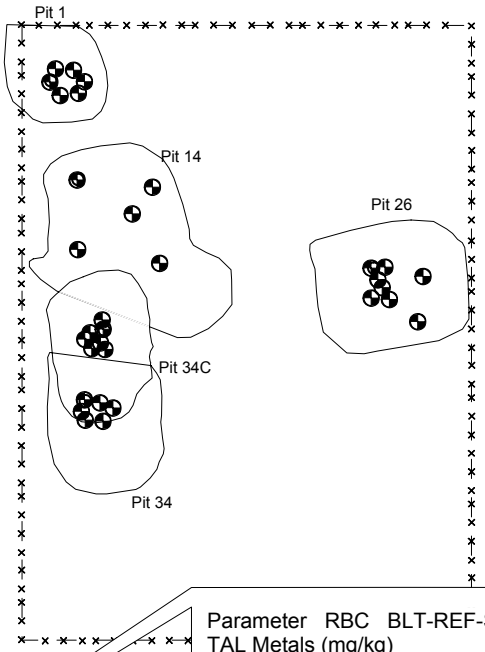
Contract No. W52P1J-05-D-0043/0001
Goverment Project AG 2002-001

DRAWING # 06-3070.01-6

6

Feet
0 1 2

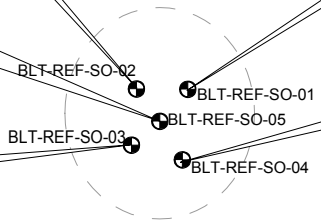
DATE: May 2007



Parameter	RBC	BLT-REF-SO-02a-03	BLT-REF-SO-02b-03
TAL Metals (mg/kg)			
Arsenic	1.91	7.14	5.51
Radionuclides (pCi/g)			
Radium-226	0.7	0.65	0.74

Parameter	RBC	BLT-REF-SO-01a-03	BLT-REF-SO-01b-2
TAL Metals (mg/kg)			
Arsenic	1.91	7.21	6.1

Parameter	RBC	BLT-REF-SO-05c-2	BLT-REF-SO-06a-2
TAL Metals (mg/kg)			
Arsenic	1.91	4.11	5.9



Parameter	RBC	BLT-REF-SO-04a-03	BLT-REF-SO-04b-03
TAL Metals (mg/kg)			
Arsenic	1.91	4.9	4.16

Paramete	RBC	BLT-REF-SO-03a-2	BLT-REF-SO-03b-03
TAL Metals (mg/kg)			
Arsenic	1.91	4.01	3.89
Radionuclides (pCi/g)			
Lead-210	0.9	--	1.98
Radium-226	0.7	--	0.87

REFERENCE AREA

Soil Sample Location

Temporary Well and Soil Sample Location

Notes:
1. "a" = 0-1 ft below excavation floor,
"b" - 1 to 2 ft, "c" = 0 to 4 ft, "d" = 4 to 8 ft,
"e" = 8 to 12 ft, "f" = 12 to 16 ft, etc.
2. Organic and inorganic concentrations in soil are compared against EPA Region 3 risk-based concentrations (industrial)
3. Radionuclide concentrations are compared against NRC screening values for unrestricted release of soils.

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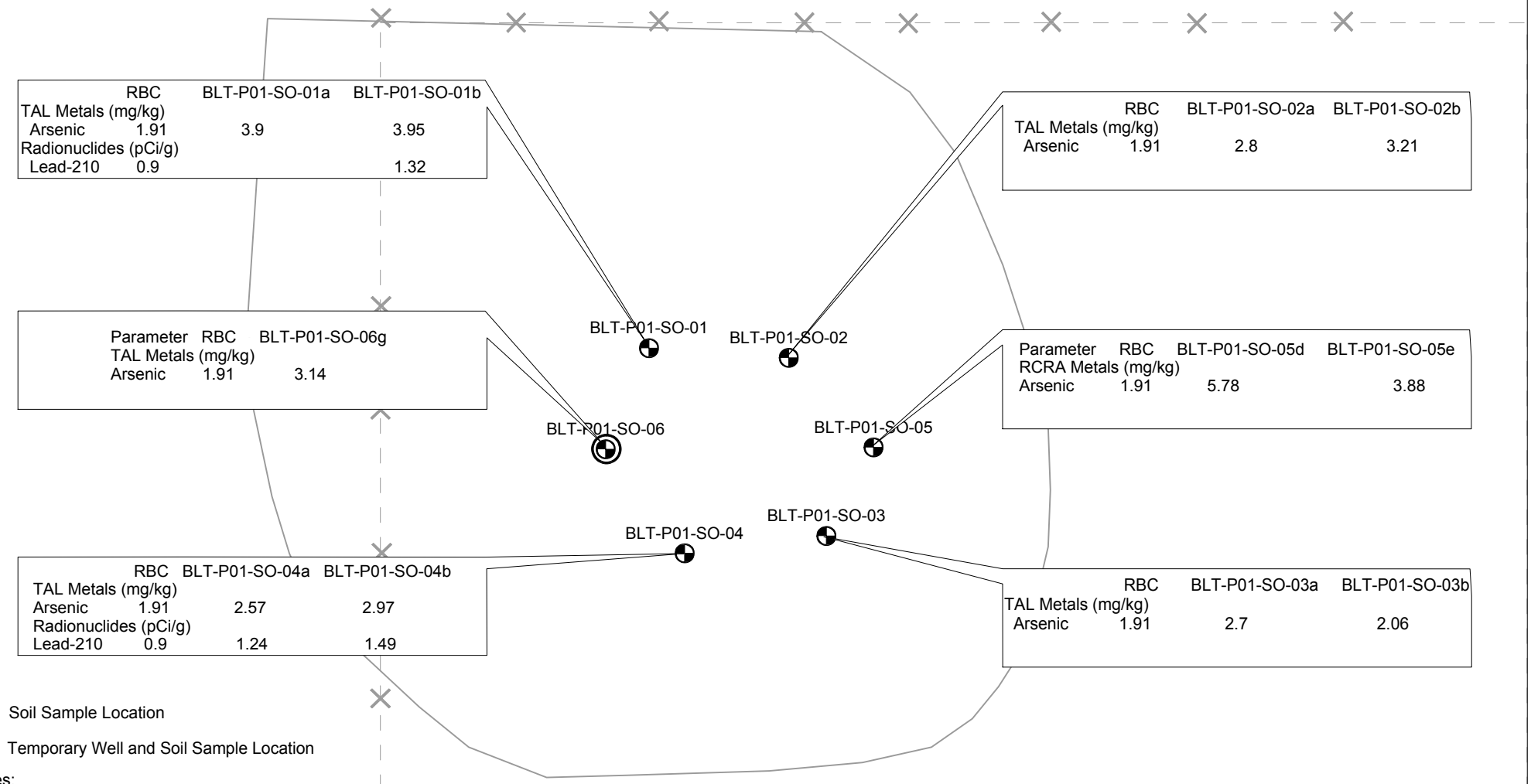
Figure 7
Analytes Exceeding Regulatory Guidelines
Reference Area



Notes:
1. "a" = 0-1 ft below excavation floor, "b" - 1 to 2 ft, "c" = 0 to 4 ft, "d" = 4 to 8 ft, "e" = 8 to 12 ft, "f" = 12 to 16 ft, etc.
2. Organic and inorganic concentrations in soil are compared against EPA Region 3 risk-based concentrations (industrial)
3. Radionuclide concentrations are compared against NRC screening values for unrestricted release of soils.

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Figure 8
Analytes Exceeding Regulatory Guidelines
Pit 1 Soils

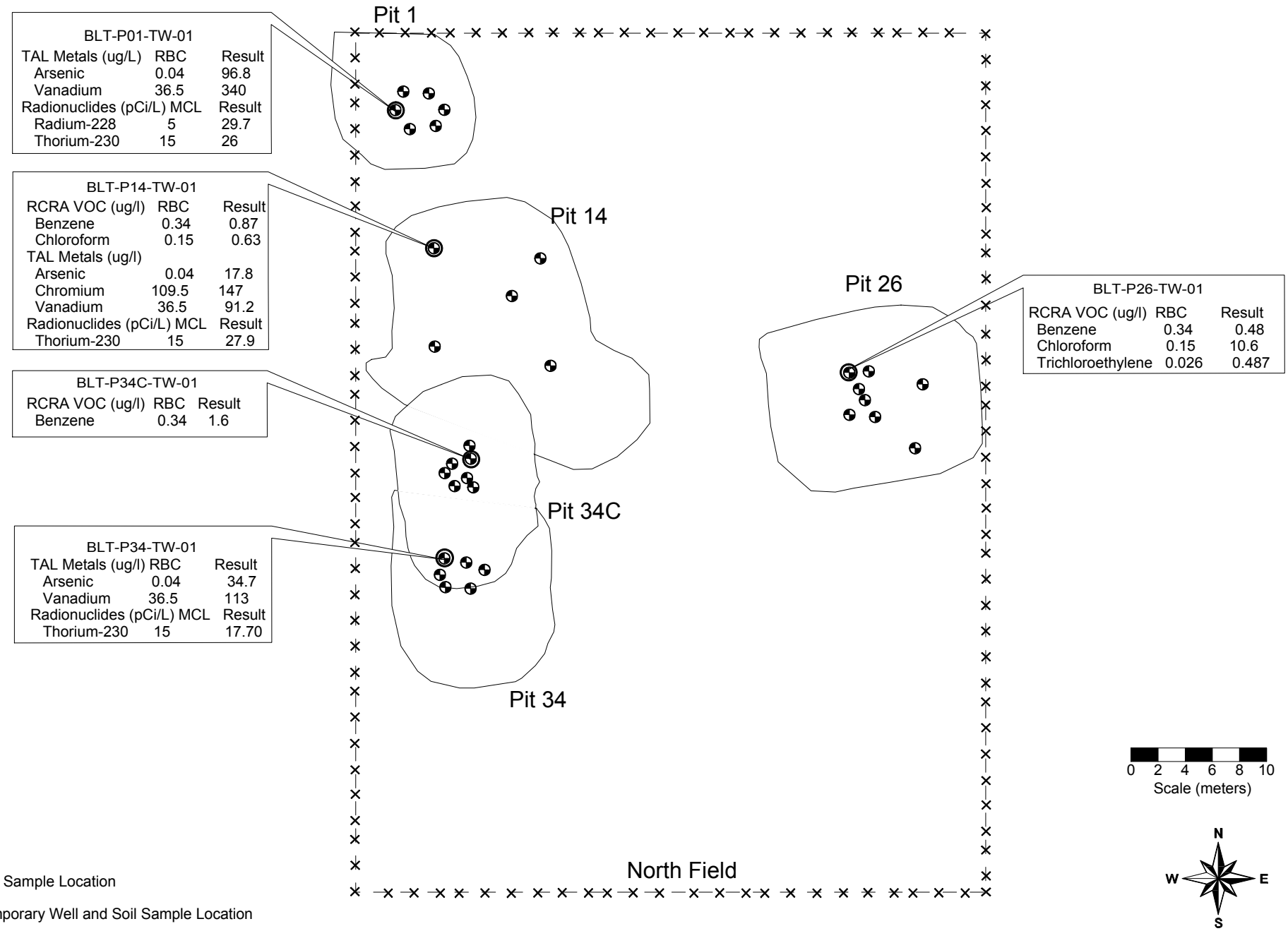

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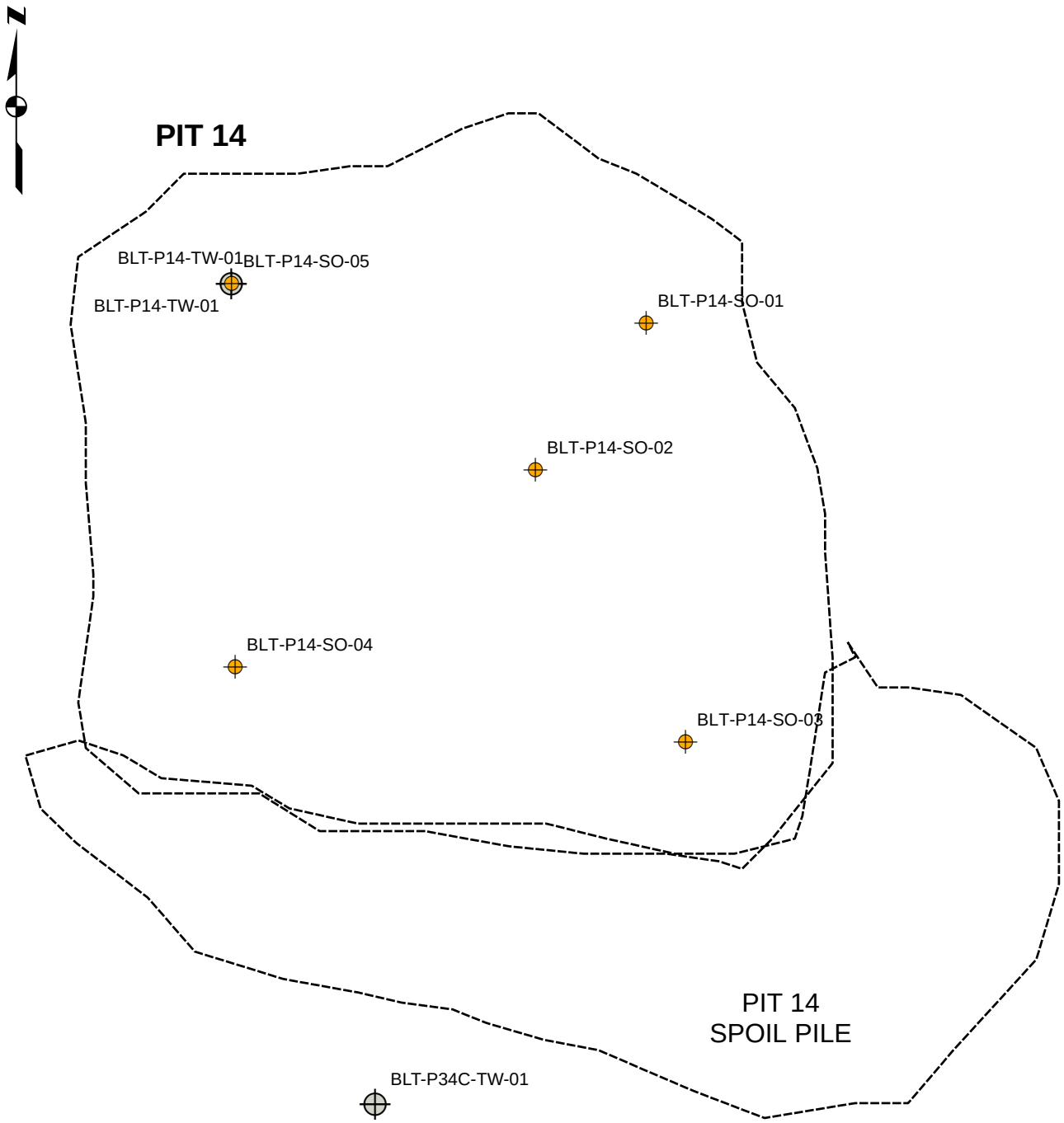
Figure 9
Analytes Exceeding Regulatory Guidelines
Temporary Wells



Legend

- Pit 14 Soil Sample Locations
- Temporary Monitoring Well

NOTES:

Pit #14 excavated on May 3, 2006; Backfilled May 10, 2006

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Rock Island, Illinois

PREPARED BY: JDM

REVIEWED BY:

BELTSVILLE MARYLAND

PIT 14 SOIL SAMPLE & TEMPORARY WELL LOCATIONS

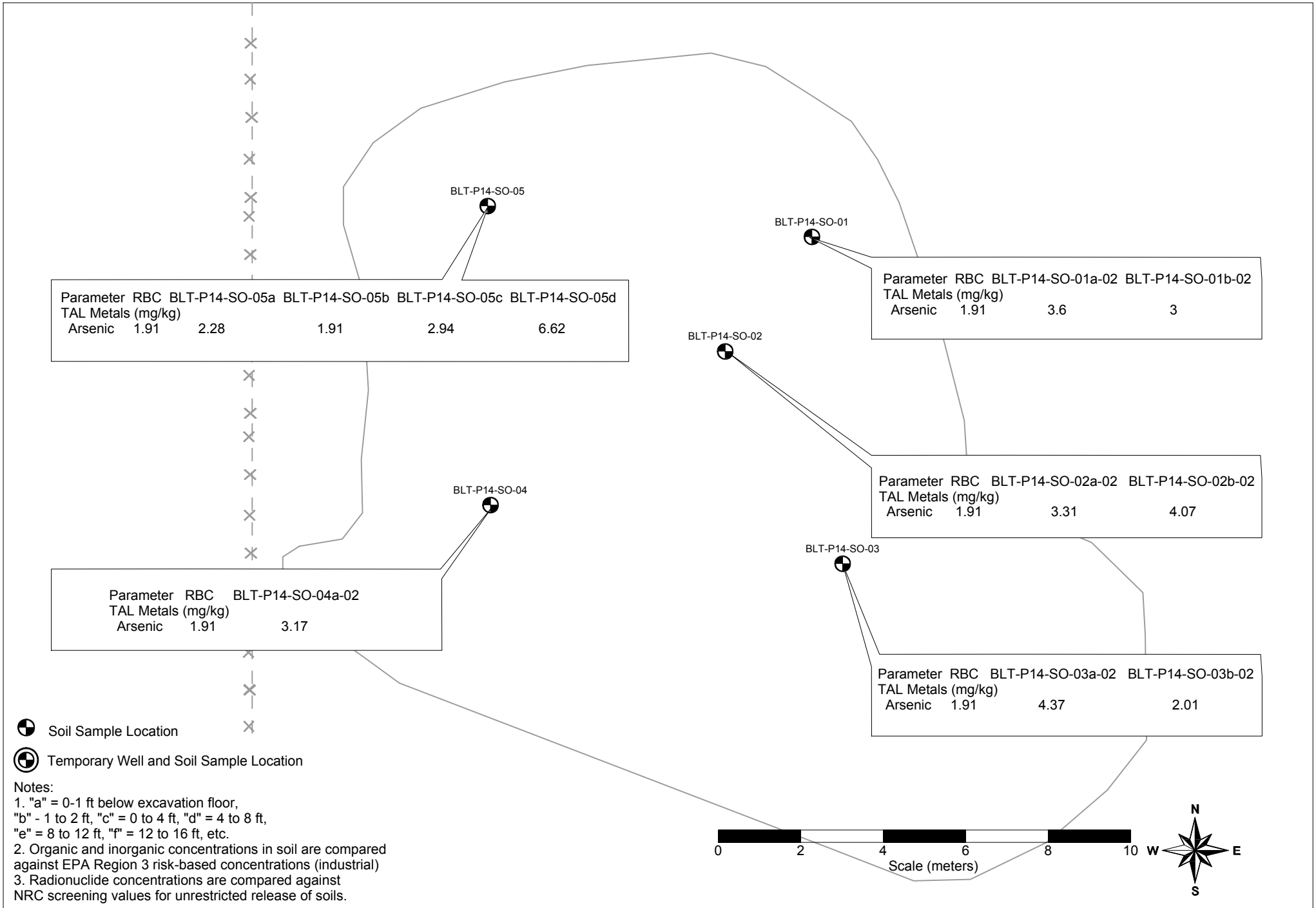
Contract No. W52P1J-05-D-0043/0001
Goverment Project AG 2002-001

DRAWING # 06-3070.01-9

10

SCALE: 0 1 2 Feet

DATE: May 2007



Notes:
1. "a" = 0-1 ft below excavation floor, "b" - 1 to 2 ft, "c" = 0 to 4 ft, "d" = 4 to 8 ft, "e" = 8 to 12 ft, "f" = 12 to 16 ft, etc.
2. Organic and inorganic concentrations in soil are compared against EPA Region 3 risk-based concentrations (industrial)
3. Radionuclide concentrations are compared against NRC screening values for unrestricted release of soils.

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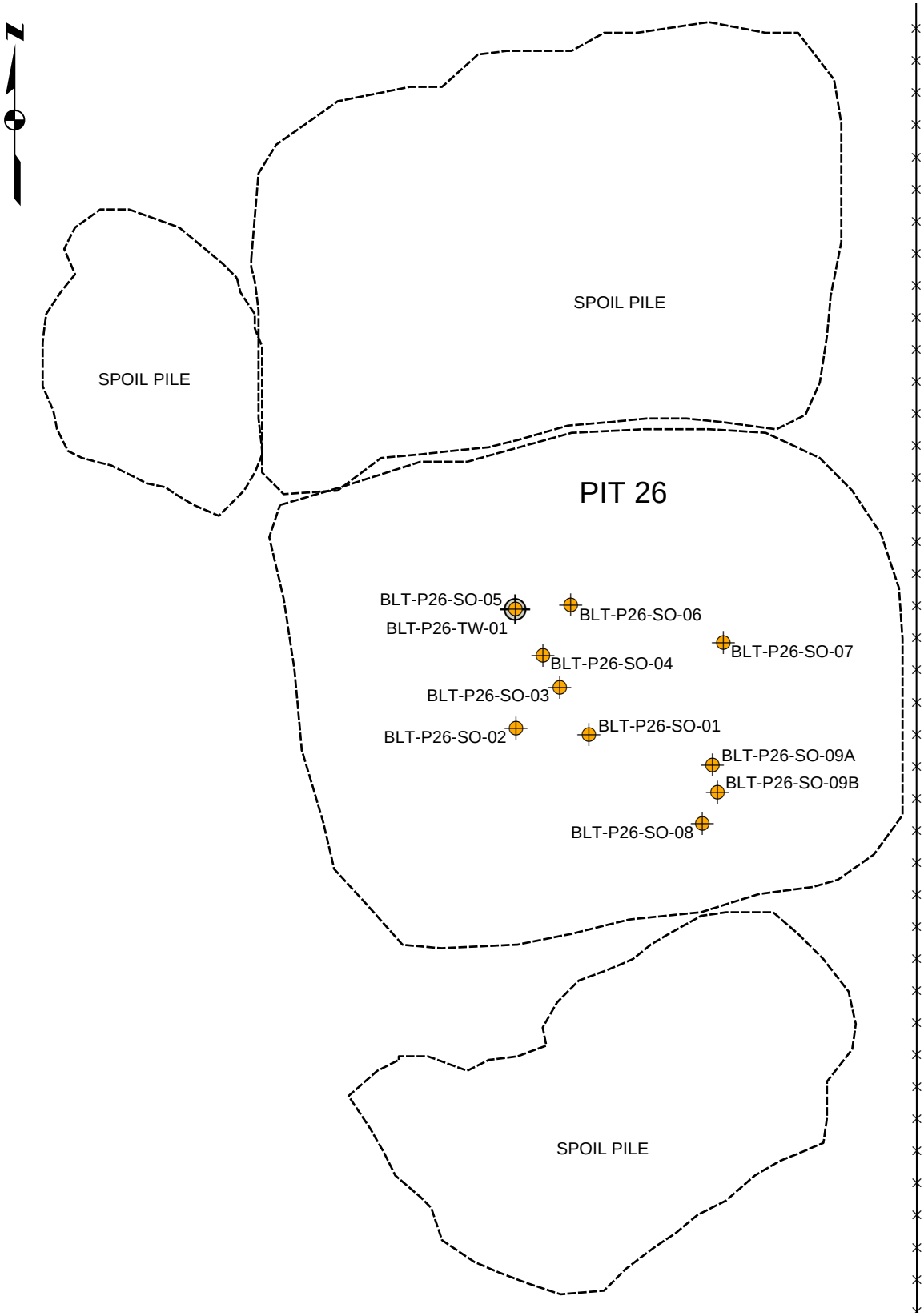
Figure 11
Analytes Exceeding Regulatory Guidelines
Pit 14 Soils



Legend

- Pit 26 Soil Sample Locations
- Temporary Monitoring Well

NOTES:

Pit #26 excavated on May 16, 2006; Backfilled May 22, 2006

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Beltsville, Maryland
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Rock Island, Illinois

PREPARED BY: JDM

REVIEWED BY:

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PIT 26 SOIL SAMPLE & TEMPORARY WELL LOCATIONS

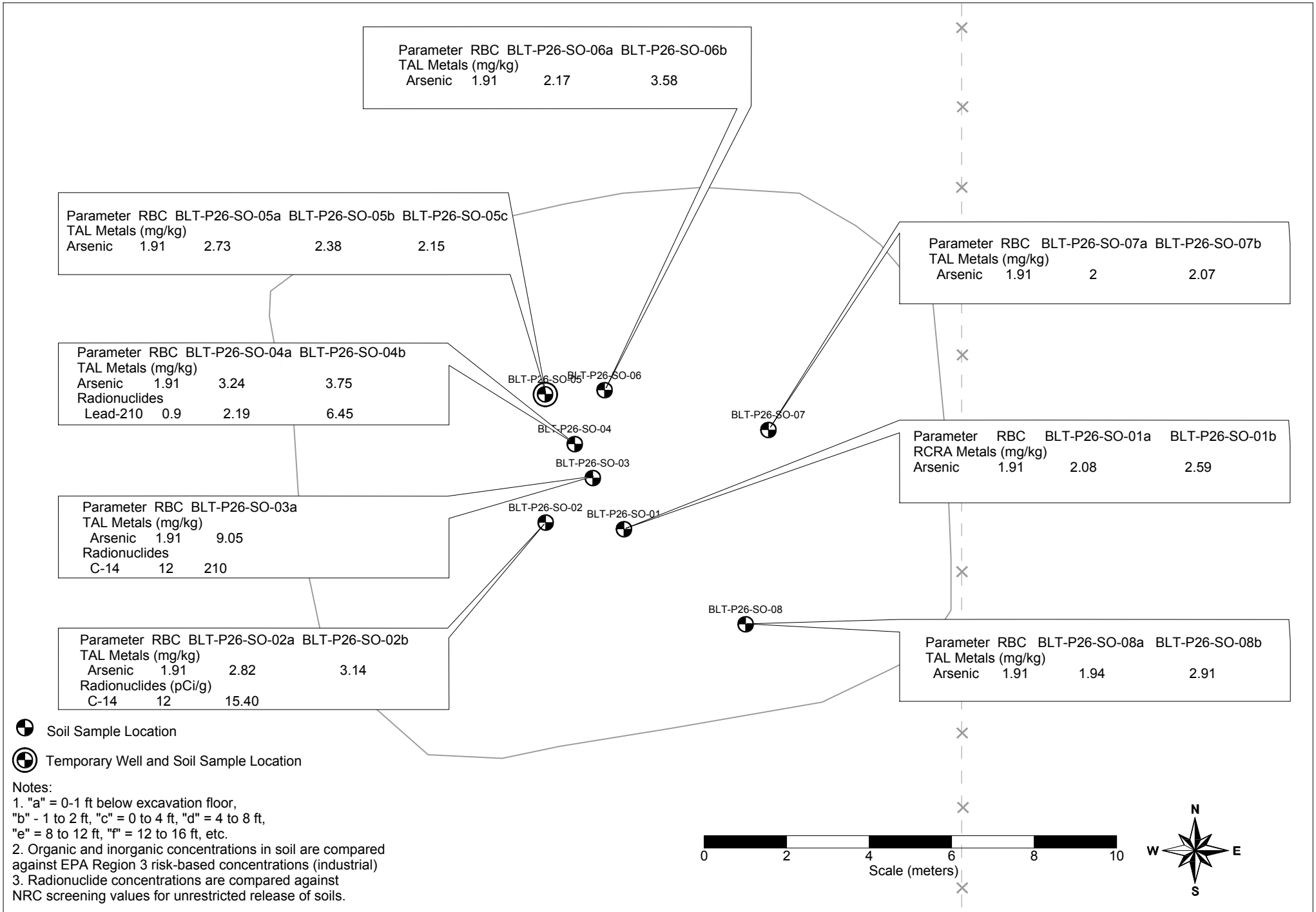
Contract No. W52P1J-05-D-0043/0001
Goverment Project AG 2002-001

DRAWING # 06-3070.01-11

12

SCALE: 0 1 2 Feet

DATE: May 2007



Notes:
1. "a" = 0-1 ft below excavation floor,
"b" - 1 to 2 ft, "c" = 0 to 4 ft, "d" = 4 to 8 ft,
"e" = 8 to 12 ft, "f" = 12 to 16 ft, etc.
2. Organic and inorganic concentrations in soil are compared against EPA Region 3 risk-based concentrations (industrial)
3. Radionuclide concentrations are compared against NRC screening values for unrestricted release of soils.

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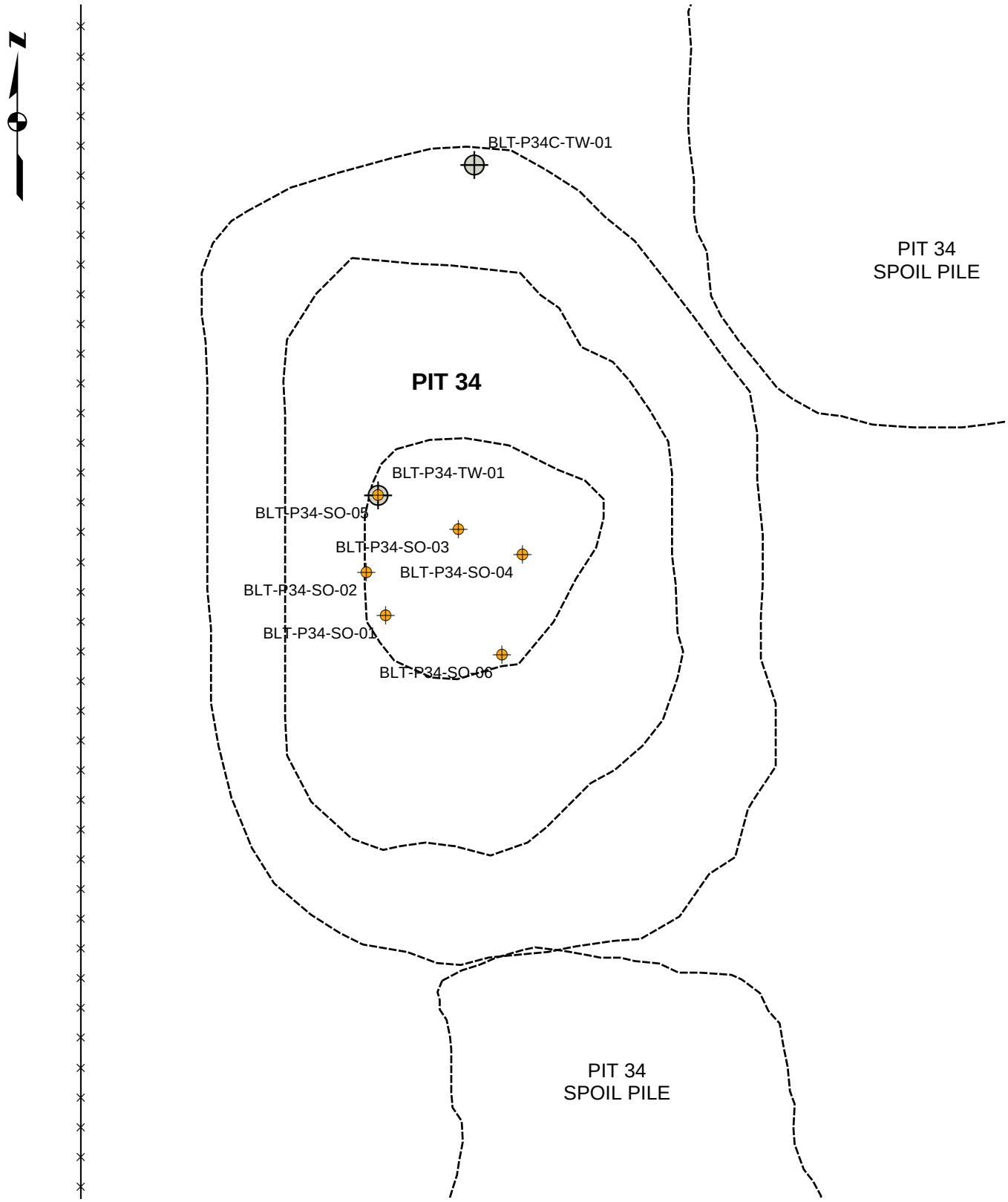
Figure 13
Analytes Exceeding Regulatory Guidelines
Pit 26 Soils



Legend

- Pit 34 Soil Sample Locations
- Temporary Monitoring Wells

NOTES:

Pit #34 excavated on June 15, 2006; Backfilled July 11, 2006

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PREPARED BY: JDM

REVIEWED BY:

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PIT 34 SOIL SAMPLE & TEMPORARY WELL LOCATIONS

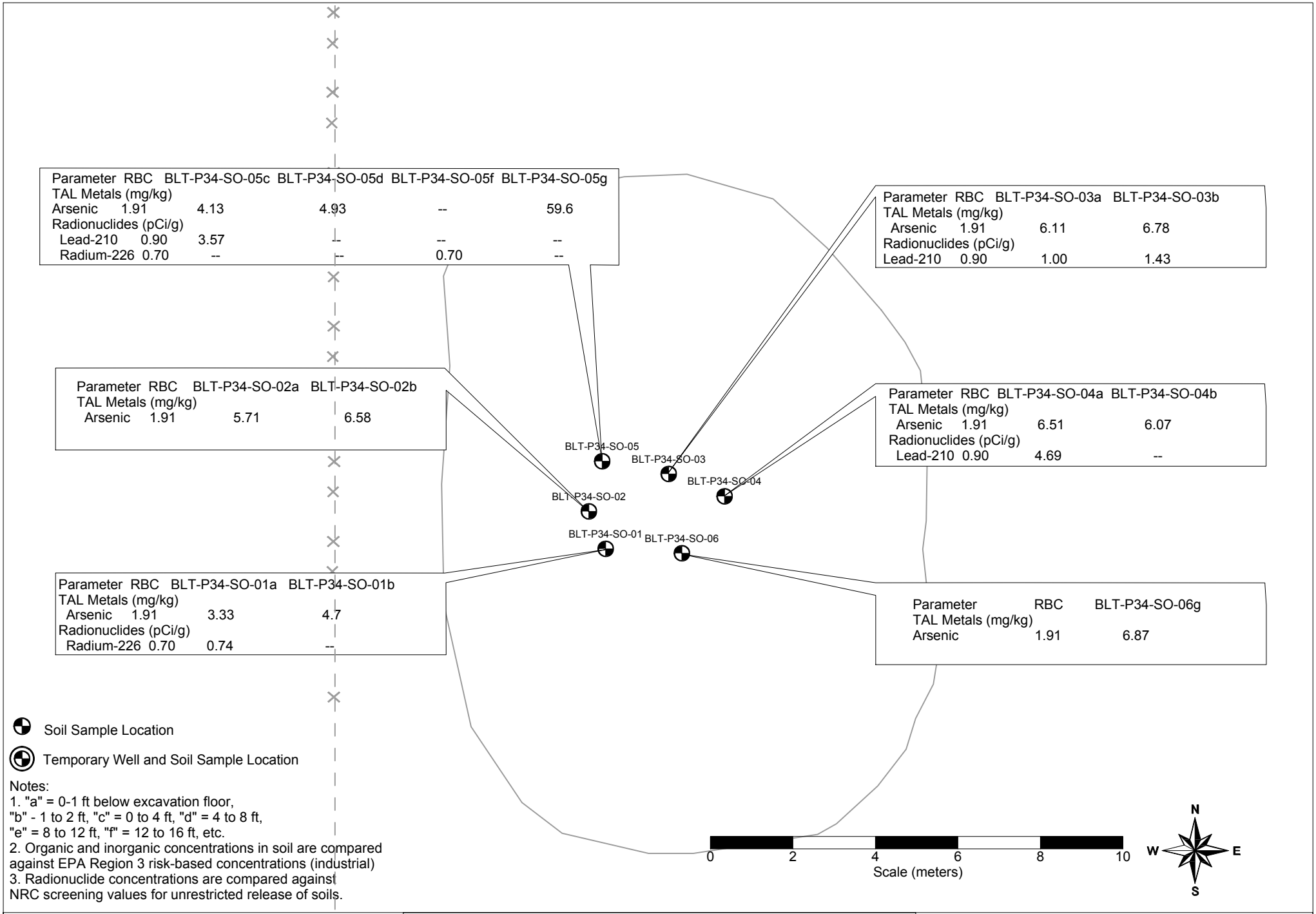
Contract No. W52P1J-05-D-0043/0001
Goverment Project AG 2002-001

DRAWING # 06-3070.01-13

14

SCALE: 0 1 2 Feet

DATE: May 2007



Parameter	RBC	BLT-P34-SO-05c	BLT-P34-SO-05d	BLT-P34-SO-05f	BLT-P34-SO-05g
TAL Metals (mg/kg)					
Arsenic	1.91	4.13	4.93	--	59.6
Radionuclides (pCi/g)					
Lead-210	0.90	3.57	--	--	--
Radium-226	0.70	--	--	0.70	--

Parameter	RBC	BLT-P34-SO-03a	BLT-P34-SO-03b
TAL Metals (mg/kg)			
Arsenic	1.91	6.11	6.78
Radionuclides (pCi/g)			
Lead-210	0.90	1.00	1.43

Parameter	RBC	BLT-P34-SO-02a	BLT-P34-SO-02b
TAL Metals (mg/kg)			
Arsenic	1.91	5.71	6.58

Parameter	RBC	BLT-P34-SO-04a	BLT-P34-SO-04b
TAL Metals (mg/kg)			
Arsenic	1.91	6.51	6.07
Radionuclides (pCi/g)			
Lead-210	0.90	4.69	--

Parameter	RBC	BLT-P34-SO-01a	BLT-P34-SO-01b
TAL Metals (mg/kg)			
Arsenic	1.91	3.33	4.7
Radionuclides (pCi/g)			
Radium-226	0.70	0.74	--

Parameter	RBC	BLT-P34-SO-06g
TAL Metals (mg/kg)		
Arsenic	1.91	6.87

Soil Sample Location

Temporary Well and Soil Sample Location

Notes:
1. "a" = 0-1 ft below excavation floor, "b" - 1 to 2 ft, "c" = 0 to 4 ft, "d" = 4 to 8 ft, "e" = 8 to 12 ft, "f" = 12 to 16 ft, etc.
2. Organic and inorganic concentrations in soil are compared against EPA Region 3 risk-based concentrations (industrial)
3. Radionuclide concentrations are compared against NRC screening values for unrestricted release of soils.

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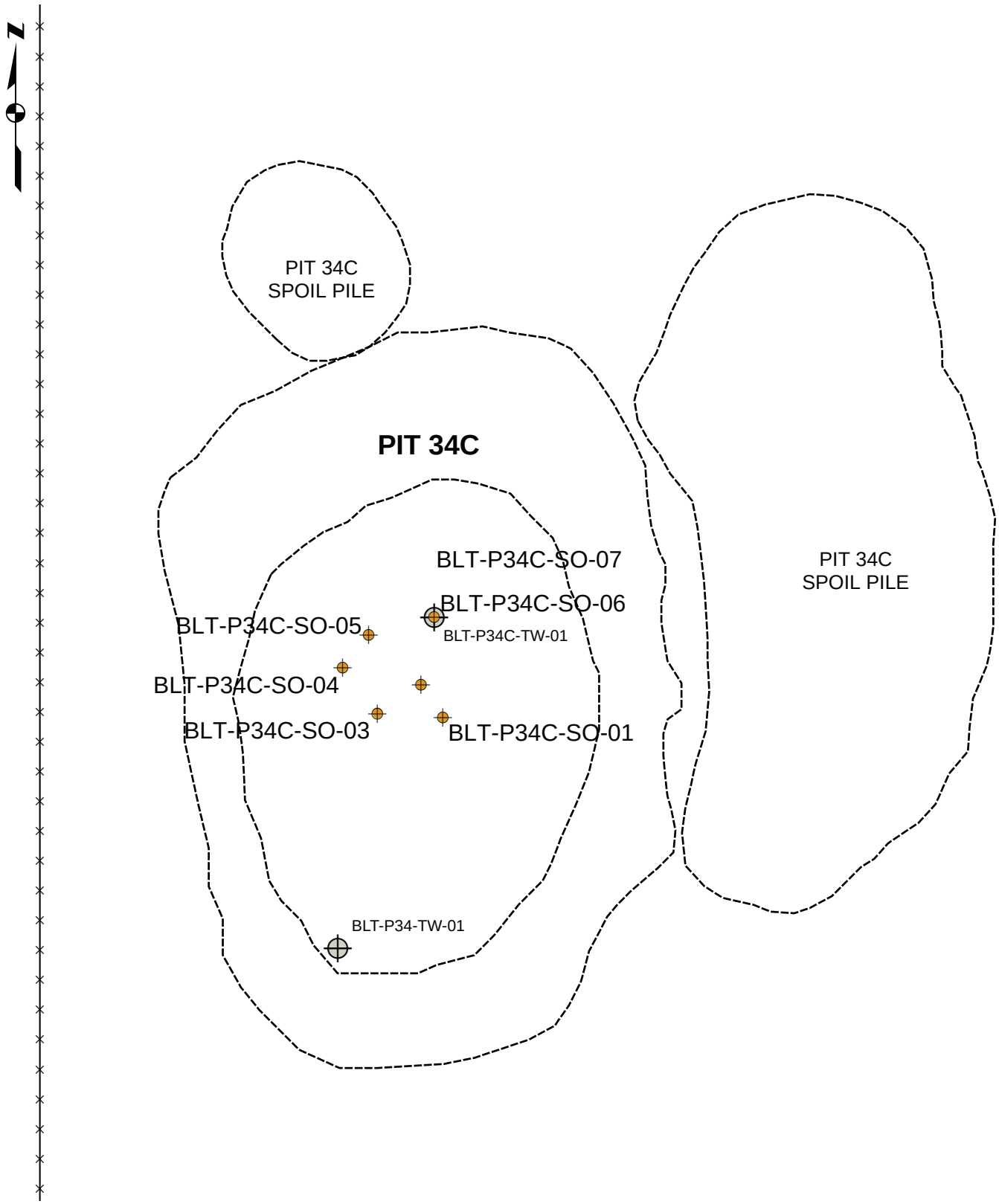
Figure 15
Analytes Exceeding Regulatory Guidelines
Pit 34 Soils



Legend

Pit 34 C Soil Sample Locations

Temporary Monitoring Wells

NOTES:

Pit #34C excavated on July 13, 2006; Backfilled July 16, 2006

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PREPARED BY: JDM

REVIEWED BY:

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PIT 34 C SOIL SAMPLE & TEMPORARY WELL LOCATIONS

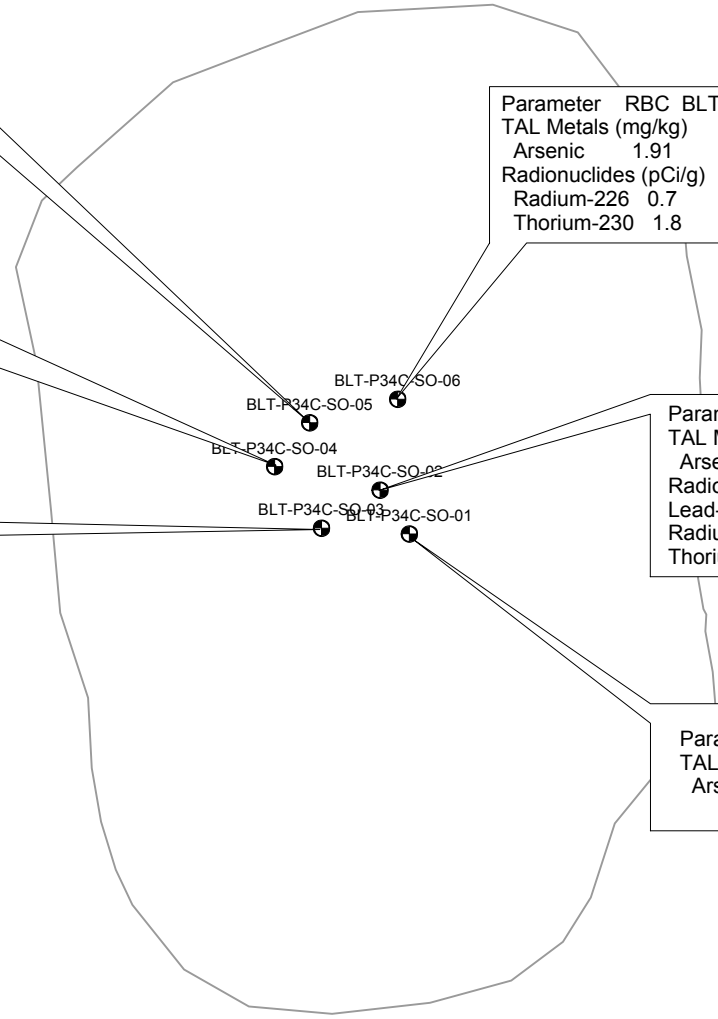
Contract No. W52P1J-05-D-0043/0001
Goverment Project AG 2002-001

DRAWING # 06-3070.01-15

16

SCALE: 0 1 2 Feet

DATE: May 2007



Parameter	RBC	BLT-P34C-SO-05a	BLT-P34C-SO-05b
TAL Metals (mg/kg)			
Arsenic	1.91	3.61	5.44
Radionuclides (pCi/g)			
Radium-226	0.7	2.04	1.14
Thorium-230	1.8	2.04	--

Parameter	RBC	BLT-P34C-SO-06a	BLT-P34C-SO-06b	BLT-P34C-SO-06g
TAL Metals (mg/kg)				
Arsenic	1.91	7.48	8.08	6.18
Radionuclides (pCi/g)				
Radium-226	0.7	--	0.857	1.95
Thorium-230	1.8	--	--	1.95

Parameter	RBC	BLT-P34C-SO-04a	BLT-P34C-SO-04b
TAL Metals (mg/kg)			
Arsenic	1.91	7.35	6.31
Radionuclides (pCi/g)			
Radium-226	0.7	--	0.718

Parameter	RBC	BLT-P34C-SO-02a	BLT-P34C-SO-02b
TAL Metals (mg/kg)			
Arsenic	1.91	2.49	2.96
Radionuclides (pCi/g)			
Lead-210	0.9	--	8.04
Radium-226	0.7	1.31	7.53
Thorium-230	1.8	--	7.53

Parameter	RBC	BLT-P34C-SO-03a	BLT-P34C-SO-03b
TAL Metals (mg/kg)			
Arsenic	1.91	6.41	6.05

Parameter	RBC	BLT-P34C-SO-01a	BLT-P34C-SO-01b
TAL Metals (mg/kg)			
Arsenic	1.91	4.93	5.14

Soil Sample Location

Temporary Well and Soil Sample Location

Notes:
1. "a" = 0-1 ft below excavation floor, "b" - 1 to 2 ft, "c" = 0 to 4 ft, "d" = 4 to 8 ft, "e" = 8 to 12 ft, "f" = 12 to 16 ft, etc.
2. Organic and inorganic concentrations in soil are compared against EPA Region 3 risk-based concentrations (industrial)
3. Radionuclide concentrations are compared against NRC screening values for unrestricted release of soils.

0 2 4 6 8 10
Scale (meters)

N W E S

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Figure 17
Analytes Exceeding Regulatory Guidelines
Pit 34C Soils

TABLES

Reference Area

1. Reference Area Soil, Non-Radiological Detections
2. Reference Area Soil, Radiological Detections
3. Reference Area Soil, Non-Radiological Results
4. Reference Area Soil, Radiological Results
5. Reference Area Water, Non-Radiological Detections
6. Reference Area Water, Radiological Detections
7. Reference Area Water, Non-Radiological Results
8. Reference Area Water, Radiological Results

Pit 1

9. Pit 1 Soil, Non-Radiological Detections
10. Pit 1 Soil, Radiological Detections
11. Pit 1 Soil, Non-Radiological Results
12. Pit 1 Soil, Radiological Results
13. Pit 1 Water, Non-Radiological Detections
14. Pit 1 Water, Radiological Detections
15. Pit 1 Water, Non-Radiological Results
16. Pit 1 Water, Radiological Results
17. Pit 1 Waste Solid, Non-Radiological Detections
18. Pit 1 Waste Solid, Radiological Detections
19. Pit 1 Waste Solid, Non-Radiological Results
20. Pit 1 Waste Solid, Radiological Results
21. Pit 1 Waste Liquid, Non-Radiological Results

Pit 14

22. Pit 14 Soil, Non-Radiological Detections
23. Pit 14 Soil, Radiological Detections
24. Pit 14 Soil, Non-Radiological Results
25. Pit 14 Soil, Radiological Results
26. Pit 14 Water, Non-Radiological Detections
27. Pit 14 Water, Radiological Detections
28. Pit 14 Water, Non-Radiological Results
29. Pit 14 Water, Radiological Results
30. Pit 14 Waste Solid, Non-Radiological Detections
31. Pit 14 Waste Solid, Radiological Detections
32. Pit 14 Waste Solid, Non-Radiological Results
33. Pit 14 Waste Solid, Radiological Results
34. Pit 14 Waste Liquid, Non-Radiological Results

Pit 26

35. Pit 26 Soil, Non-Radiological Detections
36. Pit 26 Soil, Radiological Detections
37. Pit 26 Soil, Non-Radiological Results
38. Pit 26 Soil, Radiological Results
39. Pit 26 Water, Non-Radiological Detections
40. Pit 26 Water, Radiological Detections
41. Pit 26 Water, Non-Radiological Results
42. Pit 26 Water, Radiological Results
43. Pit 26 Waste Liquid, Non-Radiological Detections
44. Pit 26 Waste Solid and Waste Liquid, Radiological Detections
45. Pit 26 Waste Solid, Non-Radiological Results
46. Pit 26 Waste Solid, Radiological Results
47. Pit 26 Waste Liquid, Non-Radiological Results
48. Pit 26 Waste Liquid, Radiological Results

Pit 34

49. Pit 34 Soil, Non-Radiological Detections
50. Pit 34 Soil, Radiological Detections
51. Pit 34 Soil, Non-Radiological Results
52. Pit 34 Soil, Radiological Results
53. Pit 34 Water, Non-Radiological Detections
54. Pit 34 Water, Radiological Detections
55. Pit 34 Water, Non-Radiological Results
56. Pit 34 Water, Radiological Results
57. Pit 34 Waste Solid and Waste Liquid, Non-Radiological Detections
58. Pit 34 Waste Solid, Radiological Detections
59. Pit 34 Waste Solid, Non-Radiological Results
60. Pit 34 Waste Solid, Radiological Results
61. Pit 34 Waste Liquid, Non-Radiological Results
62. Pit 34 Waste Liquid, Radiological Results

Pit 34C

63. Pit 34C Soil, Non-Radiological Detections
64. Pit 34C Soil, Radiological Detections
65. Pit 34C Soil, Non-Radiological Results
66. Pit 34C Soil, Radiological Results
67. Pit 34C Rinsate, Non-Radiological Detections
68. Pit 34C Rinsate, Non-Radiological Results
69. Pit 34C Waste Solid and Waste Liquid, Non-Radiological Detections
70. Pit 34C Waste Solid and Waste Liquid, Radiological Detections
71. Pit 34C Waste Solid, Non-Radiological Results
72. Pit 34C Waste Liquid, Non-Radiological Results
73. Pit 34C Waste Solid, Radiological Results
74. Pit 34C Waste Liquid, Radiological Results

Other

75. Laboratory Qualifiers
76. Pit 1 - Cabrera Radioactive Inventory Licensed Material
77. Pit 14 - Cabrera Radioactive Inventory Licensed Material
78. Pit 26 - Cabrera Radioactive Inventory Licensed Material
79. Pit 34 - Cabrera Radioactive Inventory Licensed Material
80. Pit 34C - Cabrera Radioactive Inventory Licensed Material
81. Miscellaneous Wastes - Cabrera Radioactive Inventory Licensed Material
82. Total Curies - Cabrera Radioactive Inventory Licensed Material
83. Summary of Excavated Wastes from all Pits

Table 1. Reference Area Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

		Sample Number									
Parameter	**RBC***	**BLT-REF-SO-01a-03**		**BLT-REF-SO-01a-2**		**BLT-REF-SO-01b-03**		**BLT-REF-SO-01b-2**		**BLT-REF-SO-02a-03**	
		Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA VOC (ug/kg)											
1,1-Dichloroethylene	NA	0.289	U			0.298	U			0.283	U
Acetone	919800000	2.49	U			2.56	U			2.44	U
m,p-Xylenes	NA	0.669	BJ			0.68	BJ			0.59	BJ
o-Xylene	NA	0.193	U			0.198	U			0.189	U
Toluene	81760000	0.28	U			0.288	U			0.274	U
Xylenes (total)	204400000	0.669	BJ			0.68	BJ			0.59	BJ
RCRA SVOC (ug/kg)											
RCRA Metals (mg/kg)											
Aluminum	NA	13700		7120		5760		4470		9410	
Antimony	408.8	0.521	J	0.586	J	0.411	U	0.424	U	0.546	J
Arsenic	1.9077333	**7.21**		**4.64**		**2.89**		**6.1**		**7.14**	
Barium	204400	18.7		13.7		11		12.5		25.1	
Beryllium	2044	0.223	J	0.177	J	0.109	J	0.128	J	0.181	J
Cadmium	511	0.119	J	0.111	J	0.103	U	0.106	U	0.148	J
Calcium	NA	28.1		28.2		15.1		10.1	J	68.1	
Chromium	3066	25		17.7		8.9		14.9		21.7	
Cobalt	NA	1.21		0.827		0.554		0.328	J	0.755	
Copper	40880	15.4		9.51		5.8		11.7		11.6	
Iron	306600	16300		12200		6180		17800		15000	
Lead	NA	5.43		4.38		3.08		4.3		7.55	
Magnesium	NA	387		258		193		140		301	
Manganese	20440	16.9		18.1		12.6		5.79		14.9	
Mercury	NA	18.3		13.6		8.45	J	17.2		10.4	J
Nickel	20440	6.36		3.99		2.4		1.92		3.35	
Potassium	NA	439		330		237		339		468	
Silver	5110	0.105	U	0.104	J	0.103	U	0.106	U	0.108	U
Sodium	NA	14.9	J	14.4	J	7.04	J	15.7	J	17.2	
Vanadium	1022	41.9		26.1		15.7		39.4		41.6	
Zinc	306600	14.8		10.3		5.94		8.33		9.66	
RCRA Pesticide (ug/kg)											
TCLP PCB (ug/kg)											
Herbicides (ug/kg)											

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted. Sub-floor samples are shaded.

Table 1. Reference Area Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

		Sample Number									
Parameter	**RBC***	**BLT-REF-SO-02a-2**		**BLT-REF-SO-02b-03**		**BLT-REF-SO-02b-2**		**BLT-REF-SO-03a-03**		**BLT-REF-SO-03a-2**	
		Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA VOC (ug/kg)											
1,1-Dichloroethylene	NA			0.326	U			0.33	U		
Acetone	919800000			2.8	U			2.84	U		
m,p-Xylenes	NA			0.556	BJ			0.558	BJ		
o-Xylene	NA			0.217	U			0.22	U		
Toluene	81760000			0.315	U			0.319	U		
Xylenes (total)	204400000			0.556	BJ			0.558	BJ		
RCRA SVOC (ug/kg)											
RCRA Metals (mg/kg)											
Aluminum	NA	5800		9870		4130		6030		9870	
Antimony	408.8	0.456	U	0.436	U	0.417	U	0.416	U	0.426	U
Arsenic	1.9077333	**5.34**		**5.51**		**3.43**		**3.08**		**4.01**	
Barium	204400	15.5		17.4		20.8		12.6		18.2	
Beryllium	2044	0.14	J	0.161	J	0.106	J	0.127	J	0.195	J
Cadmium	511	0.114	U	0.121	J	0.104	U	0.104	U	0.107	U
Calcium	NA	21.1		68.7		42.8		16.9		22.4	
Chromium	3066	26.4		18.8		8.04		11.6		17.5	
Cobalt	NA	0.49	J	0.582		0.208	U	0.559		0.928	
Copper	40880	13.4		11.7		6.3		6.42		10.1	
Iron	306600	16500		13500		6260		7860		11100	
Lead	NA	4.7		6.23		6.1		3.56		5.61	
Magnesium	NA	207		337		176		214		322	
Manganese	20440	12.6		7.67		2.81		13.8		22.8	
Mercury	NA	12.8		12.4		14.2		18.1		23.4	
Nickel	20440	11.6		3.44		1.17		2.21		4.7	
Potassium	NA	336		493		646		257		402	
Silver	5110	0.114	U	0.109	U	0.104	U	0.104	U	0.107	U
Sodium	NA	17.2		21.8		26.6		9.15	J	15.3	J
Vanadium	1022	41.1		42.4		31.6		25.8		27.6	
Zinc	306600	9.82		9.02		3.02		6.53		9.78	
RCRA Pesticide (ug/kg)											
TCLP PCB (ug/kg)											
Herbicides (ug/kg)											

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted. Sub-floor samples are shaded.

Table 1. Reference Area Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

		Sample Number									
Parameter	**RBC***	**BLT-REF-SO-03b-03**		**BLT-REF-SO-03b-2**		**BLT-REF-SO-04a-03**		**BLT-REF-SO-04a-2**		**BLT-REF-SO-04b-03**	
		Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA VOC (ug/kg)											
1,1-Dichloroethylene	NA	0.352	U			0.332	U			0.351	U
Acetone	919800000	3.02	U			2.85	U			3.02	U
m,p-Xylenes	NA	0.698	BJ			0.667	BJ			0.653	J
o-Xylene	NA	0.234	U			0.221	U			0.234	U
Toluene	81760000	0.34	U			0.321	U			0.34	U
Xylenes (total)	204400000	0.698	BJ			0.667	BJ			0.653	J
RCRA SVOC (ug/kg)											
RCRA Metals (mg/kg)											
Aluminum	NA	10700		2640		13700		3020		12500	
Antimony	408.8	0.439	U	0.445	U	0.421	U	0.461	U	0.429	U
Arsenic	1.9077333	**3.89**		**3.79**		**4.9**		**4.72**		**4.16**	
Barium	204400	18.4		13.3		24.1		16.9		19.4	
Beryllium	2044	0.183	J	0.115	J	0.232	J	0.115	U	0.212	J
Cadmium	511	0.11	U	0.111	U	0.16	J	0.115	U	0.116	J
Calcium	NA	21.4		22.8		24.3		50		14	
Chromium	3066	17.4		7.29		21.4		7.27		14.7	
Cobalt	NA	0.84		0.223	U	1.21		0.23	U	1.17	
Copper	40880	10.4		6.54		10.8		5.92		8.64	
Iron	306600	10500		5010		14600		3270		11000	
Lead	NA	4.86		4.87		6.32		6.69		5.27	
Magnesium	NA	327		87.1		435		140		401	
Manganese	20440	15.2		2.4		21.5		2.96		25.8	
Mercury	NA	17.3		20.9		21.5		23.3		25.1	
Nickel	20440	4.02		0.945		5.4		0.9		4.98	
Potassium	NA	363		499		450		662		403	
Silver	5110	0.11	U	0.111	U	0.105	U	0.115	U	0.107	U
Sodium	NA	13.9	J	17.3		16.8		22.1		14.8	J
Vanadium	1022	29.6		23.3		31.5		23.7		26.4	
Zinc	306600	8.28		3.01		12.4		5.41		10.6	
RCRA Pesticide (ug/kg)											
TCLP PCB (ug/kg)											
Herbicides (ug/kg)											

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted. Sub-floor samples are shaded.

Table 1. Reference Area Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

		Sample Number									
Parameter	**RBC***	**BLT-REF-SO-04b-2**		**BLT-REF-SO-05c-2**		**BLT-REF-SO-05d-2**		**BLT-REF-SO-05e-2**		**BLT-REF-SO-05f-2**	
		Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA VOC (ug/kg)											
1,1-Dichloroethylene	NA			0.352	U	0.297	U	0.379	U	1.15	J
Acetone	919800000			3.75	J	3.29	J	3.96	J	5.16	J
m,p-Xylenes	NA			0.294	U	0.248	U	0.316	U	0.347	U
o-Xylene	NA			0.275	J	0.198	U	0.253	U	0.278	U
Toluene	81760000			0.579	J	0.287	U	0.367	U	0.403	U
Xylenes (total)	204400000			0.275	J	0.198	U	0.253	U	0.278	U
RCRA SVOC (ug/kg)											
RCRA Metals (mg/kg)											
Aluminum	NA	5020		3950		1440		516		956	
Antimony	408.8	0.422	U	0.438	U	0.449	U	0.413	U	0.433	U
Arsenic	1.9077333	**3.33**		**4.11**		1.9		0.619	U	0.65	U
Barium	204400	15.7		21.8		9.34		3.05		5.11	
Beryllium	2044	0.13	J	0.137	J	0.112	U	0.103	U	0.108	U
Cadmium	511	0.106	U	0.11	U	0.112	U	0.103	U	0.108	U
Calcium	NA	20.7		109		48.7		13.3		18.3	
Chromium	3066	11.3		19.1		8.26		2.6		4.08	
Cobalt	NA	0.409	J	0.219	U	0.225	U	0.206	U	0.217	U
Copper	40880	6.37		11.3		1.65		1.19		2.57	
Iron	306600	5470		3830		1820		532		1570	
Lead	NA	4.83		6.49		2.16		0.408	J	0.659	J
Magnesium	NA	172		176		54.9		9.69	J	24.6	J
Manganese	20440	7.84		6.73		1.03	J	1.03	J	1.74	
Mercury	NA	18.8		20.8		8.37	J	2.5	U	3.5	J
Nickel	20440	2.3		8.65		0.462	J	0.859		1.32	
Potassium	NA	476		868		396		89.7		175	
Silver	5110	0.106	U	0.11	U	0.112	U	0.103	U	0.108	U
Sodium	NA	15.7	J	32.1		10.9	J	4.65	U	4.88	U
Vanadium	1022	19.2		37.6		12.5		3.24		5.65	
Zinc	306600	5.7		3.54		1.02	J	5.17		0.992	J
RCRA Pesticide (ug/kg)											
TCLP PCB (ug/kg)											
Herbicides (ug/kg)											

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted. Sub-floor samples are shaded.

Table 1. Reference Area Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

		Sample Number	
Parameter	**RBC***	**BLT-REF-SO-06a-2**	
		Result	**Qual**
RCRA VOC (ug/kg)			
1,1-Dichloroethylene	NA		
Acetone	919800000		
m,p-Xylenes	NA		
o-Xylene	NA		
Toluene	81760000		
Xylenes (total)	204400000		
RCRA SVOC (ug/kg)			
RCRA Metals (mg/kg)			
Aluminum	NA	12300	
Antimony	408.8	0.423	U
Arsenic	1.9077333	**5.9**	
Barium	204400	17.1	
Beryllium	2044	0.199	J
Cadmium	511	0.106	U
Calcium	NA	28.6	
Chromium	3066	21	
Cobalt	NA	1.07	
Copper	40880	12.7	
Iron	306600	13400	
Lead	NA	5.84	
Magnesium	NA	346	
Manganese	20440	18.2	
Mercury	NA	20.9	
Nickel	20440	6.4	
Potassium	NA	407	
Silver	5110	0.106	U
Sodium	NA	15.3	J
Vanadium	1022	40.7	
Zinc	306600	12.7	
RCRA Pesticide (ug/kg)			
TCLP PCB (ug/kg)			
Herbicides (ug/kg)			

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted. Sub-floor samples are shaded.

Table 2. Reference Area Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number							
Parameter	**NRC Screening Values[1]**	**DCGL**	**BLT-REF-SO-01a-03**		**BLT-REF-SO-01b-03**		**BLT-REF-SO-02a-03**		**BLT-REF-SO-02b-03**	
			Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Gamma Scan (901.1mod/HASL 300)										
Actinium-228	NA		1.15		0.81		0.88		0.90	
Bismuth-212	NA		0.76		0.52		0.47		0.73	
Bismuth-214	NA		0.55		0.68		0.65		0.74	
Lead-210	0.9	1.62	0.76	U	**0.92**		0.43		0.58	
Lead-212	NA		1.08		0.85		0.92		0.83	
Lead-214	NA		0.68		0.87		0.71		0.74	
Potassium-40	NA		2.73		3.01		3.05		3.90	
Radium-226	0.7	1.34	0.55		0.68		0.65		**0.74**	
Radium-228	NA		1.15		0.81		0.88		0.90	
Thallium-208	NA		0.31		0.25		0.25		0.32	
Thorium-230	1.8		0.55		0.68		0.65		0.74	
Thorium-234	14		0.08	U	0.00	UI	0.94		1.06	
Uranium-238	14		0.08	U	0.00	UI	0.94		1.06	
1 From NUREG 1757, Appendix B, Table B-2										
NA = Not available for this radionuclide										
Result that exceeds NRC screening value is highlighted.										

Table 2. Reference Area Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number							
Parameter	**NRC Screening Values[1]**	**DCGL**	**BLT-REF-SO-03a-03**		**BLT-REF-SO-03b-03**		**BLT-REF-SO-04a-03**		**BLT-REF-SO-04b-03**	
			Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Gamma Scan (901.1mod/HASL 300)										
Actinium-228	NA		0.77		1.16		0.82		0.78	
Bismuth-212	NA		0.41		0.65		0.52		0.37	
Bismuth-214	NA		0.47		0.87		0.46		0.50	
Lead-210	0.9	1.62	1.09	U	**1.98**		0.93	U	0.53	
Lead-212	NA		0.81		1.12		0.71		0.66	
Lead-214	NA		0.54		0.86		0.51		0.54	
Potassium-40	NA		1.91		10.50		2.46		1.77	
Radium-226	0.7	1.34	0.47		**0.87**		0.46		0.50	
Radium-228	NA		0.77		1.16		0.82		0.78	
Thallium-208	NA		0.22		0.33		0.23		0.22	
Thorium-230	1.8		0.47		0.87		0.46		0.50	
Thorium-234	14		0.63	U	0.31	U	0.40	U	0.59	
Uranium-238	14		0.63	U	0.31	U	0.40	U	0.59	
1 From NUREG 1757, Appendix B, Table B-2										
NA = Not available for this radionuclide										
Result that exceeds NRC screening value is highlighted.										

Table 3. Reference Area Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																	
	BLT-REF-SO-01a-03		BLT-REF-SO-01a-2		BLT-REF-SO-01b-03		BLT-REF-SO-01b-2		BLT-REF-SO-02a-03		BLT-REF-SO-02a-2		BLT-REF-SO-02b-03		BLT-REF-SO-02b-2		BLT-REF-SO-03a-03	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)																		
1,1,1,2-Tetrachloroethane	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
1,1,1-Trichloroethane	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
1,1,2,2-Tetrachloroethane	0.241	U			0.248	U			0.236	U			0.271	U			0.275	U
1,1,2-Trichloroethane	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
1,1-Dichloroethane	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
1,1-Dichloroethylene	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
1,1-Dichloropropene	0.241	U			0.248	U			0.236	U			0.271	U			0.275	U
1,2,3-Trichlorobenzene	0.241	U			0.248	U			0.236	U			0.271	U			0.275	U
1,2,3-Trichloropropane	0.482	U			0.496	U			0.472	U			0.543	U			0.55	U
1,2,4-Trichlorobenzene	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
1,2,4-Trimethylbenzene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
1,2-Dibromo-3-chloropropane	0.482	U			0.496	U			0.472	U			0.543	U			0.55	U
1,2-Dibromoethane	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
1,2-Dichlorobenzene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
1,2-Dichloroethane	0.241	U			0.248	U			0.236	U			0.271	U			0.275	U
1,2-Dichloroethylene (total)	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
1,2-Dichloropropane	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
1,3,5-Trimethylbenzene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
1,3-Dichlorobenzene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
1,3-Dichloropropane	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
1,4-Dichlorobenzene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
2,2-Dichloropropane	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
2-Butanone	1.64	U			1.69	U			1.6	U			1.85	U			1.87	U
2-Chloro-1,3-butadiene	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
2-Chloroethylvinyl ether	1.21	U			1.24	U			1.18	U			1.36	U			1.38	U
2-Chlorotoluene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
2-Hexanone	1.47	U			1.51	U			1.44	U			1.65	U			1.67	U
2-Nitropropane	0.868	U			0.893	U			0.85	U			0.977	U			0.99	U
4-Chlorotoluene	0.231	U			0.238	U			0.227	U			0.261	U			0.264	U
4-Isopropyltoluene	0.241	U			0.248	U			0.236	U			0.271	U			0.275	U
4-Methyl-2-pentanone	1.05	U			1.08	U			1.03	U			1.18	U			1.2	U
Acetone	2.49	U			2.56	U			2.44	U			2.8	U			2.84	U
Acetonitrile	8.79	U			9.04	U			8.6	U			9.89	U			10	U
Acrolein	2.89	U			2.98	U			2.83	U			3.26	U			3.3	U
Acrylonitrile	0.965	U			0.992	U			0.944	U			1.09	U			1.1	U
Allyl chloride	1.93	U			1.98	U			1.89	U			2.17	U			2.2	U
Benzene	0.318	U			0.327	U			0.312	U			0.358	U			0.363	U
Benzyl chloride	0.579	U			0.595	U			0.566	U			0.651	U			0.66	U
bis(2-Chloroisopropyl)ether	1.45	U			1.49	U			1.42	U			1.63	U			1.65	U
Bromobenzene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
Bromochloromethane	0.482	U			0.496	U			0.472	U			0.543	U			0.55	U
Bromodichloromethane	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
Bromoform	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
Bromomethane	0.482	U			0.496	U			0.472	U			0.543	U			0.55	U
Carbon disulfide	1.21	U			1.24	U			1.18	U			1.36	U			1.38	U
Carbon tetrachloride	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
Chlorobenzene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
Chloroethane	0.482	U			0.496	U			0.472	U			0.543	U			0.55	U

Table 3. Reference Area Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																	
	BLT-REF-SO-01a-03		BLT-REF-SO-01a-2		BLT-REF-SO-01b-03		BLT-REF-SO-01b-2		BLT-REF-SO-02a-03		BLT-REF-SO-02a-2		BLT-REF-SO-02b-03		BLT-REF-SO-02b-2		BLT-REF-SO-03a-03	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Chloroform	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
Chloromethane	0.482	U			0.496	U			0.472	U			0.543	U			0.55	U
cis-1,2-Dichloroethylene	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
cis-1,3-Dichloropropylene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
cis-1,4-Dichloro-2-butene	0.482	U			0.496	U			0.472	U			0.543	U			0.55	U
Cyclohexane	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
Cyclohexanone	14.5	U			14.9	U			14.2	U			16.3	U			16.5	U
Dibromochloromethane	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
Dibromomethane	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
Dichlorodifluoromethane	0.482	U			0.496	U			0.472	U			0.543	U			0.55	U
Ethyl ether	0.241	U			0.248	U			0.236	U			0.271	U			0.275	U
Ethyl methacrylate	0.482	U			0.496	U			0.472	U			0.543	U			0.55	U
Ethylbenzene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
Hexachlorobutadiene	0.482	U			0.496	U			0.472	U			0.543	U			0.55	U
Iodomethane	1.61	U			1.66	U			1.58	U			1.81	U			1.84	U
Isobutyl alcohol	9.65	U			9.92	U			9.44	U			10.9	U			11	U
Isopropylbenzene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
m,p-Xylenes	0.669	BJ			0.68	BJ			0.59	BJ			0.556	BJ			0.558	BJ
Methacrylonitrile	0.675	U			0.694	U			0.661	U			0.76	U			0.77	U
Methyl acetate	1.61	U			1.66	U			1.58	U			1.81	U			1.84	U
Methyl methacrylate	0.965	U			0.992	U			0.944	U			1.09	U			1.1	U
Methylcyclohexane	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
Methylene chloride	1.93	U			1.98	U			1.89	U			2.17	U			2.2	U
Naphthalene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
n-Butyl alcohol	26	U			26.8	U			25.5	U			29.3	U			29.7	U
n-Butylbenzene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
n-Propylbenzene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
o-Xylene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
Pentachloroethane	1.45	U			1.49	U			1.42	U			1.63	U			1.65	U
Propionitrile	0.965	U			0.992	U			0.944	U			1.09	U			1.1	U
sec-Butylbenzene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
Styrene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
tert-Butyl methyl ether	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
tert-Butylbenzene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
Tetrachloroethylene	0.193	U			0.198	U			0.189	U			0.217	U			0.22	U
Toluene	0.28	U			0.288	U			0.274	U			0.315	U			0.319	U
trans-1,2-Dichloroethylene	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
trans-1,3-Dichloropropylene	0.289	U			0.298	U			0.283	U			0.326	U			0.33	U
trans-1,4-Dichloro-2-butene	0.482	U			0.496	U			0.472	U			0.543	U			0.55	U
Trichloroethylene	0.241	U			0.248	U			0.236	U			0.271	U			0.275	U
Trichlorofluoromethane	0.482	U			0.496	U			0.472	U			0.543	U			0.55	U
Trichlorotrifluoroethane	0.965	U			0.992	U			0.944	U			1.09	U			1.1	U
Vinyl acetate	1.21	U			1.24	U			1.18	U			1.36	U			1.38	U
Vinyl chloride	0.482	U			0.496	U			0.472	U			0.543	U			0.55	U
Xylenes (total)	0.669	BJ			0.68	BJ			0.59	BJ			0.556	BJ			0.558	BJ

Table 3. Reference Area Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																	
	BLT-REF-SO-01a-03		BLT-REF-SO-01a-2		BLT-REF-SO-01b-03		BLT-REF-SO-01b-2		BLT-REF-SO-02a-03		BLT-REF-SO-02a-2		BLT-REF-SO-02b-03		BLT-REF-SO-02b-2		BLT-REF-SO-03a-03	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA SVOC (ug/kg)																		
1,1'-Biphenyl	108	U	108	U	107	U	111	U	110	U	114	U	111	U	109	U	108	U
1,2,4-Trichlorobenzene	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
1,2-Dichlorobenzene	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
1,3-Dichlorobenzene	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
1,4-Dichlorobenzene	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
2,4,5-Trichlorophenol	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
2,4,6-Trichlorophenol	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
2,4-Dichlorophenol	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
2,4-Dimethylphenol	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
2,4-Dinitrophenol	137	U	137	U	136	U	140	U	139	U	145	U	140	U	139	U	137	U
2,4-Dinitrotoluene	36	U	36.1	U	35.7	U	37	U	36.5	U	38.1	U	36.9	U	36.5	U	35.9	U
2,6-Dinitrotoluene	36	U	36.1	U	35.7	U	37	U	36.5	U	38.1	U	36.9	U	36.5	U	35.9	U
2-Chloronaphthalene	12.6	U	12.6	U	12.5	U	12.9	U	12.8	U	13.4	U	12.9	U	12.8	U	12.6	U
2-Chlorophenol	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
2-Methyl-4,6-dinitrophenol	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
2-Methylnaphthalene	7.2	U	7.22	U	7.14	U	7.39	U	7.3	U	7.63	U	7.38	U	7.3	U	7.19	U
2-Nitrophenol	36	U	36.1	U	35.7	U	37	U	36.5	U	38.1	U	36.9	U	36.5	U	35.9	U
3,3'-Dichlorobenzidine	108	U	108	U	107	U	111	U	110	U	114	U	111	U	109	U	108	U
4-Bromophenylphenylether	36	U	36.1	U	35.7	U	37	U	36.5	U	38.1	U	36.9	U	36.5	U	35.9	U
4-Chloro-3-methylphenol	36	U	36.1	U	35.7	U	37	U	36.5	U	38.1	U	36.9	U	36.5	U	35.9	U
4-Chloroaniline	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
4-Chlorophenylphenylether	36	U	36.1	U	35.7	U	37	U	36.5	U	38.1	U	36.9	U	36.5	U	35.9	U
4-Nitrophenol	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
Acenaphthene	12	U	12.1	U	11.9	U	12.3	U	12.2	U	12.7	U	12.3	U	12.2	U	12	U
Acenaphthylene	10.8	U	10.8	U	10.7	U	11.1	U	11	U	11.4	U	11.1	U	10.9	U	10.8	U
alpha-Terpineol	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
Anthracene	7.2	U	7.22	U	7.14	U	7.39	U	7.3	U	7.63	U	7.38	U	7.3	U	7.19	U
Atrazine	108	U	108	U	107	U	111	U	110	U	114	U	111	U	109	U	108	U
Benzaldehyde	108	U	108	U	107	U	111	U	110	U	114	U	111	U	109	U	108	U
Benzo(a)anthracene	10.8	U	10.8	U	10.7	U	11.1	U	11	U	11.4	U	11.1	U	10.9	U	10.8	U
Benzo(a)pyrene	10.8	U	10.8	U	10.7	U	11.1	U	11	U	11.4	U	11.1	U	10.9	U	10.8	U
Benzo(b)fluoranthene	10.8	U	10.8	U	10.7	U	11.1	U	11	U	11.4	U	11.1	U	10.9	U	10.8	U
Benzo(ghi)perylene	10.8	U	10.8	U	10.7	U	11.1	U	11	U	11.4	U	11.1	U	10.9	U	10.8	U
Benzo(k)fluoranthene	10.8	U	10.8	U	10.7	U	11.1	U	11	U	11.4	U	11.1	U	10.9	U	10.8	U
bis(2-Chloroethoxy)methane	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
bis(2-Chloroethyl) ether	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
bis(2-Chloroisopropyl)ether	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
bis(2-Ethylhexyl)phthalate	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
Butylbenzylphthalate	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
Carbazole	10.8	U	10.8	U	10.7	U	11.1	U	11	U	11.4	U	11.1	U	10.9	U	10.8	U
Chrysene	10.8	U	10.8	U	10.7	U	11.1	U	11	U	11.4	U	11.1	U	10.9	U	10.8	U
Dibenzo(a,h)anthracene	10.8	U	10.8	U	10.7	U	11.1	U	11	U	11.4	U	11.1	U	10.9	U	10.8	U
Dibenzofuran	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
Diethylphthalate	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
Dimethylphthalate	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
Di-n-butylphthalate	36	U	36.1	U	35.7	U	37	U	36.5	U	38.1	U	36.9	U	36.5	U	35.9	U
Di-n-octylphthalate	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
Diphenylamine	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U

Table 3. Reference Area Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																	
	BLT-REF-SO-01a-03		BLT-REF-SO-01a-2		BLT-REF-SO-01b-03		BLT-REF-SO-01b-2		BLT-REF-SO-02a-03		BLT-REF-SO-02a-2		BLT-REF-SO-02b-03		BLT-REF-SO-02b-2		BLT-REF-SO-03a-03	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Fluoranthene	10.8	U	10.8	U	10.7	U	11.1	U	11	U	11.4	U	11.1	U	10.9	U	10.8	U
Fluorene	10.8	U	10.8	U	10.7	U	11.1	U	11	U	11.4	U	11.1	U	10.9	U	10.8	U
Hexachlorobenzene	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
Hexachlorobutadiene	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
Hexachlorocyclopentadiene	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
Hexachloroethane	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
Indeno(1,2,3-cd)pyrene	10.8	U	10.8	U	10.7	U	11.1	U	11	U	11.4	U	11.1	U	10.9	U	10.8	U
Isophorone	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
m,p-Cresols	144	U	144	U	143	U	148	U	146	U	153	U	148	U	146	U	144	U
m-Nitroaniline	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
Naphthalene	10.8	U	10.8	U	10.7	U	11.1	U	11	U	11.4	U	11.1	U	10.9	U	10.8	U
Nitrobenzene	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
N-Nitrosodipropylamine	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
o-Cresol	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
o-Nitroaniline	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
Pentachlorophenol	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
Phenanthrene	10.8	U	10.8	U	10.7	U	11.1	U	11	U	11.4	U	11.1	U	10.9	U	10.8	U
Phenol	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
p-Nitroaniline	72	U	72.2	U	71.4	U	73.9	U	73	U	76.3	U	73.8	U	73	U	71.9	U
Pyrene	11.3	U	11.3	U	11.2	U	11.6	U	11.5	U	12	U	11.6	U	11.5	U	11.3	U
RCRA Metals (mg/kg)																		
Aluminum	13700		7120		5760		4470		9410		5800		9870		4130		6030	
Antimony	0.521	J	0.586	J	0.411	U	0.424	U	0.546	J	0.456	U	0.436	U	0.417	U	0.416	U
Arsenic	7.21		4.64		2.89		6.1		7.14		5.34		5.51		3.43		3.08	
Barium	18.7		13.7		11		12.5		25.1		15.5		17.4		20.8		12.6	
Beryllium	0.223	J	0.177	J	0.109	J	0.128	J	0.181	J	0.14	J	0.161	J	0.106	J	0.127	J
Cadmium	0.119	J	0.111	J	0.103	U	0.106	U	0.148	J	0.114	U	0.121	J	0.104	U	0.104	U
Calcium	28.1		28.2		15.1		10.1	J	68.1		21.1		68.7		42.8		16.9	
Chromium	25		17.7		8.9		14.9		21.7		26.4		18.8		8.04		11.6	
Cobalt	1.21		0.827		0.554		0.328	J	0.755		0.49	J	0.582		0.208	U	0.559	
Copper	15.4		9.51		5.8		11.7		11.6		13.4		11.7		6.3		6.42	
Iron	16300		12200		6180		17800		15000		16500		13500		6260		7860	
Lead	5.43		4.38		3.08		4.3		7.55		4.7		6.23		6.1		3.56	
Magnesium	387		258		193		140		301		207		337		176		214	
Manganese	16.9		18.1		12.6		5.79		14.9		12.6		7.67		2.81		13.8	
Mercury	18.3		13.6		8.45	J	17.2		10.4	J	12.8		12.4		14.2		18.1	
Nickel	6.36		3.99		2.4		1.92		3.35		11.6		3.44		1.17		2.21	
Potassium	439		330		237		339		468		336		493		646		257	
Selenium	0.632	U	0.62	U	0.617	U	0.636	U	0.651	U	0.684	U	0.654	U	0.625	U	0.623	U
Silver	0.105	U	0.104	J	0.103	U	0.106	U	0.108	U	0.114	U	0.109	U	0.104	U	0.104	U
Sodium	14.9	J	14.4	J	7.04	J	15.7	J	17.2		17.2		21.8		26.6		9.15	J
Thallium	0.526	U	0.517	U	0.514	U	0.53	U	0.542	U	0.57	U	0.545	U	0.521	U	0.519	U
Vanadium	41.9		26.1		15.7		39.4		41.6		41.1		42.4		31.6		25.8	
Zinc	14.8		10.3		5.94		8.33		9.66		9.82		9.02		3.02		6.53	

Table 3. Reference Area Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																	
	BLT-REF-SO-01a-03		BLT-REF-SO-01a-2		BLT-REF-SO-01b-03		BLT-REF-SO-01b-2		BLT-REF-SO-02a-03		BLT-REF-SO-02a-2		BLT-REF-SO-02b-03		BLT-REF-SO-02b-2		BLT-REF-SO-03a-03	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA Pesticide (ug/kg)																		
4,4'-DDD	0.36	U	0.361	U	0.357	U	0.37	U	0.365	U	0.381	U	0.369	U	0.365	U	0.359	U
4,4'-DDE	0.36	U	0.361	U	0.357	U	0.37	U	0.365	U	0.381	U	0.369	U	0.365	U	0.359	U
4,4'-DDT	0.36	U	0.361	U	0.357	U	0.37	U	0.365	U	0.381	U	0.369	U	0.365	U	0.359	U
Aldrin	0.18	U	0.18	U	0.179	U	0.185	U	0.183	U	0.191	U	0.185	U	0.182	U	0.18	U
alpha-BHC	0.18	U	0.18	U	0.179	U	0.185	U	0.183	U	0.191	U	0.185	U	0.182	U	0.18	U
beta-BHC	0.18	U	0.18	U	0.179	U	0.185	U	0.183	U	0.191	U	0.185	U	0.182	U	0.18	U
Chlordane (tech.)	1.8	U	1.8	U	1.79	U	1.85	U	1.83	U	1.91	U	1.85	U	1.82	U	1.8	U
delta-BHC	0.18	U	0.18	U	0.179	U	0.185	U	0.183	U	0.191	U	0.185	U	0.182	U	0.18	U
Dieldrin	0.36	U	0.361	U	0.357	U	0.37	U	0.365	U	0.381	U	0.369	U	0.365	U	0.359	U
Endosulfan I	0.18	U	0.18	U	0.179	U	0.185	U	0.183	U	0.191	U	0.185	U	0.182	U	0.18	U
Endosulfan II	0.36	U	0.361	U	0.357	U	0.37	U	0.365	U	0.381	U	0.369	U	0.365	U	0.359	U
Endosulfan sulfate	0.36	U	0.361	U	0.357	U	0.37	U	0.365	U	0.381	U	0.369	U	0.365	U	0.359	U
Endrin	0.36	U	0.361	U	0.357	U	0.37	U	0.365	U	0.381	U	0.369	U	0.365	U	0.359	U
Endrin aldehyde	0.36	U	0.361	U	0.357	U	0.37	U	0.365	U	0.381	U	0.369	U	0.365	U	0.359	U
Endrin ketone	0.36	U	0.361	U	0.357	U	0.37	U	0.365	U	0.381	U	0.369	U	0.365	U	0.359	U
gamma-BHC (Lindane)	0.18	U	0.18	U	0.179	U	0.185	U	0.183	U	0.191	U	0.185	U	0.182	U	0.18	U
Heptachlor	0.18	U	0.18	U	0.179	U	0.185	U	0.183	U	0.191	U	0.185	U	0.182	U	0.18	U
Heptachlor epoxide	0.18	U	0.18	U	0.179	U	0.185	U	0.183	U	0.191	U	0.185	U	0.182	U	0.18	U
Methoxychlor	1.8	U	1.8	U	1.79	U	1.85	U	1.83	U	1.91	U	1.85	U	1.82	U	1.8	U
Toxaphene	6	U	6.01	U	5.95	U	6.15	U	6.08	U	6.35	U	6.15	U	6.07	U	5.98	U
TCLP PCB (ug/kg)																		
Aroclor-1016	1.2	U	1.2	U	1.19	U	1.23	U	1.22	U	1.27	U	1.23	U	1.21	U	1.2	U
Aroclor-1221	1.2	U	1.2	U	1.19	U	1.23	U	1.22	U	1.27	U	1.23	U	1.21	U	1.2	U
Aroclor-1232	1.2	U	1.2	U	1.19	U	1.23	U	1.22	U	1.27	U	1.23	U	1.21	U	1.2	U
Aroclor-1242	1.2	U	1.2	U	1.19	U	1.23	U	1.22	U	1.27	U	1.23	U	1.21	U	1.2	U
Aroclor-1248	1.2	U	1.2	U	1.19	U	1.23	U	1.22	U	1.27	U	1.23	U	1.21	U	1.2	U
Aroclor-1254	1.2	U	1.2	U	1.19	U	1.23	U	1.22	U	1.27	U	1.23	U	1.21	U	1.2	U
Aroclor-1260	1.2	U	1.2	U	1.19	U	1.23	U	1.22	U	1.27	U	1.23	U	1.21	U	1.2	U
Herbicides (ug/kg)																		
2,4,5-T	1.79	U	1.8	U	1.78	U	1.84	U	1.82	U	1.9	U	1.84	U	1.82	U	1.79	U
2,4,5-TP	1.79	U	1.8	U	1.78	U	1.84	U	1.82	U	1.9	U	1.84	U	1.82	U	1.79	U
2,4-D	1.79	U	1.8	U	1.78	U	1.84	U	1.82	U	1.9	U	1.84	U	1.82	U	1.79	U
TOC (mg/kg)																		
Total Organic Carbon #1	515		387		436		492		469		607		637		467		377	
Total Organic Carbon #2	580		358		417		492		493		574		670		482		388	
Total Organic Carbon #3	567		354		419		519		442		534		622		507		394	
Total Organic Carbon #4	543		396		403		521		451		577		628		525		381	
Total Organic Carbon Average	552		374		419		506		464		573		639		495		385	

Table 3. Reference Area Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																	
	BLT-REF-SO-03a-2		BLT-REF-SO-03b-03		BLT-REF-SO-03b-2		BLT-REF-SO-04a-03		BLT-REF-SO-04a-2		BLT-REF-SO-04b-03		BLT-REF-SO-04b-2		BLT-REF-SO-05c-2		BLT-REF-SO-05d-2	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)																		
1,1,1,2-Tetrachloroethane			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
1,1,1-Trichloroethane			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
1,1,2,2-Tetrachloroethane			0.293	U			0.276	U			0.293	U			0.294	U	0.248	U
1,1,2-Trichloroethane			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
1,1-Dichloroethane			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
1,1-Dichloroethylene			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
1,1-Dichloropropene			0.293	U			0.276	U			0.293	U			0.294	U	0.248	U
1,2,3-Trichlorobenzene			0.293	U			0.276	U			0.293	U			0.294	U	0.248	U
1,2,3-Trichloropropane			0.586	U			0.553	U			0.585	U			0.587	U	0.496	U
1,2,4-Trichlorobenzene			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
1,2,4-Trimethylbenzene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
1,2-Dibromo-3-chloropropane			0.586	U			0.553	U			0.585	U			0.587	U	0.496	U
1,2-Dibromoethane			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
1,2-Dichlorobenzene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
1,2-Dichloroethane			0.293	U			0.276	U			0.293	U			0.294	U	0.248	U
1,2-Dichloroethylene (total)			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
1,2-Dichloropropane			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
1,3,5-Trimethylbenzene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
1,3-Dichlorobenzene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
1,3-Dichloropropane			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
1,4-Dichlorobenzene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
2,2-Dichloropropane			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
2-Butanone			1.99	U			1.88	U			1.99	U			2	U	1.69	U
2-Chloro-1,3-butadiene			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
2-Chloroethylvinyl ether			1.47	U			1.38	U			1.46	U			1.47	U	1.24	U
2-Chlorotoluene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
2-Hexanone			1.78	U			1.68	U			1.78	U			1.79	U	1.51	U
2-Nitropropane			1.05	U			0.995	U			1.05	U			1.06	U	0.892	U
4-Chlorotoluene			0.281	U			0.265	U			0.281	U			0.282	U	0.238	U
4-Isopropyltoluene			0.293	U			0.276	U			0.293	U			0.294	U	0.248	U
4-Methyl-2-pentanone			1.28	U			1.2	U			1.28	U			1.28	U	1.08	U
Acetone			3.02	U			2.85	U			3.02	U			3.75	J	3.29	J
Acetonitrile			10.7	U			10.1	U			10.7	U			10.7	U	9.03	U
Acrolein			3.52	U			3.32	U			3.51	U			3.52	U	2.97	U
Acrylonitrile			1.17	U			1.11	U			1.17	U			1.17	U	0.991	U
Allyl chloride			2.34	U			2.21	U			2.34	U			2.35	U	1.98	U
Benzene			0.387	U			0.365	U			0.386	U			0.388	U	0.327	U
Benzyl chloride			0.703	U			0.663	U			0.703	U			0.705	U	0.595	U
bis(2-Chloroisopropyl)ether			1.76	U			1.66	U			1.76	U			1.76	U	1.49	U
Bromobenzene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
Bromochloromethane			0.586	U			0.553	U			0.585	U			0.587	U	0.496	U
Bromodichloromethane			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
Bromoform			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
Bromomethane			0.586	U			0.553	U			0.585	U			0.587	U	0.496	U
Carbon disulfide			1.47	U			1.38	U			1.46	U			1.47	U	1.24	U
Carbon tetrachloride			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
Chlorobenzene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
Chloroethane			0.586	U			0.553	U			0.585	U			0.587	U	0.496	U

Table 3. Reference Area Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																	
	BLT-REF-SO-03a-2		BLT-REF-SO-03b-03		BLT-REF-SO-03b-2		BLT-REF-SO-04a-03		BLT-REF-SO-04a-2		BLT-REF-SO-04b-03		BLT-REF-SO-04b-2		BLT-REF-SO-05c-2		BLT-REF-SO-05d-2	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Chloroform			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
Chloromethane			0.586	U			0.553	U			0.585	U			0.587	U	0.496	U
cis-1,2-Dichloroethylene			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
cis-1,3-Dichloropropylene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
cis-1,4-Dichloro-2-butene			0.586	U			0.553	U			0.585	U			0.587	U	0.496	U
Cyclohexane			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
Cyclohexanone			17.6	U			16.6	U			17.6	U			17.6	U	14.9	U
Dibromochloromethane			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
Dibromomethane			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
Dichlorodifluoromethane			0.586	U			0.553	U			0.585	U			0.587	U	0.496	U
Ethyl ether			0.293	U			0.276	U			0.293	U			0.294	U	0.248	U
Ethyl methacrylate			0.586	U			0.553	U			0.585	U			0.587	U	0.496	U
Ethylbenzene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
Hexachlorobutadiene			0.586	U			0.553	U			0.585	U			0.587	U	0.496	U
Iodomethane			1.96	U			1.85	U			1.96	U			1.96	U	1.66	U
Isobutyl alcohol			11.7	U			11.1	U			11.7	U			11.7	U	9.91	U
Isopropylbenzene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
m,p-Xylenes			0.698	BJ			0.667	BJ			0.653	J			0.294	U	0.248	U
Methacrylonitrile			0.821	U			0.774	U			0.82	U			0.822	U	0.694	U
Methyl acetate			1.96	U			1.85	U			1.96	U			1.96	U	1.66	U
Methyl methacrylate			1.17	U			1.11	U			1.17	U			1.17	U	0.991	U
Methylcyclohexane			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
Methylene chloride			2.34	U			2.21	U			2.34	U			2.35	U	1.98	U
Naphthalene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
n-Butyl alcohol			31.6	U			29.8	U			31.6	U			31.7	U	26.8	U
n-Butylbenzene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
n-Propylbenzene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
o-Xylene			0.234	U			0.221	U			0.234	U			0.275	J	0.198	U
Pentachloroethane			1.76	U			1.66	U			1.76	U			1.76	U	1.49	U
Propionitrile			1.17	U			1.11	U			1.17	U			1.17	U	0.991	U
sec-Butylbenzene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
Styrene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
tert-Butyl methyl ether			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
tert-Butylbenzene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
Tetrachloroethylene			0.234	U			0.221	U			0.234	U			0.235	U	0.198	U
Toluene			0.34	U			0.321	U			0.34	U			0.579	J	0.287	U
trans-1,2-Dichloroethylene			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
trans-1,3-Dichloropropylene			0.352	U			0.332	U			0.351	U			0.352	U	0.297	U
trans-1,4-Dichloro-2-butene			0.586	U			0.553	U			0.585	U			0.587	U	0.496	U
Trichloroethylene			0.293	U			0.276	U			0.293	U			0.294	U	0.248	U
Trichlorofluoromethane			0.586	U			0.553	U			0.585	U			0.587	U	0.496	U
Trichlorotrifluoroethane			1.17	U			1.11	U			1.17	U			1.17	U	0.991	U
Vinyl acetate			1.47	U			1.38	U			1.46	U			1.47	U	1.24	U
Vinyl chloride			0.586	U			0.553	U			0.585	U			0.587	U	0.496	U
Xylenes (total)			0.698	BJ			0.667	BJ			0.653	J			0.275	J	0.198	U

Table 3. Reference Area Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																	
	BLT-REF-SO-03a-2		BLT-REF-SO-03b-03		BLT-REF-SO-03b-2		BLT-REF-SO-04a-03		BLT-REF-SO-04a-2		BLT-REF-SO-04b-03		BLT-REF-SO-04b-2		BLT-REF-SO-05c-2		BLT-REF-SO-05d-2	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA SVOC (ug/kg)																		
1,1'-Biphenyl	111	U	113	U	112	U	108	U	115	U	108	U	110	U	115	U	115	U
1,2,4-Trichlorobenzene	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
1,2-Dichlorobenzene	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
1,3-Dichlorobenzene	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
1,4-Dichlorobenzene	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
2,4,5-Trichlorophenol	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
2,4,6-Trichlorophenol	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
2,4-Dichlorophenol	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
2,4-Dimethylphenol	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
2,4-Dinitrophenol	140	U	143	U	142	U	137	U	146	U	136	U	139	U	146	U	146	U
2,4-Dinitrotoluene	36.9	U	37.5	U	37.3	U	36.1	U	38.4	U	35.9	U	36.5	U	38.4	U	38.3	U
2,6-Dinitrotoluene	36.9	U	37.5	U	37.3	U	36.1	U	38.4	U	35.9	U	36.5	U	38.4	U	38.3	U
2-Chloronaphthalene	12.9	U	13.1	U	13.1	U	12.6	U	13.4	U	12.6	U	12.8	U	13.4	U	13.4	U
2-Chlorophenol	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
2-Methyl-4,6-dinitrophenol	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
2-Methylnaphthalene	7.39	U	7.5	U	7.46	U	7.22	U	7.68	U	7.18	U	7.3	U	7.67	U	7.67	U
2-Nitrophenol	36.9	U	37.5	U	37.3	U	36.1	U	38.4	U	35.9	U	36.5	U	38.4	U	38.3	U
3,3'-Dichlorobenzidine	111	U	113	U	112	U	108	U	115	U	108	U	110	U	115	U	115	U
4-Bromophenylphenylether	36.9	U	37.5	U	37.3	U	36.1	U	38.4	U	35.9	U	36.5	U	38.4	U	38.3	U
4-Chloro-3-methylphenol	36.9	U	37.5	U	37.3	U	36.1	U	38.4	U	35.9	U	36.5	U	38.4	U	38.3	U
4-Chloroaniline	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
4-Chlorophenylphenylether	36.9	U	37.5	U	37.3	U	36.1	U	38.4	U	35.9	U	36.5	U	38.4	U	38.3	U
4-Nitrophenol	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
Acenaphthene	12.3	U	12.5	U	12.5	U	12.1	U	12.8	U	12	U	12.2	U	12.8	U	12.8	U
Acenaphthylene	11.1	U	11.3	U	11.2	U	10.8	U	11.5	U	10.8	U	11	U	11.5	U	11.5	U
alpha-Terpineol	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
Anthracene	7.39	U	7.5	U	7.46	U	7.22	U	7.68	U	7.18	U	7.3	U	7.67	U	7.67	U
Atrazine	111	U	113	U	112	U	108	U	115	U	108	U	110	U	115	U	115	U
Benzaldehyde	111	U	113	U	112	U	108	U	115	U	108	U	110	U	115	U	115	U
Benzo(a)anthracene	11.1	U	11.3	U	11.2	U	10.8	U	11.5	U	10.8	U	11	U	11.5	U	11.5	U
Benzo(a)pyrene	11.1	U	11.3	U	11.2	U	10.8	U	11.5	U	10.8	U	11	U	11.5	U	11.5	U
Benzo(b)fluoranthene	11.1	U	11.3	U	11.2	U	10.8	U	11.5	U	10.8	U	11	U	11.5	U	11.5	U
Benzo(ghi)perylene	11.1	U	11.3	U	11.2	U	10.8	U	11.5	U	10.8	U	11	U	11.5	U	11.5	U
Benzo(k)fluoranthene	11.1	U	11.3	U	11.2	U	10.8	U	11.5	U	10.8	U	11	U	11.5	U	11.5	U
bis(2-Chloroethoxy)methane	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
bis(2-Chloroethyl) ether	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
bis(2-Chloroisopropyl)ether	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
bis(2-Ethylhexyl)phthalate	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
Butylbenzylphthalate	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
Carbazole	11.1	U	11.3	U	11.2	U	10.8	U	11.5	U	10.8	U	11	U	11.5	U	11.5	U
Chrysene	11.1	U	11.3	U	11.2	U	10.8	U	11.5	U	10.8	U	11	U	11.5	U	11.5	U
Dibenzo(a,h)anthracene	11.1	U	11.3	U	11.2	U	10.8	U	11.5	U	10.8	U	11	U	11.5	U	11.5	U
Dibenzofuran	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
Diethylphthalate	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
Dimethylphthalate	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
Di-n-butylphthalate	36.9	U	37.5	U	37.3	U	36.1	U	38.4	U	35.9	U	36.5	U	38.4	U	38.3	U
Di-n-octylphthalate	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
Diphenylamine	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U

Table 3. Reference Area Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																	
	BLT-REF-SO-03a-2		BLT-REF-SO-03b-03		BLT-REF-SO-03b-2		BLT-REF-SO-04a-03		BLT-REF-SO-04a-2		BLT-REF-SO-04b-03		BLT-REF-SO-04b-2		BLT-REF-SO-05c-2		BLT-REF-SO-05d-2	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Fluoranthene	11.1	U	11.3	U	11.2	U	10.8	U	11.5	U	10.8	U	11	U	11.5	U	11.5	U
Fluorene	11.1	U	11.3	U	11.2	U	10.8	U	11.5	U	10.8	U	11	U	11.5	U	11.5	U
Hexachlorobenzene	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
Hexachlorobutadiene	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
Hexachlorocyclopentadiene	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
Hexachloroethane	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
Indeno(1,2,3-cd)pyrene	11.1	U	11.3	U	11.2	U	10.8	U	11.5	U	10.8	U	11	U	11.5	U	11.5	U
Isophorone	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
m,p-Cresols	148	U	150	U	149	U	144	U	154	U	144	U	146	U	153	U	153	U
m-Nitroaniline	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
Naphthalene	11.1	U	11.3	U	11.2	U	10.8	U	11.5	U	10.8	U	11	U	11.5	U	11.5	U
Nitrobenzene	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
N-Nitrosodipropylamine	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
o-Cresol	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
o-Nitroaniline	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
Pentachlorophenol	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
Phenanthrene	11.1	U	11.3	U	11.2	U	10.8	U	11.5	U	10.8	U	11	U	11.5	U	11.5	U
Phenol	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
p-Nitroaniline	73.9	U	75	U	74.6	U	72.2	U	76.8	U	71.8	U	73	U	76.7	U	76.7	U
Pyrene	11.6	U	11.8	U	11.7	U	11.3	U	12.1	U	11.3	U	11.5	U	12	U	12	U
RCRA Metals (mg/kg)																		
Aluminum	9870		10700		2640		13700		3020		12500		5020		3950		1440	
Antimony	0.426	U	0.439	U	0.445	U	0.421	U	0.461	U	0.429	U	0.422	U	0.438	U	0.449	U
Arsenic	4.01		3.89		3.79		4.9		4.72		4.16		3.33		4.11		1.9	
Barium	18.2		18.4		13.3		24.1		16.9		19.4		15.7		21.8		9.34	
Beryllium	0.195	J	0.183	J	0.115	J	0.232	J	0.115	U	0.212	J	0.13	J	0.137	J	0.112	U
Cadmium	0.107	U	0.11	U	0.111	U	0.16	J	0.115	U	0.116	J	0.106	U	0.11	U	0.112	U
Calcium	22.4		21.4		22.8		24.3		50		14		20.7		109		48.7	
Chromium	17.5		17.4		7.29		21.4		7.27		14.7		11.3		19.1		8.26	
Cobalt	0.928		0.84		0.223	U	1.21		0.23	U	1.17		0.409	J	0.219	U	0.225	U
Copper	10.1		10.4		6.54		10.8		5.92		8.64		6.37		11.3		1.65	
Iron	11100		10500		5010		14600		3270		11000		5470		3830		1820	
Lead	5.61		4.86		4.87		6.32		6.69		5.27		4.83		6.49		2.16	
Magnesium	322		327		87.1		435		140		401		172		176		54.9	
Manganese	22.8		15.2		2.4		21.5		2.96		25.8		7.84		6.73		1.03	J
Mercury	23.4		17.3		20.9		21.5		23.3		25.1		18.8		20.8		8.37	J
Nickel	4.7		4.02		0.945		5.4		0.9		4.98		2.3		8.65		0.462	J
Potassium	402		363		499		450		662		403		476		868		396	
Selenium	0.639	U	0.658	U	0.668	U	0.632	U	0.691	U	0.644	U	0.633	U	0.658	U	0.674	U
Silver	0.107	U	0.11	U	0.111	U	0.105	U	0.115	U	0.107	U	0.106	U	0.11	U	0.112	U
Sodium	15.3	J	13.9	J	17.3		16.8		22.1		14.8	J	15.7	J	32.1		10.9	J
Thallium	0.533	U	0.548	U	0.556	U	0.527	U	0.576	U	0.536	U	0.528	U	0.548	U	0.561	U
Vanadium	27.6		29.6		23.3		31.5		23.7		26.4		19.2		37.6		12.5	
Zinc	9.78		8.28		3.01		12.4		5.41		10.6		5.7		3.54		1.02	J

Table 3. Reference Area Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																	
	BLT-REF-SO-03a-2		BLT-REF-SO-03b-03		BLT-REF-SO-03b-2		BLT-REF-SO-04a-03		BLT-REF-SO-04a-2		BLT-REF-SO-04b-03		BLT-REF-SO-04b-2		BLT-REF-SO-05c-2		BLT-REF-SO-05d-2	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA Pesticide (ug/kg)																		
4,4'-DDD	0.369	U	0.375	U	0.373	U	0.361	U	0.384	U	0.359	U	0.365	U	0.384	U	0.383	U
4,4'-DDE	0.369	U	0.375	U	0.373	U	0.361	U	0.384	U	0.359	U	0.365	U	0.384	U	0.383	U
4,4'-DDT	0.369	U	0.375	U	0.373	U	0.361	U	0.384	U	0.359	U	0.365	U	0.384	U	0.383	U
Aldrin	0.185	U	0.188	U	0.187	U	0.181	U	0.192	U	0.18	U	0.183	U	0.192	U	0.192	U
alpha-BHC	0.185	U	0.188	U	0.187	U	0.181	U	0.192	U	0.18	U	0.183	U	0.192	U	0.192	U
beta-BHC	0.185	U	0.188	U	0.187	U	0.181	U	0.192	U	0.18	U	0.183	U	0.192	U	0.192	U
Chlordane (tech.)	1.85	U	1.88	U	1.87	U	1.81	U	1.92	U	1.8	U	1.83	U	1.92	U	1.92	U
delta-BHC	0.185	U	0.188	U	0.187	U	0.181	U	0.192	U	0.18	U	0.183	U	0.192	U	0.192	U
Dieldrin	0.369	U	0.375	U	0.373	U	0.361	U	0.384	U	0.359	U	0.365	U	0.384	U	0.383	U
Endosulfan I	0.185	U	0.188	U	0.187	U	0.181	U	0.192	U	0.18	U	0.183	U	0.192	U	0.192	U
Endosulfan II	0.369	U	0.375	U	0.373	U	0.361	U	0.384	U	0.359	U	0.365	U	0.384	U	0.383	U
Endosulfan sulfate	0.369	U	0.375	U	0.373	U	0.361	U	0.384	U	0.359	U	0.365	U	0.384	U	0.383	U
Endrin	0.369	U	0.375	U	0.373	U	0.361	U	0.384	U	0.359	U	0.365	U	0.384	U	0.383	U
Endrin aldehyde	0.369	U	0.375	U	0.373	U	0.361	U	0.384	U	0.359	U	0.365	U	0.384	U	0.383	U
Endrin ketone	0.369	U	0.375	U	0.373	U	0.361	U	0.384	U	0.359	U	0.365	U	0.384	U	0.383	U
gamma-BHC (Lindane)	0.185	U	0.188	U	0.187	U	0.181	U	0.192	U	0.18	U	0.183	U	0.192	U	0.192	U
Heptachlor	0.185	U	0.188	U	0.187	U	0.181	U	0.192	U	0.18	U	0.183	U	0.192	U	0.192	U
Heptachlor epoxide	0.185	U	0.188	U	0.187	U	0.181	U	0.192	U	0.18	U	0.183	U	0.192	U	0.192	U
Methoxychlor	1.85	U	1.88	U	1.87	U	1.81	U	1.92	U	1.8	U	1.83	U	1.92	U	1.92	U
Toxaphene	6.15	U	6.25	U	6.21	U	6.01	U	6.39	U	5.98	U	6.08	U	6.39	U	6.38	U
TCLP PCB (ug/kg)																		
Aroclor-1016	1.23	U	1.25	U	1.24	U	1.2	U	1.28	U	1.2	U	1.22	U	2.56	U	2.55	U
Aroclor-1221	1.23	U	1.25	U	1.24	U	1.2	U	1.28	U	1.2	U	1.22	U	2.56	U	2.55	U
Aroclor-1232	1.23	U	1.25	U	1.24	U	1.2	U	1.28	U	1.2	U	1.22	U	2.56	U	2.55	U
Aroclor-1242	1.23	U	1.25	U	1.24	U	1.2	U	1.28	U	1.2	U	1.22	U	2.56	U	2.55	U
Aroclor-1248	1.23	U	1.25	U	1.24	U	1.2	U	1.28	U	1.2	U	1.22	U	2.56	U	2.55	U
Aroclor-1254	1.23	U	1.25	U	1.24	U	1.2	U	1.28	U	1.2	U	1.22	U	2.56	U	2.55	U
Aroclor-1260	1.23	U	1.25	U	1.24	U	1.2	U	1.28	U	1.2	U	1.22	U	2.56	U	2.55	U
Herbicides (ug/kg)																		
2,4,5-T	1.84	U	1.87	U	1.86	U	1.8	U	1.91	U	1.79	U	1.82	U	1.91	U	1.91	U
2,4,5-TP	1.84	U	1.87	U	1.86	U	1.8	U	1.91	U	1.79	U	1.82	U	1.91	U	1.91	U
2,4-D	1.84	U	1.87	U	1.86	U	1.8	U	1.91	U	1.79	U	1.82	U	1.91	U	1.91	U
TOC (mg/kg)																		
Total Organic Carbon #1	488		423		539		536		495		486		507		719		190	
Total Organic Carbon #2	466		512		549		493		526		560		544		773		159	
Total Organic Carbon #3	457		471		554		562		518		558		526		874		173	
Total Organic Carbon #4	482		437		558		548		449		519		525		820		165	
Total Organic Carbon Average	473		461		550		535		497		530		526		797		172	

Table 3. Reference Area Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number					
	BLT-REF-SO-05e-2		BLT-REF-SO-05f-2		BLT-REF-SO-06a-2	
	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)						
1,1,1,2-Tetrachloroethane	0.253	U	0.278	U		
1,1,1-Trichloroethane	0.379	U	0.417	U		
1,1,2,2-Tetrachloroethane	0.316	U	0.347	U		
1,1,2-Trichloroethane	0.379	U	0.417	U		
1,1-Dichloroethane	0.379	U	0.417	U		
1,1-Dichloroethylene	0.379	U	1.15	J		
1,1-Dichloropropene	0.316	U	0.347	U		
1,2,3-Trichlorobenzene	0.316	U	0.347	U		
1,2,3-Trichloropropane	0.632	U	0.695	U		
1,2,4-Trichlorobenzene	0.379	U	0.417	U		
1,2,4-Trimethylbenzene	0.253	U	0.278	U		
1,2-Dibromo-3-chloropropane	0.632	U	0.695	U		
1,2-Dibromoethane	0.253	U	0.278	U		
1,2-Dichlorobenzene	0.253	U	0.278	U		
1,2-Dichloroethane	0.316	U	0.347	U		
1,2-Dichloroethylene (total)	0.379	U	0.417	U		
1,2-Dichloropropane	0.379	U	0.417	U		
1,3,5-Trimethylbenzene	0.253	U	0.278	U		
1,3-Dichlorobenzene	0.253	U	0.278	U		
1,3-Dichloropropane	0.379	U	0.417	U		
1,4-Dichlorobenzene	0.253	U	0.278	U		
2,2-Dichloropropane	0.379	U	0.417	U		
2-Butanone	2.15	U	2.36	U		
2-Chloro-1,3-butadiene	0.379	U	0.417	U		
2-Chloroethylvinyl ether	1.58	U	1.74	U		
2-Chlorotoluene	0.253	U	0.278	U		
2-Hexanone	1.92	U	2.11	U		
2-Nitropropane	1.14	U	1.25	U		
4-Chlorotoluene	0.303	U	0.333	U		
4-Isopropyltoluene	0.316	U	0.347	U		
4-Methyl-2-pentanone	1.38	U	1.51	U		
Acetone	3.96	J	5.16	J		
Acetonitrile	11.5	U	12.7	U		
Acrolein	3.79	U	4.17	U		
Acrylonitrile	1.26	U	1.39	U		
Allyl chloride	2.53	U	2.78	U		
Benzene	0.417	U	0.458	U		
Benzyl chloride	0.758	U	0.833	U		
bis(2-Chloroisopropyl)ether	1.9	U	2.08	U		
Bromobenzene	0.253	U	0.278	U		
Bromochloromethane	0.632	U	0.695	U		
Bromodichloromethane	0.253	U	0.278	U		
Bromoform	0.379	U	0.417	U		
Bromomethane	0.632	U	0.695	U		
Carbon disulfide	1.58	U	1.74	U		
Carbon tetrachloride	0.253	U	0.278	U		
Chlorobenzene	0.253	U	0.278	U		
Chloroethane	0.632	U	0.695	U		

Table 3. Reference Area Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number					
	BLT-REF-SO-05e-2		BLT-REF-SO-05f-2		BLT-REF-SO-06a-2	
	Result	Qual	Result	Qual	Result	Qual
Chloroform	0.253	U	0.278	U		
Chloromethane	0.632	U	0.695	U		
cis-1,2-Dichloroethylene	0.379	U	0.417	U		
cis-1,3-Dichloropropylene	0.253	U	0.278	U		
cis-1,4-Dichloro-2-butene	0.632	U	0.695	U		
Cyclohexane	0.379	U	0.417	U		
Cyclohexanone	19	U	20.8	U		
Dibromochloromethane	0.379	U	0.417	U		
Dibromomethane	0.379	U	0.417	U		
Dichlorodifluoromethane	0.632	U	0.695	U		
Ethyl ether	0.316	U	0.347	U		
Ethyl methacrylate	0.632	U	0.695	U		
Ethylbenzene	0.253	U	0.278	U		
Hexachlorobutadiene	0.632	U	0.695	U		
Iodomethane	2.11	U	2.32	U		
Isobutyl alcohol	12.6	U	13.9	U		
Isopropylbenzene	0.253	U	0.278	U		
m,p-Xylenes	0.316	U	0.347	U		
Methacrylonitrile	0.885	U	0.972	U		
Methyl acetate	2.11	U	2.32	U		
Methyl methacrylate	1.26	U	1.39	U		
Methylcyclohexane	0.379	U	0.417	U		
Methylene chloride	2.53	U	2.78	U		
Naphthalene	0.253	U	0.278	U		
n-Butyl alcohol	34.1	U	37.5	U		
n-Butylbenzene	0.253	U	0.278	U		
n-Propylbenzene	0.253	U	0.278	U		
o-Xylene	0.253	U	0.278	U		
Pentachloroethane	1.9	U	2.08	U		
Propionitrile	1.26	U	1.39	U		
sec-Butylbenzene	0.253	U	0.278	U		
Styrene	0.253	U	0.278	U		
tert-Butyl methyl ether	0.253	U	0.278	U		
tert-Butylbenzene	0.253	U	0.278	U		
Tetrachloroethylene	0.253	U	0.278	U		
Toluene	0.367	U	0.403	U		
trans-1,2-Dichloroethylene	0.379	U	0.417	U		
trans-1,3-Dichloropropylene	0.379	U	0.417	U		
trans-1,4-Dichloro-2-butene	0.632	U	0.695	U		
Trichloroethylene	0.316	U	0.347	U		
Trichlorofluoromethane	0.632	U	0.695	U		
Trichlorotrifluoroethane	1.26	U	1.39	U		
Vinyl acetate	1.58	U	1.74	U		
Vinyl chloride	0.632	U	0.695	U		
Xylenes (total)	0.253	U	0.278	U		

Table 3. Reference Area Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number					
	BLT-REF-SO-05e-2		BLT-REF-SO-05f-2		BLT-REF-SO-06a-2	
	Result	Qual	Result	Qual	Result	Qual
RCRA SVOC (ug/kg)						
1,1'-Biphenyl	104	U	108	U		
1,2,4-Trichlorobenzene	69.1	U	72.2	U		
1,2-Dichlorobenzene	69.1	U	72.2	U		
1,3-Dichlorobenzene	69.1	U	72.2	U		
1,4-Dichlorobenzene	69.1	U	72.2	U		
2,4,5-Trichlorophenol	69.1	U	72.2	U		
2,4,6-Trichlorophenol	69.1	U	72.2	U		
2,4-Dichlorophenol	69.1	U	72.2	U		
2,4-Dimethylphenol	69.1	U	72.2	U		
2,4-Dinitrophenol	131	U	137	U		
2,4-Dinitrotoluene	34.5	U	36.1	U		
2,6-Dinitrotoluene	34.5	U	36.1	U		
2-Chloronaphthalene	12.1	U	12.6	U		
2-Chlorophenol	69.1	U	72.2	U		
2-Methyl-4,6-dinitrophenol	69.1	U	72.2	U		
2-Methylnaphthalene	6.91	U	7.22	U		
2-Nitrophenol	34.5	U	36.1	U		
3,3'-Dichlorobenzidine	104	U	108	U		
4-Bromophenylphenylether	34.5	U	36.1	U		
4-Chloro-3-methylphenol	34.5	U	36.1	U		
4-Chloroaniline	69.1	U	72.2	U		
4-Chlorophenylphenylether	34.5	U	36.1	U		
4-Nitrophenol	69.1	U	72.2	U		
Acenaphthene	11.5	U	12.1	U		
Acenaphthylene	10.4	U	10.8	U		
alpha-Terpineol	69.1	U	72.2	U		
Anthracene	6.91	U	7.22	U		
Atrazine	104	U	108	U		
Benzaldehyde	104	U	108	U		
Benzo(a)anthracene	10.4	U	10.8	U		
Benzo(a)pyrene	10.4	U	10.8	U		
Benzo(b)fluoranthene	10.4	U	10.8	U		
Benzo(ghi)perylene	10.4	U	10.8	U		
Benzo(k)fluoranthene	10.4	U	10.8	U		
bis(2-Chloroethoxy)methane	69.1	U	72.2	U		
bis(2-Chloroethyl) ether	69.1	U	72.2	U		
bis(2-Chloroisopropyl)ether	69.1	U	72.2	U		
bis(2-Ethylhexyl)phthalate	69.1	U	72.2	U		
Butylbenzylphthalate	69.1	U	72.2	U		
Carbazole	10.4	U	10.8	U		
Chrysene	10.4	U	10.8	U		
Dibenzo(a,h)anthracene	10.4	U	10.8	U		
Dibenzofuran	69.1	U	72.2	U		
Diethylphthalate	69.1	U	72.2	U		
Dimethylphthalate	69.1	U	72.2	U		
Di-n-butylphthalate	34.5	U	36.1	U		
Di-n-octylphthalate	69.1	U	72.2	U		
Diphenylamine	69.1	U	72.2	U		

Table 3. Reference Area Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number					
	BLT-REF-SO-05e-2		BLT-REF-SO-05f-2		BLT-REF-SO-06a-2	
	Result	Qual	Result	Qual	Result	Qual
Fluoranthene	10.4	U	10.8	U		
Fluorene	10.4	U	10.8	U		
Hexachlorobenzene	69.1	U	72.2	U		
Hexachlorobutadiene	69.1	U	72.2	U		
Hexachlorocyclopentadiene	69.1	U	72.2	U		
Hexachloroethane	69.1	U	72.2	U		
Indeno(1,2,3-cd)pyrene	10.4	U	10.8	U		
Isophorone	69.1	U	72.2	U		
m,p-Cresols	138	U	144	U		
m-Nitroaniline	69.1	U	72.2	U		
Naphthalene	10.4	U	10.8	U		
Nitrobenzene	69.1	U	72.2	U		
N-Nitrosodipropylamine	69.1	U	72.2	U		
o-Cresol	69.1	U	72.2	U		
o-Nitroaniline	69.1	U	72.2	U		
Pentachlorophenol	69.1	U	72.2	U		
Phenanthrene	10.4	U	10.8	U		
Phenol	69.1	U	72.2	U		
p-Nitroaniline	69.1	U	72.2	U		
Pyrene	10.8	U	11.3	U		
RCRA Metals (mg/kg)						
Aluminum	516		956		12300	
Antimony	0.413	U	0.433	U	0.423	U
Arsenic	0.619	U	0.65	U	5.9	
Barium	3.05		5.11		17.1	
Beryllium	0.103	U	0.108	U	0.199	J
Cadmium	0.103	U	0.108	U	0.106	U
Calcium	13.3		18.3		28.6	
Chromium	2.6		4.08		21	
Cobalt	0.206	U	0.217	U	1.07	
Copper	1.19		2.57		12.7	
Iron	532		1570		13400	
Lead	0.408	J	0.659	J	5.84	
Magnesium	9.69	J	24.6	J	346	
Manganese	1.03	J	1.74		18.2	
Mercury	2.5	U	3.5	J	20.9	
Nickel	0.859		1.32		6.4	
Potassium	89.7		175		407	
Selenium	0.619	U	0.65	U	0.635	U
Silver	0.103	U	0.108	U	0.106	U
Sodium	4.65	U	4.88	U	15.3	J
Thallium	0.516	U	0.542	U	0.529	U
Vanadium	3.24		5.65		40.7	
Zinc	5.17		0.992	J	12.7	

Table 3. Reference Area Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number					
	BLT-REF-SO-05e-2		BLT-REF-SO-05f-2		BLT-REF-SO-06a-2	
	Result	Qual	Result	Qual	Result	Qual
RCRA Pesticide (ug/kg)						
4,4'-DDD	0.345	U	0.361	U	0.362	U
4,4'-DDE	0.345	U	0.361	U	0.362	U
4,4'-DDT	0.345	U	0.361	U	0.362	U
Aldrin	0.173	U	0.181	U	0.181	U
alpha-BHC	0.173	U	0.181	U	0.181	U
beta-BHC	0.173	U	0.181	U	0.181	U
Chlordane (tech.)	1.73	U	1.81	U	1.81	U
delta-BHC	0.173	U	0.181	U	0.181	U
Dieldrin	0.345	U	0.361	U	0.362	U
Endosulfan I	0.173	U	0.181	U	0.181	U
Endosulfan II	0.345	U	0.361	U	0.362	U
Endosulfan sulfate	0.345	U	0.361	U	0.362	U
Endrin	0.345	U	0.361	U	0.362	U
Endrin aldehyde	0.345	U	0.361	U	0.362	U
Endrin ketone	0.345	U	0.361	U	0.362	U
gamma-BHC (Lindane)	0.173	U	0.181	U	0.181	U
Heptachlor	0.173	U	0.181	U	0.181	U
Heptachlor epoxide	0.173	U	0.181	U	0.181	U
Methoxychlor	1.73	U	1.81	U	1.81	U
Toxaphene	5.75	U	6.01	U	6.02	U
TCLP PCB (ug/kg)						
Aroclor-1016	2.3	U	2.41	U	1.2	U
Aroclor-1221	2.3	U	2.41	U	1.2	U
Aroclor-1232	2.3	U	2.41	U	1.2	U
Aroclor-1242	2.3	U	2.41	U	1.2	U
Aroclor-1248	2.3	U	2.41	U	1.2	U
Aroclor-1254	2.3	U	2.41	U	1.2	U
Aroclor-1260	2.3	U	2.41	U	1.2	U
Herbicides (ug/kg)						
2,4,5-T	1.72	U	1.8	U	1.8	U
2,4,5-TP	1.72	U	1.8	U	1.8	U
2,4-D	1.72	U	1.8	U	1.8	U
TOC (mg/kg)						
Total Organic Carbon #1	50.9	J	155		559	
Total Organic Carbon #2	60.1	J	114		588	
Total Organic Carbon #3	44.2	J	123		522	
Total Organic Carbon #4	43.6	J	144		477	
Total Organic Carbon Average	49.7	J	134		537	

Table 4. Reference Area Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																															
Parameter	**BLT-REF-SO-01a-03**				**BLT-REF-SO-01b-03**				**BLT-REF-SO-02a-03**				**BLT-REF-SO-02b-03**				**BLT-REF-SO-03a-03**				**BLT-REF-SO-03b-03**				**BLT-REF-SO-04a-03**				**BLT-REF-SO-04b-03**			
	Result	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**
Gamma Scan (901.1mod/HASL 300)																																
Actinium-228	1.15	+/-	0.21		0.81	+/-	0.26		0.88	+/-	0.17		0.90	+/-	0.16		0.77	+/-	0.09		1.16	+/-	0.20		0.82	+/-	0.15		0.78	+/-	0.14	
Americium-241	0.07	+/-	0.09	U	0.00	+/-	0.06	U	0.00	+/-	0.02	U	0.01	+/-	0.03	U	0.02	+/-	0.07	U	0.00	+/-	0.06	U	0.04	+/-	0.05	U	0.00	+/-	0.02	UI
Antimony-124	0.00	+/-	0.03	U	0.08	+/-	0.12	U	0.04	+/-	0.03	U	-0.01	+/-	0.04	U	-0.03	+/-	0.03	U	0.05	+/-	0.05	U	-0.01	+/-	0.03	U	0.00	+/-	0.04	U
Antimony-125	0.00	+/-	0.05	U	0.02	+/-	0.10	U	0.03	+/-	0.04	U	0.04	+/-	0.05	U	0.02	+/-	0.03	U	0.03	+/-	0.04	U	0.02	+/-	0.03	U	-0.01	+/-	0.04	U
Barium-133	-0.01	+/-	0.02	U	0.01	+/-	0.04	U	0.00	+/-	0.02	U	-0.03	+/-	0.03	U	-0.06	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.02	U	0.00	+/-	0.02	U
Barium-140	-0.08	+/-	0.16	U	-0.34	+/-	0.35	U	0.09	+/-	0.15	U	0.00	+/-	0.19	U	0.15	+/-	0.09	U	0.01	+/-	0.13	U	-0.02	+/-	0.11	U	-0.13	+/-	0.15	U
Beryllium-7	0.12	+/-	0.18	U	-0.13	+/-	0.35	U	-0.05	+/-	0.14	U	0.00	+/-	0.19	U	0.01	+/-	0.10	U	-0.03	+/-	0.13	U	0.02	+/-	0.11	U	0.06	+/-	0.15	U
Bismuth-212	0.76	+/-	0.28		0.52	+/-	0.43		0.47	+/-	0.24		0.73	+/-	0.30		0.41	+/-	0.16		0.65	+/-	0.23		0.52	+/-	0.16		0.37	+/-	0.27	
Bismuth-214	0.55	+/-	0.11		0.68	+/-	0.15		0.65	+/-	0.11		0.74	+/-	0.10		0.47	+/-	0.05		0.87	+/-	0.11		0.46	+/-	0.07		0.50	+/-	0.08	
Cerium-139	-0.01	+/-	0.02	U	0.00	+/-	0.03	UI	0.00	+/-	0.01	U	-0.01	+/-	0.01	U	-0.01	+/-	0.01	U	-0.02	+/-	0.01	U	0.00	+/-	0.01	U	0.00	+/-	0.01	U
Cerium-141	0.01	+/-	0.04	U	0.05	+/-	0.06	U	0.02	+/-	0.03	U	-0.03	+/-	0.03	U	0.00	+/-	0.02	U	0.04	+/-	0.03	U	0.04	+/-	0.03	U	0.02	+/-	0.03	U
Cerium-144	0.04	+/-	0.12	U	-0.06	+/-	0.20	U	-0.02	+/-	0.08	U	0.06	+/-	0.09	U	0.00	+/-	0.07	U	-0.08	+/-	0.09	U	-0.02	+/-	0.07	U	-0.02	+/-	0.08	U
Cesium-134	0.05	+/-	0.03	U	0.00	+/-	0.05	UI	0.00	+/-	0.02	UI	0.00	+/-	0.04	UI	0.00	+/-	0.02	UI	0.00	+/-	0.03	UI	0.00	+/-	0.03	UI	0.00	+/-	0.03	UI
Cesium-136	0.06	+/-	0.06	U	-0.09	+/-	0.14	U	-0.02	+/-	0.06	U	-0.04	+/-	0.07	U	-0.01	+/-	0.04	U	-0.01	+/-	0.05	U	-0.02	+/-	0.04	U	0.00	+/-	0.07	U
Cesium-137	0.00	+/-	0.02	U	0.00	+/-	0.04	U	-0.01	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.01	U	0.00	+/-	0.02	U	-0.01	+/-	0.01	U	-0.02	+/-	0.02	U
Chromium-51	-0.01	+/-	0.22	U	0.09	+/-	0.41	U	-0.16	+/-	0.16	U	0.09	+/-	0.23	U	0.02	+/-	0.14	U	0.07	+/-	0.17	U	0.02	+/-	0.14	U	0.07	+/-	0.16	U
Cobalt-56	0.01	+/-	0.02	U	-0.01	+/-	0.04	U	-0.01	+/-	0.02	U	0.00	+/-	0.03	U	-0.01	+/-	0.01	U	0.00	+/-	0.02	U	0.00	+/-	0.01	U	-0.01	+/-	0.02	U
Cobalt-57	0.00	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.01	U	-0.01	+/-	0.01	U	0.00	+/-	0.01	U	0.00	+/-	0.01	U	0.00	+/-	0.01	U	0.00	+/-	0.01	U
Cobalt-58	-0.02	+/-	0.02	U	0.01	+/-	0.04	U	0.00	+/-	0.02	U	-0.02	+/-	0.03	U	-0.01	+/-	0.01	U	-0.01	+/-	0.02	U	0.00	+/-	0.01	U	0.00	+/-	0.02	U
Cobalt-60	-0.01	+/-	0.02	U	0.03	+/-	0.04	U	-0.02	+/-	0.02	U	0.01	+/-	0.04	U	0.00	+/-	0.01	U	0.00	+/-	0.02	U	0.00	+/-	0.01	U	-0.01	+/-	0.02	U
Europium-152	0.01	+/-	0.05	U	0.02	+/-	0.12	U	-0.02	+/-	0.04	U	-0.04	+/-	0.05	U	0.00	+/-	0.03	U	-0.02	+/-	0.04	U	0.01	+/-	0.03	U	0.03	+/-	0.05	U
Europium-154	-0.03	+/-	0.05	U	-0.04	+/-	0.13	U	0.01	+/-	0.06	U	0.04	+/-	0.07	U	0.00	+/-	0.03	U	-0.01	+/-	0.04	U	-0.01	+/-	0.03	U	-0.02	+/-	0.05	U
Europium-155	0.00	+/-	0.06	UI	0.00	+/-	0.08	UI	0.06	+/-	0.05	U	0.00	+/-	0.07	UI	0.04	+/-	0.04	U	0.08	+/-	0.06	U	0.04	+/-	0.05	U	0.00	+/-	0.05	UI
Iridium-192	0.02	+/-	0.02	U	-0.02	+/-	0.04	U	0.00	+/-	0.01	U	-0.01	+/-	0.02	U	-0.01	+/-	0.01	U	0.00	+/-	0.01	U	0.00	+/-	0.01	U	-0.01	+/-	0.01	U
Iron-59	-0.03	+/-	0.04	U	0.02	+/-	0.09	U	0.00	+/-	0.04	U	0.00	+/-	0.05	U	-0.01	+/-	0.03	U	-0.01	+/-	0.04	U	-0.03	+/-	0.03	U	0.02	+/-	0.04	U
Lead-210	0.76	+/-	1.57	U	0.92	+/-	0.45		0.43	+/-	0.41		0.58	+/-	0.56		1.09	+/-	2.27	U	1.98	+/-	1.77		0.93	+/-	1.46	U	0.53	+/-	0.24	
Lead-212	1.08	+/-	0.11		0.85	+/-	0.12		0.92	+/-	0.11		0.83	+/-	0.08		0.81	+/-	0.04		1.12	+/-	0.10		0.71	+/-	0.07		0.66	+/-	0.07	
Lead-214	0.68	+/-	0.10		0.87	+/-	0.15		0.71	+/-	0.10		0.74	+/-	0.10		0.54	+/-	0.05		0.86	+/-	0.11		0.51	+/-	0.07		0.54	+/-	0.07	
Manganese-54	0.00	+/-	0.02	U	-0.01	+/-	0.04	U	0.00	+/-	0.02	U	0.02	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.02	U
Mercury-203	0.02	+/-	0.02	U	0.08	+/-	0.06		0.03	+/-	0.03	U	0.04	+/-	0.04	U	0.02	+/-	0.02	U	0.00	+/-	0.02	UI	0.00	+/-	0.02	UI	0.00	+/-	0.03	UI
Neodymium-147	0.02	+/-	0.42	U	0.41	+/-	0.73	U	-0.17	+/-	0.34	U	-0.31	+/-	0.43	U	0.12	+/-	0.27	U	-0.09	+/-	0.29	U	0.22	+/-	0.20	U	0.22	+/-	0.32	U
Neptunium-239	-0.11	+/-	0.11	U	-0.02	+/-	0.14	U	-0.06	+/-	0.07	U	-0.04	+/-	0.08	U	0.09	+/-	0.09	U	0.00	+/-	0.08	U	0.04	+/-	0.07	U	0.02	+/-	0.06	U
Niobium-94	0.01	+/-	0.02	U	0.02	+/-	0.04	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.01	U	0.00	+/-	0.01	U	-0.01	+/-	0.01	U	0.00	+/-	0.02	U
Niobium-95	0.00	+/-	0.03	U	0.02	+/-	0.06	U	0.03	+/-	0.05	U	0.03	+/-	0.04	U	0.00	+/-	0.03	U	0.03	+/-	0.02	U	0.00	+/-	0.02	U	0.00	+/-	0.03	UI
Potassium-40	2.73	+/-	0.43		3.01	+/-	0.88		3.05	+/-	0.46		3.90	+/-	0.50		1.91	+/-	0.31		10.50	+/-	0.84		2.46	+/-	0.35		1.77	+/-	0.39	
Promethium-144	0.00	+/-	0.02	U	0.03	+/-	0.04	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U	-0.01	+/-	0.01	U	-0.02	+/-	0.02	U	0.01	+/-	0.01	U	0.00	+/-	0.02	U
Promethium-146	0.02	+/-	0.03	U	0.00	+/-	0.05	U	0.02	+/-	0.02	U	0.01	+/-	0.02	U	0.02	+/-	0.01	U	0.01	+/-	0.02	U	0.00	+/-	0.01	U	0.00	+/-	0.02	U
Radium-226	0.55	+/-	0.11		0.68	+/-	0.15		0.65	+/-	0.11		0.74	+/-	0.10		0.47	+/-	0.05		0.87	+/-	0.11		0.46	+/-	0.07		0.50	+/-	0.08	
Radium-228	1.15	+/-	0.21		0.81	+/-	0.26		0.88	+/-	0.17		0.90	+/-	0.16		0.77	+/-	0.09		1.16	+/-	0.20		0.82	+/-	0.15		0.78	+/-	0.14	
Ruthenium-106	0.04	+/-	0.22	U	0.19	+/-	0.35	U	0.00	+/-	0.14	U	-0.01	+/-	0.19	U	0.09	+/-	0.10	U	-0.12	+/-	0.14	U	-0.01	+/-	0.10	U	0.03	+/-	0.14	U
Silver-110m	-0.01	+/-	0.02	U	0.01	+/-	0.03	U	0.01	+/-	0.02	U	-0.01	+/-	0.02	U	0.00	+/-	0.01	U	-0.01	+/-	0.01	U	0.00	+/-	0.01	U	0.01	+/-	0.02	U
Sodium-22	-0.01	+/-	0.02	U	-0.02	+/-	0.05	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.01	U	0.00	+/-	0.02	U	0.00	+/-	0.01	U	-0.01	+/-	0.02	U
Thallium-208	0.31	+/-	0.05		0.25	+/-	0.08		0.25	+/-	0.04		0.32	+/-	0.05		0.22	+/-	0.03		0.33	+/-	0.05		0.23	+/-	0.03		0.22	+/-	0.05	
Thorium-230	0.55	+/-	0.11		0.68	+/-	0.15		0.65	+/-	0.11		0.74	+/-	0.10		0.47	+/-	0.05		0.87	+/-	0.11		0.46	+/-	0.07		0.50	+/-	0.08	
Thorium-234	0.08	+/-	1.18	U	0.00	+/-	0.68	UI	0.94	+/-	0.45		1.06	+/-	0.68		0.63	+/-	0.89	U	0.31	+/-	0.93	U	0.40	+/-	0.72	U	0.59	+/-	0.35	
Tin-113	-0.01	+/-	0.02	U	0.02	+/-	0.04	U	-0.01	+/-	0.02	U	-0.02	+/-	0.03	U	0.01	+/-	0.01	U	-0.01	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.02	U
Uranium-235	0.20	+/-	0.13	U	0.01	+/-	0.18	U	0.06	+/-	0.11	U	0.00	+/-	0.10	UI	0.00	+/-	0.08	U	0.16	+/-	0.13	U	0.14	+/-	0.11	U	0.06	+/-	0.09	U
Uranium-238	0.08	+/-	1.18	U	0.00	+/-	0.68	UI	0.94	+/-	0.45		1.06	+/-	0.68		0.63	+/-	0.89	U	0.31	+/-	0.93	U	0.40	+/-	0.72	U	0.59	+/-	0.35	
Yttrium-88	0.01	+/-	0.02	U	0.06	+/-	0.05	U	0.01	+/-	0.01	U	-0.01	+/-	0.02	U	0.00	+/-	0.01	U	0.01	+/-	0.01	U	-0.01	+/-	0.01	U	0.01	+/-	0.02	U
Zinc-65	-0.01	+/-	0.04	U	0.01	+/-	0.10	U	0.02	+/-	0.04	U	-0.02	+/-	0.06	U	0.01	+/-	0.03	U	-0.01	+/-	0.04	U	0.01	+/-	0.03	U	0.00	+/-	0.05	UI
Zirconium-95	-0.01	+/-	0.04	U	0.02	+/-	0.08	U	-0.01	+/-	0.04	U	-0.01	+/-	0.04	U	-0.01	+/-	0.02	U	0.00	+/-	0.03	U	0.02	+/-	0.02	U	0.01	+/-	0.03	U

Table 4. Reference Area Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																															
Parameter	**BLT-REF-SO-01a-03**				**BLT-REF-SO-01b-03**				**BLT-REF-SO-02a-03**				**BLT-REF-SO-02b-03**				**BLT-REF-SO-03a-03**				**BLT-REF-SO-03b-03**				**BLT-REF-SO-04a-03**				**BLT-REF-SO-04b-03**			
	Result	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**
Gamma Scan (901.1mod/HASL 300)																																
C-14 (EERF C-01 mod)	-0.51	+/-	0.83	U	-0.01	+/-	0.80	U	-0.23	+/-	0.76	U	-1.29	+/-	0.81	U	-0.77	+/-	0.78	U	-0.68	+/-	0.77	U	-0.45	+/-	0.77	U	-1.02	+/-	0.72	U
Cl-36 (GL-Rad-A033)	0.00	+/-	0.06	U	0.02		0.04	U	-0.01		0.04	U	-0.02	+/-	0.05	U	0.07	+/-	0.07	U	-0.01	+/-	0.05	U	0.10	+/-	0.06		-0.03	+/-	0.04	U
Ni-63 (RESL Ni-1 mod)	-1.26	+/-	2.17	U	-0.73		1.40	U	-0.54		1.43	U	-0.19	+/-	2.15	U	-1.27	+/-	1.51	U	-1.20	+/-	1.29	U	-0.82	+/-	1.34	U	-0.53	+/-	2.08	U
Sr-90 (905.0 mod)	0.02	+/-	0.07	U	-0.04		0.05	U	0.04		0.06	U	0.01	+/-	0.07	U	-0.01	+/-	0.05	U	0.04	+/-	0.05	U	0.00	+/-	0.05	U	-0.02	+/-	0.06	U
H-3 (906.0 mod)	0.00	+/-	0.41	U	0.65		0.43	U	-0.06		0.41	U	-0.12	+/-	0.40	U	0.21	+/-	0.44	U	-0.34	+/-	0.40	U	0.06	+/-	0.43	U	0.20	+/-	0.42	U

Table 5. Reference Area Groundwater - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	Sample Number													
		BLT-REF-SO-06i		BLT-REF-SO-06-j		BLT-REF-SO-O61-2		BLT-P01-MW-09f		BLT-P01-MW-09u		BLT-P01-MW-10f		BLT-P01-MW-10u	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/l)															
2-Butanone	NA	1.25	U	1.25	U	1.29	J	1.25	U	1.25	U	1.25	U	1.25	U
Acetone	5475	1.25	U	1.25	U	5.66		7.22		10.8		7.66		7.44	
Benzene	0.34	**0.45**	J	0.3	U	**0.36**	J	0.3	U	0.3	U	0.3	U	0.3	U
Bromodichloromethane	0.17	0.25	U	0.25	U	**1.46**		0.25	U	0.25	U	0.25	U	0.25	U
Chloroform	0.15	0.25	U	0.25	U	**4.88**		0.25	U	0.25	U	0.25	U	0.25	U
Ethyl ether	1216.7	0.455	J	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Ethylbenzene	1339.9	0.459	J	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
o-Xylene	NA	0.284	J	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
tert-Butyl methyl ether	NA	0.25	U	0.25	U	0.449	J	0.25	U	0.25	U	0.25	U	0.25	U
Toluene	2271.1	7.74		0.25	U	0.621	J	0.482	J	0.449	J	0.805	J	0.798	J
Xylenes (total)	212.6	2.47		0.25	U	0.25	U	0.479	BJ	0.479	BJ	0.523	BJ	0.459	BJ
RCRA SVOC (ug/l)															
RCRA Metals (ug/l)															
Aluminum	NA					4710		68	U	216		68	U	103	J
Antimony	14.6					4.46	J	4	U	4	U	4	U	4	U
Barium	7300					23.6		49.1		48.5		78.7		69	
Calcium	NA					447		3220		3040		15800		19000	
Chromium	109.5					**120**		1	U	3.51	J	2.1	J	2.42	J
Cobalt	NA					2.09	J	3.02	J	2.3	J	1	U	1	U
Copper	1.46					92		11.9		7.53	J	3.82	J	5.37	J
Iron	10950					**16100**		49.7	J	240		60.7	J	228	
Lead	NA					3.83	J	2.5	U	2.5	U	2.5	U	2.5	U
Magnesium	NA					415		3680		3600		4930		4690	
Manganese	730					105		18		17.9		17.8		10.5	
Nickel	730					52.4		12		5.94		5.36		3.19	J
Potassium	NA					886		1100		1140		2830		6550	
Sodium	NA					267		10300		10100		13000		13700	
Vanadium	36.50					12.1		1	U	1	U	1	U	1	U
Zinc	10950					1610		16.7		10.4		7.02	J	15.8	
RCRA Pesticide															
TCL PCB															
Herbicides															

NA = Not Available

Result is highlighted where concentration exceeds RBC limit.

Table 6. Reference Area Groundwater - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	MCL	Sample Number (All Results in pCi/L)							
		BLT-P01-MW-09f		BLT-P01-MW-09u		BLT-P01-MW-10f		BLT-P01-MW-10u	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual
Gamma Scan (901.1mod/HASL 300)									
H-3 (906.0 mod)	20,000	200	U	109	U	695		73.7	U

Table 7. Reference Area Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number													
	BLT-REF-SO-06i		BLT-REF-SO-06-j		BLT-REF-SO-O61-2		BLT-P01-MW-09f		BLT-P01-MW-09u		BLT-P01-MW-10f		BLT-P01-MW-10u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/l)														
1,1,1,2-Tetrachloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,1-Trichloroethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,1,2,2-Tetrachloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,2-Trichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1-Dichloroethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,1-Dichloroethylene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,1-Dichloropropene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2,3-Trichlorobenzene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2,3-Trichloropropane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2,4-Trichlorobenzene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2,4-Trimethylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dibromo-3-chloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichloroethylene (total)	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2-Dichloropropane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,3,5-Trimethylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,3-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,3-Dichloropropane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,4-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
2,2-Dichloropropane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
2-Butanone	1.25	U	1.25	U	1.29	J	1.25	U	1.25	U	1.25	U	1.25	U
2-Chloro-1,3-butadiene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
2-Chloroethylvinyl ether	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
2-Chlorotoluene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
2-Hexanone	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
2-Nitropropane	1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Chlorotoluene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
4-Isopropyltoluene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
4-Methyl-2-pentanone	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
Acetone	1.25	U	1.25	U	5.66		7.22		10.8		7.66		7.44	
Acetonitrile	6.25	U	6.25	U	6.25	U	6.25	U	6.25	U	6.25	U	6.25	U
Acrolein	3	U	3	U	3	U	3	U	3	U	3	U	3	U
Acrylonitrile	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Allyl chloride	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U
Benzene	0.451	J	0.3	U	0.363	J	0.3	U	0.3	U	0.3	U	0.3	U
Benzyl chloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U
bis(2-Chloroisopropyl)ether	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Bromobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromochloromethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Bromodichloromethane	0.25	U	0.25	U	1.46		0.25	U	0.25	U	0.25	U	0.25	U
Bromoform	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U

Table 7. Reference Area Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number													
	BLT-REF-SO-06i		BLT-REF-SO-06-j		BLT-REF-SO-O61-2		BLT-P01-MW-09f		BLT-P01-MW-09u		BLT-P01-MW-10f		BLT-P01-MW-10u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
Carbon tetrachloride	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Chlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.25	U	0.25	U	4.88		0.25	U	0.25	U	0.25	U	0.25	U
Chloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
cis-1,3-Dichloropropylene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
cis-1,4-Dichloro-2-butene	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Cyclohexane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Cyclohexanone	15	U	15	U	15	U	15	U	15	U	15	U	15	U
Dibromochloromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Dibromomethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethyl ether	0.455	J	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Ethyl methacrylate	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	0.459	J	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Hexachlorobutadiene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Iodomethane	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
Isobutyl alcohol	12.5	U	12.5	U	12.5	U	12.5	U	12.5	U	12.5	U	12.5	U
Isopropylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
m,p-Xylenes	2.19		0.25	U	0.25	U	0.479	BJ	0.479	BJ	0.523	BJ	0.459	BJ
Methacrylonitrile	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methyl acetate	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
Methyl methacrylate	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylcyclohexane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Methylene chloride	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Naphthalene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
n-Butyl alcohol	13	U	13	U	13	U	13	U	13	U	13	U	13	U
n-Butylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
n-Propylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
o-Xylene	0.284	J	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Pentachloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Propionitrile	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
sec-Butylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Styrene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
tert-Butyl methyl ether	0.25	U	0.25	U	0.449	J	0.25	U	0.25	U	0.25	U	0.25	U
tert-Butylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Tetrachloroethylene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Toluene	7.74		0.25	U	0.621	J	0.482	J	0.449	J	0.805	J	0.798	J
trans-1,2-Dichloroethylene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
trans-1,3-Dichloropropylene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
trans-1,4-Dichloro-2-butene	1	U	1	U	1	U	1	U	1	U	1	U	1	U

Table 7. Reference Area Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number													
	BLT-REF-SO-06i		BLT-REF-SO-06-j		BLT-REF-SO-O61-2		BLT-P01-MW-09f		BLT-P01-MW-09u		BLT-P01-MW-10f		BLT-P01-MW-10u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Trichloroethylene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Trichlorofluoromethane	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U
Trichlorotrifluoroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl acetate	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylenes (total)	2.47		0.25	U	0.25	U	0.479	BJ	0.479	BJ	0.523	BJ	0.459	BJ
RCRA SVOC (ug/l)														
1,1'-Biphenyl					2.88	U								
1,2,4-Trichlorobenzene					1.92	U								
1,2-Dichlorobenzene					1.92	U								
1,3-Dichlorobenzene					1.92	U								
1,4-Dichlorobenzene					1.92	U								
2,4,5-Trichlorophenol					0.962	U								
2,4,6-Trichlorophenol					1.92	U								
2,4-Dichlorophenol					1.92	U								
2,4-Dimethylphenol					1.92	U								
2,4-Dinitrophenol					9.62	U								
2,4-Dinitrotoluene					1.92	U								
2,6-Dinitrotoluene					1.92	U								
2-Chloronaphthalene					0.337	U								
2-Chlorophenol					1.92	U								
2-Methyl-4,6-dinitrophenol					2.88	U								
2-Methylnaphthalene					0.288	U								
2-Nitrophenol					1.92	U								
3,3'-Dichlorobenzidine					0.962	U								
4-Bromophenylphenylether					1.92	U								
4-Chloro-3-methylphenol					1.92	U								
4-Chloroaniline					1.92	U								
4-Chlorophenylphenylether					1.92	U								
4-Nitrophenol					1.92	U								
Acenaphthene					0.298	U								
Acenaphthylene					0.192	U								
alpha-Terpineol					2.88	U								
Anthracene					0.192	U								
Atrazine					1.92	U								
Benzaldehyde					2.88	U								
Benzo(a)anthracene					0.192	U								
Benzo(a)pyrene					0.192	U								
Benzo(b)fluoranthene					0.192	U								
Benzo(ghi)perylene					0.192	U								
Benzo(k)fluoranthene					0.192	U								
bis(2-Chloroethoxy)methane					2.88	U								
bis(2-Chloroethyl) ether					1.92	U								
bis(2-Chloroisopropyl)ether					1.92	U								

Table 7. Reference Area Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number													
	BLT-REF-SO-06i		BLT-REF-SO-06-j		BLT-REF-SO-O61-2		BLT-P01-MW-09f		BLT-P01-MW-09u		BLT-P01-MW-10f		BLT-P01-MW-10u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
bis(2-Ethylhexyl)phthalate					1.92	U								
Butylbenzylphthalate					1.92	U								
Carbazole					0.192	U								
Chrysene					0.192	U								
Dibenzo(a,h)anthracene					0.192	U								
Dibenzofuran					1.92	U								
Diethylphthalate					1.92	U								
Dimethylphthalate					1.92	U								
Di-n-butylphthalate					1.92	U								
Di-n-octylphthalate					2.88	U								
Diphenylamine					2.88	U								
Fluoranthene					0.192	U								
Fluorene					0.192	U								
Hexachlorobenzene					1.92	U								
Hexachlorobutadiene					1.92	U								
Hexachlorocyclopentadiene					1.92	U								
Hexachloroethane					1.92	U								
Indeno(1,2,3-cd)pyrene					0.192	U								
Isophorone					1.92	U								
m,p-Cresols					2.88	U								
m-Nitroaniline					1.92	U								
Naphthalene					0.288	U								
Nitrobenzene					2.88	U								
N-Nitrosodipropylamine					1.92	U								
o-Cresol					1.92	U								
o-Nitroaniline					1.92	U								
Pentachlorophenol					1.92	U								
Phenanthrene					0.192	U								
Phenol					0.962	U								
p-Nitroaniline					2.88	U								
Pyrene					0.288	U								
RCRA Metals (ug/l)														
Aluminum					4710		68	U	216		68	U	103	J
Antimony					4.46	J	4	U	4	U	4	U	4	U
Arsenic					6	U	6	U	6	U	6	U	6	U
Barium					23.6		49.1		48.5		78.7		69	
Beryllium					1	U	1	U	1	U	1	U	1	U
Cadmium					1	U	1	U	1	U	1	U	1	U
Calcium					447		3220		3040		15800		19000	
Chromium					120		1	U	3.51	J	2.1	J	2.42	J
Cobalt					2.09	J	3.02	J	2.3	J	1	U	1	U
Copper					92		11.9		7.53	J	3.82	J	5.37	J
Iron					16100		49.7	J	240		60.7	J	228	
Lead					3.83	J	2.5	U	2.5	U	2.5	U	2.5	U

Table 7. Reference Area Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number													
	BLT-REF-SO-06i		BLT-REF-SO-06-j		BLT-REF-SO-O61-2		BLT-P01-MW-09f		BLT-P01-MW-09u		BLT-P01-MW-10f		BLT-P01-MW-10u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Magnesium					415		3680		3600		4930		4690	
Manganese					105		18		17.9		17.8		10.5	
Mercury					0.06	U	0.06	U	0.06	U	0.06	U	0.06	U
Nickel					52.4		12		5.94		5.36		3.19	J
Potassium					886		1100		1140		2830		6550	
Selenium					6	U	6	U	6	U	6	U	6	U
Silver					1	U	1	U	1	U	1	U	1	U
Sodium					267		10300		10100		13000		13700	
Thallium					5	U	5	U	5	U	5	U	5	U
Vanadium					12.1		1	U	1	U	1	U	1	U
Zinc					1610		16.7		10.4		7.02	J	15.8	
RCRA Pesticide (ug/l)														
4,4'-DDD					0.00543	U								
4,4'-DDE					0.00543	U								
4,4'-DDT					0.0109	U								
Aldrin					0.00543	U								
alpha-BHC					0.00543	U								
beta-BHC					0.00918	U								
Chlordane (tech.)					0.0832	U								
delta-BHC					0.00543	U								
Dieldrin					0.00543	U								
Endosulfan I					0.005	U								
Endosulfan II					0.005	U								
Endosulfan sulfate					0.005	U								
Endrin					0.005	U								
Endrin aldehyde					0.005	U								
Endrin ketone					0.014	U								
gamma-BHC (Lindane)					0.005	U								
Heptachlor					0.007	U								
Heptachlor epoxide					0.005	U								
Methoxychlor					0.054	U								
Toxaphene					0.163	U								
TCL PCB (ug/l)														
Aroclor-1016					0.031	U								
Aroclor-1221					0.031	U								
Aroclor-1232					0.031	U								
Aroclor-1242					0.031	U								
Aroclor-1248					0.031	U								
Aroclor-1254					0.031	U								
Aroclor-1260					0.031	U								
Herbicides (ug/l)														
2,4,5-T					0.078	U								
2,4,5-TP					0.078	U								
2,4-D					0.078	U								

Table 7. Reference Area Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number													
	BLT-REF-SO-06i		BLT-REF-SO-06-j		BLT-REF-SO-O61-2		BLT-P01-MW-09f		BLT-P01-MW-09u		BLT-P01-MW-10f		BLT-P01-MW-10u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
TOC (mg/l)														
Total Organic Carbon #1					0.33	U	0.851	J	1		1.57		1.77	
Total Organic Carbon #2					0.33	U	0.859	J	0.925	J	1.61		1.81	
Total Organic Carbon #3					0.33	U	0.864	J	0.916	J	1.58		1.76	
Total Organic Carbon #4					0.33	U	0.851	J	0.921	J	1.59		1.82	
Total Organic Carbon Average					0.33	U	0.856	J	0.941	J	1.59		1.79	

Table 8. Reference Area Groundwater - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (Results in pCi/L)											
	BLT-REF-SO-O61-2				BLT-P01-MW-09f				BLT-P01-MW-09u			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (901.1mod/HASL 300)												
Actinium-228	1.47	+/-	6.46	U	8.69	+/-	7.43	U	7.6	+/-	9.93	U
Americium-241	4.97	+/-	10.5	U	1.6	+/-	18.3	U	0.226	+/-	4.31	U
Antimony-124	2.01	+/-	4.75	U	4.56	+/-	4.64	U	-3.82	+/-	6.59	U
Antimony-125	1.9	+/-	4.86	U	-4.94	+/-	5.75	U	0	+/-	11.3	UUI
Barium-133	-2.17	+/-	2.26	U	2.01	+/-	2.93	U	-3.53	+/-	3.41	U
Barium-140	9.67	+/-	14.6	U	-1.32	+/-	14.8	U	-0.73	+/-	18.6	U
Beryllium-7	17.8	+/-	28.3	U	3.48	+/-	21.5	U	-10.6	+/-	22.1	U
Bismuth-212	6.68	+/-	13.7	U	20.7	+/-	14.3	U	9.94	+/-	20	U
Bismuth-214	5.43	+/-	3.72	U	8.05	+/-	6.56	U	8.48	+/-	9.16	U
Cerium-139	-2.12	+/-	1.68	U	0.105	+/-	2.04	U	-0.03	+/-	2	U
Cerium-141	5.1	+/-	3.84	U	1.16	+/-	4.76	U	0.001	+/-	3.92	U
Cerium-144	-1.63	+/-	12.7	U	-9.81	+/-	14.5	U	1.04	+/-	12.5	U
Cesium-134	0.153	+/-	1.81	U	0.597	+/-	1.97	U	-0.401	+/-	3.26	U
Cesium-136	-0.654	+/-	4.44	U	1.1	+/-	5.6	U	-7.6	+/-	7.32	U
Cesium-137	0.0798	+/-	1.72	U	2.4	+/-	2.98	U	2.03	+/-	2.6	U
Chromium-51	-2.81	+/-	20	U	-2.37	+/-	22.7	U	5.85	+/-	24.1	U
Cobalt-56	-0.139	+/-	1.89	U	0.876	+/-	2.04	U	0.203	+/-	3.08	U
Cobalt-57	-0.363	+/-	1.58	U	-1.57	+/-	1.75	U	-0.784	+/-	1.58	U
Cobalt-58	0.229	+/-	1.98	U	0.618	+/-	2.07	U	0.365	+/-	2.82	U
Cobalt-60	1.15	+/-	1.89	U	2.01	+/-	1.96	U	1.96	+/-	2.7	U
Europium-152	3.34	+/-	5.43	U	0.864	+/-	6.19	U	-2.59	+/-	6.04	U
Europium-154	2.01	+/-	4.75	U	0.392	+/-	5.48	U	1.07	+/-	9.72	U
Europium-155	9.05	+/-	9.04	U	3.9	+/-	7.5	U	-3.6	+/-	6.12	U
Iridium-192	0.817	+/-	1.87	U	1.44	+/-	1.99	U	-0.848	+/-	2.14	U
Iron-59	1.76	+/-	3.9	U	-1.46	+/-	5.17	U	3.46	+/-	6.96	U
Lead-210	178	+/-	404	U	68.4	+/-	335	U	34.1	+/-	84.1	U
Lead-212	3.76	+/-	5.66	U	3.68	+/-	6.68	U	2.38	+/-	5.83	U
Lead-214	1.88	+/-	3.72	U	8.26	+/-	8.67	U	9.91	+/-	8.15	U
Manganese-54	0.485	+/-	1.77	U	-0.56	+/-	1.9	U	0.413	+/-	2.83	U
Mercury-203	0.351	+/-	2.3	U	-0.585	+/-	2.52	U	0.778	+/-	2.71	U
Neodymium-147	-1.68	+/-	30.3	U	-9.94	+/-	36.4	U	-4.02	+/-	38.7	U
Neptunium-239	1.33	+/-	12.3	U	14.5	+/-	13.4	U	2.09	+/-	11.6	U
Niobium-94	0.167	+/-	1.62	U	-0.394	+/-	1.69	U	-0.463	+/-	2.59	U
Niobium-95	-0.056	+/-	2.08	U	2.14	+/-	2.97	U	-0.427	+/-	3.53	U
Potassium-40	32.5	+/-	19	U	3.56	+/-	36.6	U	22.5	+/-	27.1	U
Promethium-144	1.1	+/-	1.64	U	0.137	+/-	1.9	U	-2	+/-	2.44	U
Promethium-146	-0.321	+/-	2.18	U	1.01	+/-	2.47	U	-0.852	+/-	3.07	U
Radium-228	1.47	+/-	6.46	U	8.69	+/-	7.43	U	7.6	+/-	9.93	U
Ruthenium-106	24.1	+/-	15	U	18.4	+/-	18	U	0.695	+/-	21.5	U
Silver-110m	-0.295	+/-	1.55	U	0.795	+/-	1.77	U	-2.01	+/-	2.71	U
Sodium-22	0.73	+/-	1.7	U	0.117	+/-	1.96	U	0.358	+/-	3.48	U
Thallium-208	0	+/-	3.59	UI	0.687	+/-	4.37	U	3.51	+/-	4.2	U
Thorium-230	5.43	+/-	3.72	U	0	+/-	6.56	UUI	8.48	+/-	9.16	U
Thorium-234	68	+/-	146	U	68.2	+/-	173	U	30.4	+/-	75.7	U
Tin-113	0.582	+/-	2.23	U	0.443	+/-	2.53	U	1.9	+/-	2.89	U
Uranium-235	7.28	+/-	12.8	U	1.93	+/-	16.6	U	1.72	+/-	13.5	U
Uranium-238	68	+/-	146	U	68.2	+/-	173	U	30.4	+/-	75.7	U
Yttrium-88	2.36	+/-	1.78	U	0.589	+/-	1.78	U	-1.42	+/-	3.55	U
Zinc-65	2.35	+/-	3.47	U	-1.07	+/-	3.72	U	-0.59	+/-	5.98	U

Table 8. Reference Area Groundwater - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Sample Number (Results in pCi/L)												
Parameter	BLT-REF-SO-O61-2				BLT-P01-MW-09f				BLT-P01-MW-09u			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Zirconium-95	1.52	+/-	2.75	U	-0.751	+/-	3.72	U	1.27	+/-	5.36	U
C-14 (EERF C-01 mod)	-2.48	+/-	20.6	U	-7.67	+/-	18.4	U	-9.69	+/-	18.2	U
Cl-36 (GL-Rad-A033)	0.856	+/-	6.51	U	-1.31	+/-	5.17	U	8.42	+/-	8.21	U
Ni-63 (RESL Ni-1 mod)	5.38	+/-	19.1	U	8.95	+/-	21.4	U	1.69	+/-	21	U
Sr-90 (905.0 mod)	0.0867	+/-	0.182	U	0.713	+/-	0.548	U	0.882	+/-	0.584	U
H-3 (906.0 mod)	30.4	+/-	164	U	200	+/-	263	U	109	+/-	248	U

Table 8. Reference Area Groundwater - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (Results in pCi/L)							
	BLT-P01-MW-10f				BLT-P01-MW-10u			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (901.1m								
Actinium-228	4.53	+/-	6.88	U	8.49	+/-	8.3	U
Americium-241	2.14	+/-	10.7	U	0.44	+/-	3.45	U
Antimony-124	1.18	+/-	5.3	U	-2.25	+/-	5	U
Antimony-125	-0.51	+/-	4.66	U	4.59	+/-	5.89	U
Barium-133	-1.03	+/-	2.58	U	0.06	+/-	2.65	U
Barium-140	-4.67	+/-	12.6	U	5.56	+/-	14.2	U
Beryllium-7	6.17	+/-	17.1	U	4.50	+/-	16.4	U
Bismuth-212	6.98	+/-	14.7	U	29.10	+/-	16.9	U
Bismuth-214	3.69	+/-	6.79	U	4.47	+/-	7.87	U
Cerium-139	-0.89	+/-	1.81	U	1.04	+/-	1.54	U
Cerium-141	2.18	+/-	3.72	U	0.59	+/-	4.16	U
Cerium-144	-2.64	+/-	12.6	U	-4.56	+/-	10	U
Cesium-134	-0.85	+/-	2.03	U	0.62	+/-	2.31	U
Cesium-136	1.76	+/-	5.41	U	0.41	+/-	5.87	U
Cesium-137	-0.23	+/-	1.56	U	0.00	+/-	5.03	UUI
Chromium-51	-12.10	+/-	24.4	U	3.33	+/-	21.5	U
Cobalt-56	0.84	+/-	2.11	U	-1.10	+/-	2.36	U
Cobalt-57	-0.75	+/-	1.61	U	1.22	+/-	1.4	U
Cobalt-58	-0.56	+/-	2	U	-0.29	+/-	2.15	U
Cobalt-60	0.66	+/-	1.81	U	-0.03	+/-	2.43	U
Europium-152	-3.95	+/-	5.19	U	-2.29	+/-	5.47	U
Europium-154	1.27	+/-	5.35	U	-0.83	+/-	6.93	U
Europium-155	4.92	+/-	7.23	U	1.63	+/-	5.55	U
Iridium-192	0.00	+/-	3.51	UUI	-1.95	+/-	1.97	U
Iron-59	-0.07	+/-	3.71	U	0.69	+/-	4.8	U
Lead-210	402	+/-	337	U	45.60	+/-	64.2	U
Lead-212	1.2	+/-	4.28	U	0.11	+/-	4.87	U
Lead-214	0	+/-	6.37	UUI	6.92	+/-	6.73	U
Manganese-54	1.42	+/-	1.93	U	1.25	+/-	2.4	U
Mercury-203	-0.67	+/-	2.24	U	1.93	+/-	2.86	U
Neodymium-147	15.20	+/-	29.6	U	3.00	+/-	32.3	U
Neptunium-239	1.22	+/-	12.2	U	-1.19	+/-	10.6	U
Niobium-94	-0.95	+/-	1.76	U	-0.76	+/-	1.94	U
Niobium-95	0.78	+/-	2.44	U	1.77	+/-	2.64	U
Potassium-40	29.50	+/-	24.7	U	0.08	+/-	41.2	U
Promethium-144	0.11	+/-	1.92	U	0.26	+/-	2.08	U
Promethium-146	2.12	+/-	2.25	U	2.24	+/-	2.51	U
Radium-228	4.53	+/-	6.88	U	8.49	+/-	8.3	U
Ruthenium-106	3.21	+/-	16.4	U	13.70	+/-	18	U
Silver-110m	-0.07	+/-	1.59	U	0.54	+/-	2.09	U
Sodium-22	0.46	+/-	1.92	U	-0.29	+/-	2.48	U
Thallium-208	1.18	+/-	1.88	U	3.51	+/-	2.23	U
Thorium-230	3.69	+/-	6.79	U	4.47	+/-	7.87	U
Thorium-234	111.00	+/-	94.5	U	12.70	+/-	54.3	U
Tin-113	0.30	+/-	2.23	U	0.90	+/-	2.49	U
Uranium-235	-1.65	+/-	13	U	2.22	+/-	15.2	U
Uranium-238	111.00	+/-	94.5	U	12.70	+/-	54.3	U
Yttrium-88	0.17	+/-	2.03	U	0.03	+/-	2.34	U
Zinc-65	1.31	+/-	3.27	U	1.08	+/-	4.34	U

Table 8. Reference Area Groundwater - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (Results in pCi/L)							
	BLT-P01-MW-10f				BLT-P01-MW-10u			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Zirconium-95	-2.92	+/-	3.58	U	2.19	+/-	4.1	U
C-14 (EERF C-01 mod)	-20	+/-	18	U	3.41	+/-	18.6	U
Cl-36 (GL-Rad-A033)	10.3	+/-	7.76	U	2.93	+/-	6.18	U
Ni-63 (RESL Ni-1 mod)	9.17	+/-	20.2	U	-0.308	+/-	21	U
Sr-90 (905.0 mod)	0.186	+/-	0.383	U	-0.0833	+/-	0.364	U
H-3 (906.0 mod)	695	+/-	399		73.7	+/-	248	U

Table 9. Pit 1 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	Sample Number									
		BLT-P01-SO-01a		BLT-P01-SO-01b		BLT-P01-SO-02a		BLT-P01-SO-02b		BLT-P01-SO-03a	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)											
Acetone	919800000	4.57	J	5.6	J	6.15	J	4.53	J	4.08	J
Chloroform	10220000	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U
m,p-Xylenes	NA	0.268	J	0.322	U	0.463	J	0.277	J	0.264	J
Styrene	204400000	0.644	J	0.312	J	0.761	J	0.545	J	0.457	J
tert-Butyl methyl ether	NA	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U
Toluene	81760000	0.283	U	0.373	U	0.392	U	0.314	U	0.271	U
Xylenes (total)	204400000	0.268	J	0.257	U	0.463	J	0.277	J	0.264	J
RCRA SVOC (ug/kg)											
bis(2-Ethylhexyl)phthalate	204400	175	BJ	194	B	175	BJ	175	BJ	175	BJ
RCRA Metals (mg/kg)											
Aluminum	NA	15400		17900		13600		15400		12400	
Antimony	408.8	0.421	U	0.528	J	0.432	U	0.425	U	0.413	U
Arsenic	1.91	**3.9**		**3.95**		**2.8**		**3.21**		**2.7**	
Barium	204400	26.6		34.9		23.8		27.7		24.1	
Beryllium	2044	0.269	J	0.303	J	0.212	J	0.254	J	0.268	J
Cadmium	511	0.186	J	0.416	J	0.154	J	0.162	J	0.173	J
Calcium	NA	64		85.5		50.6		63.2		106	
Chromium	3066	24.9		18.2		13.5		15.6		12.6	
Cobalt	NA	2.12		3.7		1.73		2.31		2.1	
Copper	40880	9.19		9.58		6.66		7.41		7.06	
Iron	306600	13000		13000		9040		10700		8890	
Lead	NA	6.24		7.55		4.88		6.07		5.74	
Magnesium	NA	589		749		519		644		473	
Manganese	20440	42.4		70.6		32.7		42.8		51.3	
Mercury	NA	53		66.7		46.2		43.2		353	
Nickel	20440	6.44		7.91		5.53		6.57		5.41	
Potassium	NA	460		546		413		460		378	
Selenium	5110	0.632	U	0.623	U	0.648	U	0.637	U	0.62	U
Sodium	NA	17.6		24.6		18.3		14.7	J	12.4	J
Vanadium	1022	35.8		29.7		22.2		25.6		21.7	
Zinc	306600	50.8		80.7		45.9		56		88.2	
RCRA Pesticide (ug/kg)											

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted. Sub-floor samples are shaded.

Table 9. Pit 1 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	Sample Number									
		BLT-P01-SO-01a		BLT-P01-SO-01b		BLT-P01-SO-02a		BLT-P01-SO-02b		BLT-P01-SO-03a	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
4,4'-DDE	NA	0.999	J	0.601	J	0.414	J	0.628	J	0.655	J
4,4'-DDT	NA	1.35	J	0.736	J	0.633	J	0.695	J	1	J
TCLP PCB (ug/kg)											
Aroclor-1254	1430.8	1.19	U	1.2	U	1.2	U	1.2	U	1.2	U
Aroclor-1260	1430.8	1.19	U	1.2	U	1.2	U	1.2	U	1.2	U
Herbicides (ug/kg)											
TOC (mg/kg)											
Total Organic Carbon #1		1110		1100		980		1280		718	
Total Organic Carbon #2		1130		1120		953		1420		713	
Total Organic Carbon #3		1160		1130		850		1260		626	
Total Organic Carbon #4		1030		1020		832		1190		714	
Total Organic Carbon Average		1100		1090		903		1290		693	
Cyanide (ug/kg)											
Cyanide, Amenable to CL		80.4	Uh	81.1	Uh	81	Uh	81.1	Uh	81.2	Uh
Cyanide, Total		78.8	U	78.7	U	79.4	U	74.4	U	78.9	U
Moisture Density ASTM D 2216 (% wt)		6.73		7.47		7.45		7.51		7.65	
pH/Corrosivity		5.29	H	5.23	H	5.16	H	5.13	H	5.11	H

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted. Sub-floor samples are shaded.

Table 9. Pit 1 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

											Sample Number
Parameter	**RBC**	**BLT-P01-SO-03b**		**BLT-P01-SO-04a**		**BLT-P01-SO-04b**		**BLT-P01-SO-05c**		**BLT-P01-SO-05d**	
		Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA VOC (ug/kg)											
Acetone	919800000	3.1	J	5.7	J	6.77		5.93		6.57	
Chloroform	10220000	0.196	U	0.256	U	0.212	U	0.199	U	0.332	U
m,p-Xylenes	NA	0.245	U	0.328	J	0.265	U	0.249	U	0.248	U
Styrene	204400000	0.386	J	0.572	J	0.444	J	0.288	J	0.337	J
tert-Butyl methyl ether	NA	0.196	U	0.256	U	0.212	U	0.463	J	0.433	U
Toluene	81760000	0.284	U	0.371	U	0.307	U	0.536	J	0.288	U
Xylenes (total)	204400000	0.196	U	0.328	J	0.212	U	0.199	U	0.198	U
RCRA SVOC (ug/kg)											
bis(2-Ethylhexyl)phthalate	204400	174	BJ	172	BJ	176	BJ	74.1	U	69.8	U
RCRA Metals (mg/kg)											
Aluminum	NA	7560		11500		13100				11800	
Antimony	408.8	0.424	U	0.426	U	0.416	U			0.431	U
Arsenic	1.91	**2.06**		**2.57**		**2.97**				**5.78**	
Barium	204400	13.7		23.2		25				21.2	
Beryllium	2044	0.135	J	0.213	J	0.222	J			0.183	U
Cadmium	511	0.106	U	0.179	J	0.187	J			0.198	U
Calcium	NA	225		97.1		92.6				54.5	
Chromium	3066	8.37		12.5		16.4				25.5	
Cobalt	NA	0.995		2.04		1.93				1.28	
Copper	40880	9.62		6.63		7.72				13.3	
Iron	306600	5530		8640		9340				15500	
Lead	NA	3.47		5.52		6.5				4.7	
Magnesium	NA	314		492		506				379	
Manganese	20440	22.7		55.4		54.2				17.8	
Mercury	NA	263		169		118				29.8	
Nickel	20440	3.51		5.24		5.58				5.19	
Potassium	NA	248		376		396				582	
Selenium	5110	0.637	U	0.639	U	0.623	U			1.06	U
Sodium	NA	4.77	U	5.26	J	4.68	U			24.1	
Vanadium	1022	13.7		20.9		24.1				34.8	
Zinc	306600	85.7		69.8		69.5				11.1	
RCRA Pesticide (ug/kg)											

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted. Sub-floor samples are shaded.

Table 9. Pit 1 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

				Sample Number							
Parameter	**RBC**	**BLT-P01-SO-03b**		**BLT-P01-SO-04a**		**BLT-P01-SO-04b**		**BLT-P01-SO-05c**		**BLT-P01-SO-05d**	
		Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
4,4'-DDE	NA	0.359	U	0.964	J	0.787	J	0.359	U	0.37	U
4,4'-DDT	NA	0.42	J	1.38	J	1.19	J	0.359	U	0.37	U
TCLP PCB (ug/kg)											
Aroclor-1254	1430.8	1.2	U	1.19	U	3.7		10.2	U	1.37	U
Aroclor-1260	1430.8	1.2	U	1.19	U	1.7	J	10.2	U	1.37	U
Herbicides (ug/kg)											
TOC (mg/kg)											
Total Organic Carbon #1		642		1010		1130				720	
Total Organic Carbon #2		615		969		1000				773	
Total Organic Carbon #3		619		1040		1110				751	
Total Organic Carbon #4		475		1010		963				774	
Total Organic Carbon Average		588		1010		1050				755	
Cyanide (ug/kg)											
Cyanide, Amenable to CL		80.8	Uh	80.5	Uh	79.5	Uh				
Cyanide, Total		80.8	U	73.9	U	76.4	U				
Moisture Density ASTM D 2216 (% wt)		7.23		6.86		5.64		7.03		10	
pH/Corrosivity		5.23	H	5.16	H	5.15	H			5.63	H

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted. Sub-floor samples are shaded.

Table 9. Pit 1 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	BLT-P01-SO-05e		BLT-P01-SO-05f		BLT-P01-SO-06g	
		Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)							
Acetone	919800000	9.98		9.5		4.44	J
Chloroform	10220000	0.252	U	0.244	U	0.205	U
m,p-Xylenes	NA	0.284	U	0.305	U	0.256	U
Styrene	204400000	0.357	J	0.417	J	0.406	J
tert-Butyl methyl ether	NA	0.227	U	0.244	U	0.205	U
Toluene	81760000	0.33	U	0.353	U	0.297	U
Xylenes (total)	204400000	0.227	U	0.244	U	0.205	U
RCRA SVOC (ug/kg)							
bis(2-Ethylhexyl)phthalate	204400	70.3	U	175	BJ	75.8	U
RCRA Metals (mg/kg)							
Aluminum	NA	1350		3040		13000	
Antimony	408.8	0.416	U	0.411	U	0.435	U
Arsenic	1.91	**3.88**		1.03	U	**3.14**	
Barium	204400	3.35		5.55		25.4	
Beryllium	2044	0.104	U	0.103	U	0.239	J
Cadmium	511	0.104	U	0.103	U	0.2	J
Calcium	NA	14		14.4		93.4	
Chromium	3066	9.98		4.74		13.8	
Cobalt	NA	0.208	U	0.229	U	2.12	
Copper	40880	7.86		5.18		8.11	
Iron	306600	5060		2760		9490	
Lead	NA	0.359	J	1.22		6.15	
Magnesium	NA	34.8		89.6		538	
Manganese	20440	1.75		4.13		51.4	
Mercury	NA	21.8		38.9		111	
Nickel	20440	0.407	J	1.15		5.92	
Potassium	NA	102		145		414	
Selenium	5110	0.86	J	0.617	U	0.652	U
Sodium	NA	8.23	J	10.2	J	6.64	J
Vanadium	1022	8.02		8.15		23.5	
Zinc	306600	2.12		2.26		80.2	
RCRA Pesticide (ug/kg)							

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted. Sub-floor samples are shaded.

Table 9. Pit 1 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	BLT-P01-SO-05e		BLT-P01-SO-05f		BLT-P01-SO-06g	
		Result	Qual	Result	Qual	Result	Qual
4,4'-DDE	NA	0.349	U	0.352	U	0.492	J
4,4'-DDT	NA	0.349	U	0.352	U	0.877	J
TCLP PCB (ug/kg)							
Aroclor-1254	1430.8	1.16	U	1.17	U	1.21	U
Aroclor-1260	1430.8	1.16	U	1.17	U	1.21	U
Herbicides (ug/kg)							
TOC (mg/kg)							
Total Organic Carbon #1		172		121		919	
Total Organic Carbon #2		168		130		890	
Total Organic Carbon #3		179		96.4	J	938	
Total Organic Carbon #4		186		97.3	J	902	
Total Organic Carbon Average		176		111		912	
Cyanide (ug/kg)							
Cyanide, Amenable to CL						81.5	Uh
Cyanide, Total						74.8	U
Moisture Density ASTM D 2216 (% wt)		4.43		5.23		7.33	
pH/Corrosivity		5.78	H	5.73	H	5.13	H

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted. Sub-floor samples are shaded.

Table 10. Pit 1 Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number (All results in pCi/g)													
Parameter	**NRC Screening Values[1]**	**DCGL**	**BLT-P01-SO-01a**		**BLT-P01-SO-01b**		**BLT-P01-SO-02a**		**BLT-P01-SO-02b**		**BLT-P01-SO-03a**		**BLT-P01-SO-03b**		**BLT-P01-SO-04a**	
			Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Gamma Scan (901.1mod/HASL 300)																
Actinium-228	NA		0.76		0.48		1.13		0.71		1.02		0.95		0.50	
Bismuth-212	NA		0.55		0.51		0.39		0.54		0.58		0.73		0.82	
Bismuth-214	NA		1.03		1.06		1.11		1.43		0.73		0.85		0.89	
Lead-210	0.9	1.62	0.57	U	**1.32**		4.14	U	1.88	U	2.78	U	1.37	U	**1.24**	
Lead-212	NA		0.67		0.69		0.86		0.71		0.82		0.81		0.62	
Lead-214	NA		1.06		1.10		1.34		1.68		0.91		0.91		1.00	
Potassium-40	NA		3.51		3.28		3.96		3.74		3.51		4.17		2.82	
Radium-228	NA	1.34	0.76		0.48		1.13		0.71		1.02		0.95		0.50	
Thallium-208	NA		0.18		0.15		0.26		0.21		0.25		0.26		0.28	
Thorium-230	1.8		1.03		1.06		1.11		1.43		0.73		0.85		0.89	
Thorium-234	14		2.91		2.57		4.80		6.40		2.79		2.06		2.56	
Uranium-235	8		0.08	U	0.11	U	0.38		0.37		0.12	U	0.30		0.05	U
Uranium-238	14		2.91		2.57		4.80		6.40		2.79		2.06		2.56	
1 From NUREG 1757, Appendix B, Table B-2																
NA = Not available for this radionuclide																
Concentration that exceeds NRC screening value was highlighted. Sub-floor samples are shaded.																

Table 10. Pit 1 Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number (All results in pCi/g)											
Parameter	NRC Screening Values[1]	DCGL	BLT-P01-SO-04b		BLT-P01-SO-05c		BLT-P01-SO-05d		BLT-P01-SO-05e		BLT-P01-SO-05f		BLT-P01-SO-06g	
			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Gamma Scan (901.1mod/HASL 300)														
Actinium-228	NA		0.71		0.62		0.87		0.54		0.33		0.86	
Bismuth-212	NA		0.59		0.46		0.55		0.66		0.19	U	0.00	UUI
Bismuth-214	NA		1.43		0.43		0.59		0.46		0.30		1.05	
Lead-210	0.9	1.62	1.49	U	0.74	U	0.66	U	1.29	U	0.55	U	1.41	U
Lead-212	NA		0.80		0.73		0.84		0.64		0.32		0.89	
Lead-214	NA		1.43		0.51		0.82		0.58		0.28		1.12	
Potassium-40	NA		2.69		1.77		5.70		3.69		0.94		4.35	
Radium-228	NA	1.34	0.71		0.62		0.87		0.54		0.33		0.86	
Thallium-208	NA		0.24		0.20		0.22		0.17		0.11		0.28	
Thorium-230	1.8		1.43		0.43		0.59		0.46		0.30		1.05	
Thorium-234	14		3.43		0.43	U	0.96	U	0.31	U	0.06	UUI	1.89	
Uranium-235	8		0.23	U	0.09	U	0.11	U	0.12	U	0.13	U	0.08	U
Uranium-238	14		3.43		0.43	U	0.96	U	0.31	U	0.06	UUI	1.89	
1 From NUREG 1757, Appendix B, Table B-2														
NA = Not available for this radionuclide														
Concentration that exceeds NRC screening value was highlighted. Sub-floor samples are shaded.														

Table 11. Pit 1 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																			
Parameter	**BLT-P01-SO-01a**		**BLT-P01-SO-01b**		**BLT-P01-SO-02a**		**BLT-P01-SO-02b**		**BLT-P01-SO-03a**		**BLT-P01-SO-03b**		**BLT-P01-SO-04a**		**BLT-P01-SO-04b**		**BLT-P01-SO-05c**		**BLT-P01-SO-05d**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA VOC (ug/kg)																				
1,1,1,2-Tetrachloroethane	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
1,1,1-Trichloroethane	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
1,1,2,2-Tetrachloroethane	0.244	U	0.322	U	0.338	U	0.27	U	0.233	U	0.245	U	0.32	U	0.265	U	0.249	U	0.248	U
1,1,2-Trichloroethane	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
1,1-Dichloroethane	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
1,1-Dichloroethylene	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
1,1-Dichloropropene	0.244	U	0.322	U	0.338	U	0.27	U	0.233	U	0.245	U	0.32	U	0.265	U	0.249	U	0.248	U
1,2,3-Trichlorobenzene	0.244	U	0.322	U	0.338	U	0.27	U	0.233	U	0.245	U	0.32	U	0.265	U	0.249	U	0.248	U
1,2,3-Trichloropropane	0.487	U	0.643	U	0.675	U	0.541	U	0.467	U	0.49	U	0.639	U	0.53	U	0.498	U	0.496	U
1,2,4-Trichlorobenzene	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
1,2,4-Trimethylbenzene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
1,2-Dibromo-3-chloropropane	0.487	U	0.643	U	0.675	U	0.541	U	0.467	U	0.49	U	0.639	U	0.53	U	0.498	U	0.496	U
1,2-Dibromoethane	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
1,2-Dichlorobenzene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
1,2-Dichloroethane	0.244	U	0.322	U	0.338	U	0.27	U	0.233	U	0.245	U	0.32	U	0.265	U	0.249	U	0.248	U
1,2-Dichloroethylene (total)	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
1,2-Dichloropropane	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
1,3,5-Trimethylbenzene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
1,3-Dichlorobenzene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
1,3-Dichloropropane	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
1,4-Dichlorobenzene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
2,2-Dichloropropane	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
2-Butanone	1.66	U	2.19	U	2.3	U	1.84	U	1.59	U	1.67	U	2.17	U	1.8	U	1.69	U	1.69	U
2-Chloro-1,3-butadiene	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
2-Chloroethylvinyl ether	1.22	U	1.61	U	1.69	U	1.35	U	1.17	U	1.22	U	1.6	U	1.32	U	1.25	U	1.24	U
2-Chlorotoluene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
2-Hexanone	1.48	U	1.96	U	2.05	U	1.64	U	1.42	U	1.49	U	1.94	U	1.61	U	1.51	U	1.51	U
2-Nitropropane	0.877	U	1.16	U	1.22	U	0.973	U	0.84	U	0.882	U	1.15	U	0.954	U	0.897	U	0.893	U
4-Chlorotoluene	0.234	U	0.309	U	0.324	U	0.259	U	0.224	U	0.235	U	0.307	U	0.254	U	0.239	U	0.238	U
4-Isopropyltoluene	0.244	U	0.322	U	0.338	U	0.27	U	0.233	U	0.245	U	0.32	U	0.265	U	0.249	U	0.248	U
4-Methyl-2-pentanone	1.06	U	1.4	U	1.47	U	1.18	U	1.02	U	1.07	U	1.39	U	1.16	U	1.09	U	1.08	U
Acetone	4.57	J	5.6	J	6.15	J	4.53	J	4.08	J	3.1	J	5.7	J	6.77		5.93		6.57	
Acetonitrile	8.88	U	11.7	U	12.3	U	9.85	U	8.5	U	8.93	U	11.6	U	9.65	U	9.08	U	9.04	U
Acrolein	2.92	U	3.86	U	4.05	U	3.24	U	2.8	U	2.94	U	3.83	U	3.18	U	2.99	U	2.98	U
Acrylonitrile	0.975	U	1.29	U	1.35	U	1.08	U	0.934	U	0.98	U	1.28	U	1.06	U	0.997	U	0.992	U
Allyl chloride	1.95	U	2.57	U	2.7	U	2.16	U	1.87	U	1.96	U	2.56	U	2.12	U	1.99	U	1.98	U
Benzene	0.322	U	0.425	U	0.446	U	0.357	U	0.308	U	0.323	U	0.422	U	0.35	U	0.329	U	0.327	U
Benzyl chloride	0.585	U	0.772	U	0.81	U	0.649	U	0.56	U	0.588	U	0.767	U	0.636	U	0.598	U	0.595	U
bis(2-Chloroisopropyl)ether	1.46	U	1.93	U	2.03	U	1.62	U	1.4	U	1.47	U	1.92	U	1.59	U	1.49	U	1.49	U
Bromobenzene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
Bromochloromethane	0.487	U	0.643	U	0.675	U	0.541	U	0.467	U	0.49	U	0.639	U	0.53	U	0.498	U	0.496	U
Bromodichloromethane	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
Bromoform	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
Bromomethane	0.487	U	0.643	U	0.675	U	0.541	U	0.467	U	0.49	U	0.639	U	0.53	U	0.498	U	0.496	U
Carbon disulfide	1.22	U	1.61	U	1.69	U	1.35	U	1.17	U	1.22	U	1.6	U	1.32	U	1.25	U	1.24	U
Carbon tetrachloride	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
Chlorobenzene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
Chloroethane	0.487	U	0.643	U	0.675	U	0.541	U	0.467	U	0.49	U	0.639	U	0.53	U	0.498	U	0.496	U

Note: Sub-floor samples are shaded.

Table 11. Pit 1 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																			
Parameter	**BLT-P01-SO-01a**		**BLT-P01-SO-01b**		**BLT-P01-SO-02a**		**BLT-P01-SO-02b**		**BLT-P01-SO-03a**		**BLT-P01-SO-03b**		**BLT-P01-SO-04a**		**BLT-P01-SO-04b**		**BLT-P01-SO-05c**		**BLT-P01-SO-05d**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Chloroform	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.332	U
Chloromethane	0.487	U	0.643	U	0.675	U	0.541	U	0.467	U	0.49	U	0.639	U	0.53	U	0.498	U	0.496	U
cis-1,2-Dichloroethylene	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
cis-1,3-Dichloropropylene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
cis-1,4-Dichloro-2-butene	0.487	U	0.643	U	0.675	U	0.541	U	0.467	U	0.49	U	0.639	U	0.53	U	0.498	U	0.496	U
Cyclohexane	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
Cyclohexanone	14.6	U	19.3	U	20.3	U	16.2	U	14	U	14.7	U	19.2	U	15.9	U	14.9	U	14.9	U
Dibromochloromethane	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
Dibromomethane	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
Dichlorodifluoromethane	0.487	U	0.643	U	0.675	U	0.541	U	0.467	U	0.49	U	0.639	U	0.53	U	0.498	U	0.496	U
Ethyl ether	0.244	U	0.322	U	0.338	U	0.27	U	0.233	U	0.245	U	0.32	U	0.265	U	0.249	U	0.248	U
Ethyl methacrylate	0.487	U	0.643	U	0.675	U	0.541	U	0.467	U	0.49	U	0.639	U	0.53	U	0.498	U	0.496	U
Ethylbenzene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
Hexachlorobutadiene	0.487	U	0.643	U	0.675	U	0.541	U	0.467	U	0.49	U	0.639	U	0.53	U	0.498	U	0.496	U
Iodomethane	1.63	U	2.15	U	2.26	U	1.81	U	1.56	U	1.64	U	2.13	U	1.77	U	1.66	U	1.66	U
Isobutyl alcohol	9.75	U	12.9	U	13.5	U	10.8	U	9.34	U	9.8	U	12.8	U	10.6	U	9.97	U	9.92	U
Isopropylbenzene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
m,p-Xylenes	0.268	J	0.322	U	0.463	J	0.277	J	0.264	J	0.245	U	0.328	J	0.265	U	0.249	U	0.248	U
Methacrylonitrile	0.682	U	0.901	U	0.945	U	0.757	U	0.653	U	0.686	U	0.895	U	0.742	U	0.698	U	0.694	U
Methyl acetate	1.63	U	2.15	U	2.26	U	1.81	U	1.56	U	1.64	U	2.13	U	1.77	U	1.66	U	1.66	U
Methyl methacrylate	0.975	U	1.29	U	1.35	U	1.08	U	0.934	U	0.98	U	1.28	U	1.06	U	0.997	U	0.992	U
Methylcyclohexane	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
Methylene chloride	1.95	U	2.57	U	2.7	U	2.16	U	1.87	U	1.96	U	2.56	U	2.12	U	1.99	U	1.98	U
Naphthalene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
n-Butyl alcohol	26.3	U	34.7	U	36.5	U	29.2	U	25.2	U	26.5	U	34.5	U	28.6	U	26.9	U	26.8	U
n-Butylbenzene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
n-Propylbenzene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
o-Xylene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
Pentachloroethane	1.46	U	1.93	U	2.03	U	1.62	U	1.4	U	1.47	U	1.92	U	1.59	U	1.49	U	1.49	U
Propionitrile	0.975	U	1.29	U	1.35	U	1.08	U	0.934	U	0.98	U	1.28	U	1.06	U	0.997	U	0.992	U
sec-Butylbenzene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
Styrene	0.644	J	0.312	J	0.761	J	0.545	J	0.457	J	0.386	J	0.572	J	0.444	J	0.288	J	0.337	J
tert-Butyl methyl ether	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.463	J	0.433	U
tert-Butylbenzene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
Tetrachloroethylene	0.195	U	0.257	U	0.27	U	0.216	U	0.187	U	0.196	U	0.256	U	0.212	U	0.199	U	0.198	U
Toluene	0.283	U	0.373	U	0.392	U	0.314	U	0.271	U	0.284	U	0.371	U	0.307	U	0.536	J	0.288	U
trans-1,2-Dichloroethylene	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
trans-1,3-Dichloropropylene	0.292	U	0.386	U	0.405	U	0.324	U	0.28	U	0.294	U	0.383	U	0.318	U	0.299	U	0.298	U
trans-1,4-Dichloro-2-butene	0.487	U	0.643	U	0.675	U	0.541	U	0.467	U	0.49	U	0.639	U	0.53	U	0.498	U	0.496	U
Trichloroethylene	0.244	U	0.322	U	0.338	U	0.27	U	0.233	U	0.245	U	0.32	U	0.265	U	0.249	U	0.248	U
Trichlorofluoromethane	0.487	U	0.643	U	0.675	U	0.541	U	0.467	U	0.49	U	0.639	U	0.53	U	0.498	U	0.496	U
Trichlorotrifluoroethane	0.975	U	1.29	U	1.35	U	1.08	U	0.934	U	0.98	U	1.28	U	1.06	U	0.997	U	0.992	U
Vinyl acetate	1.22	U	1.61	U	1.69	U	1.35	U	1.17	U	1.22	U	1.6	U	1.32	U	1.25	U	1.24	U
Vinyl chloride	0.487	U	0.643	U	0.675	U	0.541	U	0.467	U	0.49	U	0.639	U	0.53	U	0.498	U	0.496	U
Xylenes (total)	0.268	J	0.257	U	0.463	J	0.277	J	0.264	J	0.196	U	0.328	J	0.212	U	0.199	U	0.198	U
RCRA SVOC (ug/kg)																				
1,1'-Biphenyl	107	U	108	U	108	U	108	U	108	U	108	U	107	U	106	U	111	U	105	U
1,2,4-Trichlorobenzene	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
1,2-Dichlorobenzene	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U

Note: Sub-floor samples are shaded.

Table 11. Pit 1 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																			
Parameter	**BLT-P01-SO-01a**		**BLT-P01-SO-01b**		**BLT-P01-SO-02a**		**BLT-P01-SO-02b**		**BLT-P01-SO-03a**		**BLT-P01-SO-03b**		**BLT-P01-SO-04a**		**BLT-P01-SO-04b**		**BLT-P01-SO-05c**		**BLT-P01-SO-05d**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
1,3-Dichlorobenzene	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
1,4-Dichlorobenzene	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
2,4,5-Trichlorophenol	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
2,4,6-Trichlorophenol	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
2,4-Dichlorophenol	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
2,4-Dimethylphenol	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
2,4-Dinitrophenol	136	U	137	U	137	U	137	U	137	U	137	U	136	U	134	U	141	U	133	U
2,4-Dinitrotoluene	35.7	U	36	U	36	U	36	U	36.1	U	35.9	U	35.8	U	35.3	U	37	U	34.9	U
2,6-Dinitrotoluene	35.7	U	36	U	36	U	36	U	36.1	U	35.9	U	35.8	U	35.3	U	37	U	34.9	U
2-Chloronaphthalene	12.5	U	12.6	U	12.6	U	12.6	U	12.6	U	12.6	U	12.5	U	12.4	U	13	U	12.2	U
2-Chlorophenol	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
2-Methyl-4,6-dinitrophenol	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
2-Methylnaphthalene	7.15	U	7.2	U	7.2	U	7.21	U	7.22	U	7.19	U	7.16	U	7.07	U	7.41	U	6.98	U
2-Nitrophenol	35.7	U	36	U	36	U	36	U	36.1	U	35.9	U	35.8	U	35.3	U	37	U	34.9	U
3,3'-Dichlorobenzidine	107	U	108	U	108	U	108	U	108	U	108	U	107	U	106	U	111	U	105	U
4-Bromophenylphenylether	35.7	U	36	U	36	U	36	U	36.1	U	35.9	U	35.8	U	35.3	U	37	U	34.9	U
4-Chloro-3-methylphenol	35.7	U	36	U	36	U	36	U	36.1	U	35.9	U	35.8	U	35.3	U	37	U	34.9	U
4-Chloroaniline	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
4-Chlorophenylphenylether	35.7	U	36	U	36	U	36	U	36.1	U	35.9	U	35.8	U	35.3	U	37	U	34.9	U
4-Nitrophenol	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
Acenaphthene	11.9	U	12	U	12	U	12	U	12.1	U	12	U	12	U	11.8	U	12.4	U	11.6	U
Acenaphthylene	10.7	U	10.8	U	10.8	U	10.8	U	10.8	U	10.8	U	10.7	U	10.6	U	11.1	U	10.5	U
alpha-Terpineol	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
Anthracene	7.15	U	7.2	U	7.2	U	7.21	U	7.22	U	7.19	U	7.16	U	7.07	U	7.41	U	6.98	U
Atrazine	107	U	108	U	108	U	108	U	108	U	108	U	107	U	106	U	111	U	105	U
Benzaldehyde	107	U	108	U	108	U	108	U	108	U	108	U	107	U	106	U	111	U	105	U
Benzo(a)anthracene	10.7	U	10.8	U	10.8	U	10.8	U	10.8	U	10.8	U	10.7	U	10.6	U	11.1	U	10.5	U
Benzo(a)pyrene	10.7	U	10.8	U	10.8	U	10.8	U	10.8	U	10.8	U	10.7	U	10.6	U	11.1	U	10.5	U
Benzo(b)fluoranthene	10.7	U	10.8	U	10.8	U	10.8	U	10.8	U	10.8	U	10.7	U	10.6	U	11.1	U	10.5	U
Benzo(ghi)perylene	10.7	U	10.8	U	10.8	U	10.8	U	10.8	U	10.8	U	10.7	U	10.6	U	11.1	U	10.5	U
Benzo(k)fluoranthene	10.7	U	10.8	U	10.8	U	10.8	U	10.8	U	10.8	U	10.7	U	10.6	U	11.1	U	10.5	U
bis(2-Chloroethoxy)methane	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
bis(2-Chloroethyl) ether	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
bis(2-Chloroisopropyl)ether	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
bis(2-Ethylhexyl)phthalate	175	BJ	194	B	175	BJ	175	BJ	175	BJ	174	BJ	172	BJ	176	BJ	74.1	U	69.8	U
Butylbenzylphthalate	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
Carbazole	10.7	U	10.8	U	10.8	U	10.8	U	10.8	U	10.8	U	10.7	U	10.6	U	11.1	U	10.5	U
Chrysene	10.7	U	10.8	U	10.8	U	10.8	U	10.8	U	10.8	U	10.7	U	10.6	U	11.1	U	10.5	U
Dibenzo(a,h)anthracene	10.7	U	10.8	U	10.8	U	10.8	U	10.8	U	10.8	U	10.7	U	10.6	U	11.1	U	10.5	U
Dibenzofuran	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
Diethylphthalate	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
Dimethylphthalate	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
Di-n-butylphthalate	35.7	U	36	U	36	U	36	U	36.1	U	35.9	U	35.8	U	35.3	U	37	U	34.9	U
Di-n-octylphthalate	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
Diphenylamine	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
Fluoranthene	10.7	U	10.8	U	10.8	U	10.8	U	10.8	U	10.8	U	10.7	U	10.6	U	11.1	U	10.5	U
Fluorene	10.7	U	10.8	U	10.8	U	10.8	U	10.8	U	10.8	U	10.7	U	10.6	U	11.1	U	10.5	U
Hexachlorobenzene	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
Hexachlorobutadiene	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U

Note: Sub-floor samples are shaded.

Table 11. Pit 1 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																			
Parameter	**BLT-P01-SO-01a**		**BLT-P01-SO-01b**		**BLT-P01-SO-02a**		**BLT-P01-SO-02b**		**BLT-P01-SO-03a**		**BLT-P01-SO-03b**		**BLT-P01-SO-04a**		**BLT-P01-SO-04b**		**BLT-P01-SO-05c**		**BLT-P01-SO-05d**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Hexachlorocyclopentadiene	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
Hexachloroethane	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
Indeno(1,2,3-cd)pyrene	10.7	U	10.8	U	10.8	U	10.8	U	10.8	U	10.8	U	10.7	U	10.6	U	11.1	U	10.5	U
Isophorone	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
m,p-Cresols	143	U	144	U	144	U	144	U	144	U	144	U	143	U	141	U	148	U	140	U
m-Nitroaniline	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
Naphthalene	10.7	U	10.8	U	10.8	U	10.8	U	10.8	U	10.8	U	10.7	U	10.6	U	11.1	U	10.5	U
Nitrobenzene	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
N-Nitrosodipropylamine	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
o-Cresol	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
o-Nitroaniline	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
Pentachlorophenol	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
Phenanthrene	10.7	U	10.8	U	10.8	U	10.8	U	10.8	U	10.8	U	10.7	U	10.6	U	11.1	U	10.5	U
Phenol	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
p-Nitroaniline	71.5	U	72	U	72	U	72.1	U	72.2	U	71.9	U	71.6	U	70.7	U	74.1	U	69.8	U
Pyrene	11.2	U	11.3	U	11.3	U	11.3	U	11.3	U	11.3	U	11.2	U	11.1	U	11.6	U	11	U
RCRA Metals (mg/kg)																				
Aluminum	15400		17900		13600		15400		12400		7560		11500		13100				11800	
Antimony	0.421	U	0.528	J	0.432	U	0.425	U	0.413	U	0.424	U	0.426	U	0.416	U			0.431	U
Arsenic	3.9		3.95		2.8		3.21		2.7		2.06		2.57		2.97				5.78	
Barium	26.6		34.9		23.8		27.7		24.1		13.7		23.2		25				21.2	
Beryllium	0.269	J	0.303	J	0.212	J	0.254	J	0.268	J	0.135	J	0.213	J	0.222	J			0.183	U
Cadmium	0.186	J	0.416	J	0.154	J	0.162	J	0.173	J	0.106	U	0.179	J	0.187	J			0.198	U
Calcium	64		85.5		50.6		63.2		106		225		97.1		92.6				54.5	
Chromium	24.9		18.2		13.5		15.6		12.6		8.37		12.5		16.4				25.5	
Cobalt	2.12		3.7		1.73		2.31		2.1		0.995		2.04		1.93				1.28	
Copper	9.19		9.58		6.66		7.41		7.06		9.62		6.63		7.72				13.3	
Iron	13000		13000		9040		10700		8890		5530		8640		9340				15500	
Lead	6.24		7.55		4.88		6.07		5.74		3.47		5.52		6.5				4.7	
Magnesium	589		749		519		644		473		314		492		506				379	
Manganese	42.4		70.6		32.7		42.8		51.3		22.7		55.4		54.2				17.8	
Mercury	53		66.7		46.2		43.2		353		263		169		118				29.8	
Nickel	6.44		7.91		5.53		6.57		5.41		3.51		5.24		5.58				5.19	
Potassium	460		546		413		460		378		248		376		396				582	
Selenium	0.632	U	0.623	U	0.648	U	0.637	U	0.62	U	0.637	U	0.639	U	0.623	U			1.06	U
Silver	0.105	U	0.104	U	0.108	U	0.106	U	0.103	U	0.106	U	0.107	U	0.104	U			0.12	U
Sodium	17.6		24.6		18.3		14.7	J	12.4	J	4.77	U	5.26	J	4.68	U			24.1	
Thallium	0.527	U	0.52	U	0.54	U	0.531	U	0.517	U	0.53	U	0.533	U	0.52	U			0.538	U
Vanadium	35.8		29.7		22.2		25.6		21.7		13.7		20.9		24.1				34.8	
Zinc	50.8		80.7		45.9		56		88.2		85.7		69.8		69.5				11.1	
RCRA Pesticide (ug/kg)																				
4,4'-DDD	0.357	U	0.36	U	0.36	U	0.36	U	0.361	U	0.359	U	0.358	U	0.353	U	0.359	U	0.37	U
4,4'-DDE	0.999	J	0.601	J	0.414	J	0.628	J	0.655	J	0.359	U	0.964	J	0.787	J	0.359	U	0.37	U
4,4'-DDT	1.35	J	0.736	J	0.633	J	0.695	J	1	J	0.42	J	1.38	J	1.19	J	0.359	U	0.37	U
Aldrin	0.179	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.179	U	0.177	U	0.179	U	0.185	U
alpha-BHC	0.179	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.179	U	0.177	U	0.179	U	0.185	U
beta-BHC	0.179	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.179	U	0.177	U	0.179	U	0.185	U
Chlordane (tech.)	1.79	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.79	U	1.77	U	1.79	U	1.85	U
delta-BHC	0.179	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.179	U	0.177	U	0.179	U	0.185	U

Note: Sub-floor samples are shaded.

Table 11. Pit 1 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																			
Parameter	**BLT-P01-SO-01a**		**BLT-P01-SO-01b**		**BLT-P01-SO-02a**		**BLT-P01-SO-02b**		**BLT-P01-SO-03a**		**BLT-P01-SO-03b**		**BLT-P01-SO-04a**		**BLT-P01-SO-04b**		**BLT-P01-SO-05c**		**BLT-P01-SO-05d**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Dieldrin	0.357	U	0.36	U	0.36	U	0.36	U	0.361	U	0.359	U	0.358	U	0.353	U	0.359	U	0.37	U
Endosulfan I	0.179	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.179	U	0.177	U	0.179	U	0.185	U
Endosulfan II	0.357	U	0.36	U	0.36	U	0.36	U	0.361	U	0.359	U	0.358	U	0.353	U	0.359	U	0.37	U
Endosulfan sulfate	0.357	U	0.36	U	0.36	U	0.36	U	0.361	U	0.359	U	0.358	U	0.353	U	0.359	U	0.37	U
Endrin	0.357	U	0.36	U	0.36	U	0.36	U	0.361	U	0.359	U	0.358	U	0.353	U	0.359	U	0.37	U
Endrin aldehyde	0.357	U	0.36	U	0.36	U	0.36	U	0.361	U	0.359	U	0.358	U	0.353	U	0.359	U	0.37	U
Endrin ketone	0.357	U	0.36	U	0.36	U	0.36	U	0.361	U	0.359	U	0.358	U	0.353	U	0.359	U	0.37	U
gamma-BHC (Lindane)	0.179	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.179	U	0.177	U	0.179	U	0.185	U
Heptachlor	0.179	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.179	U	0.177	U	0.179	U	0.185	U
Heptachlor epoxide	0.179	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.179	U	0.177	U	0.179	U	0.185	U
Methoxychlor	1.79	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.79	U	1.77	U	1.79	U	1.85	U
Toxaphene	5.95	U	6	U	6	U	6	U	6.01	U	5.98	U	5.96	U	5.88	U	5.97	U	6.17	U
TCLP PCB (ug/kg)																				
Aroclor-1016	1.19	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.19	U	1.18	U	10.2	U	1.37	U
Aroclor-1221	1.19	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.19	U	1.18	U	10.2	U	1.37	U
Aroclor-1232	1.19	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.19	U	1.18	U	10.2	U	1.37	U
Aroclor-1242	1.19	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.19	U	1.18	U	10.2	U	1.37	U
Aroclor-1248	1.19	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.19	U	1.18	U	10.2	U	1.37	U
Aroclor-1254	1.19	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.19	U	3.7		10.2	U	1.37	U
Aroclor-1260	1.19	U	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U	1.19	U	1.7	J	10.2	U	1.37	U
Herbicides (ug/kg)																				
2,4,5-T	2.97	U	2.99	U	2.99	U	2.99	U	3	U	2.98	U	2.97	U	2.93	U	25.5	U	3.07	U
2,4,5-TP	2.97	U	2.99	U	2.99	U	2.99	U	3	U	2.98	U	2.97	U	2.93	U	25.5	U	3.07	U
2,4-D	2.97	U	2.99	U	2.99	U	2.99	U	3	U	2.98	U	2.97	U	2.93	U	25.5	U	3.07	U
TOC (mg/kg)																				
Total Organic Carbon #1	1110		1100		980		1280		718		642		1010		1130				720	
Total Organic Carbon #2	1130		1120		953		1420		713		615		969		1000				773	
Total Organic Carbon #3	1160		1130		850		1260		626		619		1040		1110				751	
Total Organic Carbon #4	1030		1020		832		1190		714		475		1010		963				774	
Total Organic Carbon Averag	1100		1090		903		1290		693		588		1010		1050				755	
Cyanide (ug/kg)																				
Cyanide, Amenable to CL	80.4	Uh	81.1	Uh	81	Uh	81.1	Uh	81.2	Uh	80.8	Uh	80.5	Uh	79.5	Uh				
Cyanide, Total	78.8	U	78.7	U	79.4	U	74.4	U	78.9	U	80.8	U	73.9	U	76.4	U				

Note: Sub-floor samples are shaded.

Table 11. Pit 1 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number					
Parameter	**BLT-P01-SO-05e**		**BLT-P01-SO-05f**		**BLT-P01-SO-06g**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA VOC (ug/kg)						
1,1,1,2-Tetrachloroethane	0.227	U	0.244	U	0.205	U
1,1,1-Trichloroethane	0.341	U	0.365	U	0.308	U
1,1,2,2-Tetrachloroethane	0.284	U	0.305	U	0.256	U
1,1,2-Trichloroethane	0.341	U	0.365	U	0.308	U
1,1-Dichloroethane	0.341	U	0.365	U	0.308	U
1,1-Dichloroethylene	0.341	U	0.365	U	0.308	U
1,1-Dichloropropene	0.284	U	0.305	U	0.256	U
1,2,3-Trichlorobenzene	0.284	U	0.305	U	0.256	U
1,2,3-Trichloropropane	0.569	U	0.609	U	0.513	U
1,2,4-Trichlorobenzene	0.341	U	0.365	U	0.308	U
1,2,4-Trimethylbenzene	0.227	U	0.244	U	0.205	U
1,2-Dibromo-3-chloropropane	0.569	U	0.609	U	0.513	U
1,2-Dibromoethane	0.227	U	0.244	U	0.205	U
1,2-Dichlorobenzene	0.227	U	0.244	U	0.205	U
1,2-Dichloroethane	0.284	U	0.305	U	0.256	U
1,2-Dichloroethylene (total)	0.341	U	0.365	U	0.308	U
1,2-Dichloropropane	0.341	U	0.365	U	0.308	U
1,3,5-Trimethylbenzene	0.227	U	0.244	U	0.205	U
1,3-Dichlorobenzene	0.227	U	0.244	U	0.205	U
1,3-Dichloropropane	0.341	U	0.365	U	0.308	U
1,4-Dichlorobenzene	0.227	U	0.244	U	0.205	U
2,2-Dichloropropane	0.341	U	0.365	U	0.308	U
2-Butanone	2.78	U	2.07	U	1.74	U
2-Chloro-1,3-butadiene	0.341	U	0.365	U	0.308	U
2-Chloroethylvinyl ether	1.42	U	1.52	U	1.28	U
2-Chlorotoluene	0.227	U	0.244	U	0.205	U
2-Hexanone	1.73	U	1.85	U	1.56	U
2-Nitropropane	1.02	U	1.1	U	0.923	U
4-Chlorotoluene	0.273	U	0.292	U	0.246	U
4-Isopropyltoluene	0.284	U	0.305	U	0.256	U
4-Methyl-2-pentanone	1.24	U	1.33	U	1.12	U
Acetone	9.98		9.5		4.44	J
Acetonitrile	10.4	U	11.1	U	9.34	U
Acrolein	3.41	U	3.65	U	3.08	U
Acrylonitrile	1.14	U	1.22	U	1.03	U
Allyl chloride	2.27	U	2.44	U	2.05	U
Benzene	0.375	U	0.402	U	0.338	U
Benzyl chloride	0.682	U	0.731	U	0.615	U
bis(2-Chloroisopropyl)ether	1.71	U	1.83	U	1.54	U
Bromobenzene	0.227	U	0.244	U	0.205	U
Bromochloromethane	0.569	U	0.609	U	0.513	U
Bromodichloromethane	0.227	U	0.244	U	0.205	U
Bromoform	0.341	U	0.365	U	0.308	U
Bromomethane	0.569	U	0.609	U	0.513	U
Carbon disulfide	1.42	U	1.52	U	1.28	U
Carbon tetrachloride	0.227	U	0.244	U	0.205	U
Chlorobenzene	0.227	U	0.244	U	0.205	U
Chloroethane	0.569	U	0.609	U	0.513	U

Note: Sub-floor samples are shaded.

Table 11. Pit 1 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number					
Parameter	**BLT-P01-SO-05e**		**BLT-P01-SO-05f**		**BLT-P01-SO-06g**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Chloroform	0.252	U	0.244	U	0.205	U
Chloromethane	0.569	U	0.609	U	0.513	U
cis-1,2-Dichloroethylene	0.341	U	0.365	U	0.308	U
cis-1,3-Dichloropropylene	0.227	U	0.244	U	0.205	U
cis-1,4-Dichloro-2-butene	0.569	U	0.609	U	0.513	U
Cyclohexane	0.341	U	0.365	U	0.308	U
Cyclohexanone	17.1	U	18.3	U	15.4	U
Dibromochloromethane	0.341	U	0.365	U	0.308	U
Dibromomethane	0.341	U	0.365	U	0.308	U
Dichlorodifluoromethane	0.569	U	0.609	U	0.513	U
Ethyl ether	0.284	U	0.305	U	0.256	U
Ethyl methacrylate	0.569	U	0.609	U	0.513	U
Ethylbenzene	0.227	U	0.244	U	0.205	U
Hexachlorobutadiene	0.569	U	0.609	U	0.513	U
Iodomethane	1.9	U	2.03	U	1.71	U
Isobutyl alcohol	11.4	U	12.2	U	10.3	U
Isopropylbenzene	0.227	U	0.244	U	0.205	U
m,p-Xylenes	0.284	U	0.305	U	0.256	U
Methacrylonitrile	0.796	U	0.853	U	0.718	U
Methyl acetate	1.9	U	2.03	U	1.71	U
Methyl methacrylate	1.14	U	1.22	U	1.03	U
Methylcyclohexane	0.341	U	0.365	U	0.308	U
Methylene chloride	2.27	U	2.44	U	2.05	U
Naphthalene	0.227	U	0.244	U	0.205	U
n-Butyl alcohol	30.7	U	32.9	U	27.7	U
n-Butylbenzene	0.227	U	0.244	U	0.205	U
n-Propylbenzene	0.227	U	0.244	U	0.205	U
o-Xylene	0.227	U	0.244	U	0.205	U
Pentachloroethane	1.71	U	1.83	U	1.54	U
Propionitrile	1.14	U	1.22	U	1.03	U
sec-Butylbenzene	0.227	U	0.244	U	0.205	U
Styrene	0.357	J	0.417	J	0.406	J
tert-Butyl methyl ether	0.227	U	0.244	U	0.205	U
tert-Butylbenzene	0.227	U	0.244	U	0.205	U
Tetrachloroethylene	0.227	U	0.244	U	0.205	U
Toluene	0.33	U	0.353	U	0.297	U
trans-1,2-Dichloroethylene	0.341	U	0.365	U	0.308	U
trans-1,3-Dichloropropylene	0.341	U	0.365	U	0.308	U
trans-1,4-Dichloro-2-butene	0.569	U	0.609	U	0.513	U
Trichloroethylene	0.284	U	0.305	U	0.256	U
Trichlorofluoromethane	0.569	U	0.609	U	0.513	U
Trichlorotrifluoroethane	1.14	U	1.22	U	1.03	U
Vinyl acetate	1.42	U	1.52	U	1.28	U
Vinyl chloride	0.569	U	0.609	U	0.513	U
Xylenes (total)	0.227	U	0.244	U	0.205	U
RCRA SVOC (ug/kg)						
1,1'-Biphenyl	106	U	109	U	114	U
1,2,4-Trichlorobenzene	70.3	U	72.5	U	75.8	U
1,2-Dichlorobenzene	70.3	U	72.5	U	75.8	U

Note: Sub-floor samples are shaded.

Table 11. Pit 1 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number					
Parameter	**BLT-P01-SO-05e**		**BLT-P01-SO-05f**		**BLT-P01-SO-06g**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**
1,3-Dichlorobenzene	70.3	U	72.5	U	75.8	U
1,4-Dichlorobenzene	70.3	U	72.5	U	75.8	U
2,4,5-Trichlorophenol	70.3	U	72.5	U	75.8	U
2,4,6-Trichlorophenol	70.3	U	72.5	U	75.8	U
2,4-Dichlorophenol	70.3	U	72.5	U	75.8	U
2,4-Dimethylphenol	70.3	U	72.5	U	75.8	U
2,4-Dinitrophenol	134	U	138	U	144	U
2,4-Dinitrotoluene	35.2	U	36.2	U	37.9	U
2,6-Dinitrotoluene	35.2	U	36.2	U	37.9	U
2-Chloronaphthalene	12.3	U	12.7	U	13.3	U
2-Chlorophenol	70.3	U	72.5	U	75.8	U
2-Methyl-4,6-dinitrophenol	70.3	U	72.5	U	75.8	U
2-Methylnaphthalene	7.03	U	7.25	U	7.58	U
2-Nitrophenol	35.2	U	36.2	U	37.9	U
3,3'-Dichlorobenzidine	106	U	109	U	114	U
4-Bromophenylphenylether	35.2	U	36.2	U	37.9	U
4-Chloro-3-methylphenol	35.2	U	36.2	U	37.9	U
4-Chloroaniline	70.3	U	72.5	U	75.8	U
4-Chlorophenylphenylether	35.2	U	36.2	U	37.9	U
4-Nitrophenol	70.3	U	72.5	U	75.8	U
Acenaphthene	11.7	U	12.1	U	12.7	U
Acenaphthylene	10.6	U	10.9	U	11.4	U
alpha-Terpineol	70.3	U	72.5	U	75.8	U
Anthracene	7.03	U	7.25	U	7.58	U
Atrazine	106	U	109	U	114	U
Benzaldehyde	106	U	109	U	114	U
Benzo(a)anthracene	10.6	U	10.9	U	11.4	U
Benzo(a)pyrene	10.6	U	10.9	U	11.4	U
Benzo(b)fluoranthene	10.6	U	10.9	U	11.4	U
Benzo(ghi)perylene	10.6	U	10.9	U	11.4	U
Benzo(k)fluoranthene	10.6	U	10.9	U	11.4	U
bis(2-Chloroethoxy)methane	70.3	U	72.5	U	75.8	U
bis(2-Chloroethyl) ether	70.3	U	72.5	U	75.8	U
bis(2-Chloroisopropyl)ether	70.3	U	72.5	U	75.8	U
bis(2-Ethylhexyl)phthalate	70.3	U	175	BJ	75.8	U
Butylbenzylphthalate	70.3	U	72.5	U	75.8	U
Carbazole	10.6	U	10.9	U	11.4	U
Chrysene	10.6	U	10.9	U	11.4	U
Dibenzo(a,h)anthracene	10.6	U	10.9	U	11.4	U
Dibenzofuran	70.3	U	72.5	U	75.8	U
Diethylphthalate	70.3	U	72.5	U	75.8	U
Dimethylphthalate	70.3	U	72.5	U	75.8	U
Di-n-butylphthalate	35.2	U	36.2	U	37.9	U
Di-n-octylphthalate	70.3	U	72.5	U	75.8	U
Diphenylamine	70.3	U	72.5	U	75.8	U
Fluoranthene	10.6	U	10.9	U	11.4	U
Fluorene	10.6	U	10.9	U	11.4	U
Hexachlorobenzene	70.3	U	72.5	U	75.8	U
Hexachlorobutadiene	70.3	U	72.5	U	75.8	U

Note: Sub-floor samples are shaded.

Table 11. Pit 1 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number					
Parameter	**BLT-P01-SO-05e**		**BLT-P01-SO-05f**		**BLT-P01-SO-06g**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Hexachlorocyclopentadiene	70.3	U	72.5	U	75.8	U
Hexachloroethane	70.3	U	72.5	U	75.8	U
Indeno(1,2,3-cd)pyrene	10.6	U	10.9	U	11.4	U
Isophorone	70.3	U	72.5	U	75.8	U
m,p-Cresols	141	U	145	U	152	U
m-Nitroaniline	70.3	U	72.5	U	75.8	U
Naphthalene	10.6	U	10.9	U	11.4	U
Nitrobenzene	70.3	U	72.5	U	75.8	U
N-Nitrosodipropylamine	70.3	U	72.5	U	75.8	U
o-Cresol	70.3	U	72.5	U	75.8	U
o-Nitroaniline	70.3	U	72.5	U	75.8	U
Pentachlorophenol	70.3	U	72.5	U	75.8	U
Phenanthrene	10.6	U	10.9	U	11.4	U
Phenol	70.3	U	72.5	U	75.8	U
p-Nitroaniline	70.3	U	72.5	U	75.8	U
Pyrene	11	U	11.4	U	11.9	U
RCRA Metals (mg/kg)						
Aluminum	1350		3040		13000	
Antimony	0.416	U	0.411	U	0.435	U
Arsenic	3.88		1.03	U	3.14	
Barium	3.35		5.55		25.4	
Beryllium	0.104	U	0.103	U	0.239	J
Cadmium	0.104	U	0.103	U	0.2	J
Calcium	14		14.4		93.4	
Chromium	9.98		4.74		13.8	
Cobalt	0.208	U	0.229	U	2.12	
Copper	7.86		5.18		8.11	
Iron	5060		2760		9490	
Lead	0.359	J	1.22		6.15	
Magnesium	34.8		89.6		538	
Manganese	1.75		4.13		51.4	
Mercury	21.8		38.9		111	
Nickel	0.407	J	1.15		5.92	
Potassium	102		145		414	
Selenium	0.86	J	0.617	U	0.652	U
Silver	0.104	U	0.103	U	0.109	U
Sodium	8.23	J	10.2	J	6.64	J
Thallium	0.52	U	0.514	U	0.543	U
Vanadium	8.02		8.15		23.5	
Zinc	2.12		2.26		80.2	
RCRA Pesticide (ug/kg)						
4,4'-DDD	0.349	U	0.352	U	0.362	U
4,4'-DDE	0.349	U	0.352	U	0.492	J
4,4'-DDT	0.349	U	0.352	U	0.877	J
Aldrin	0.174	U	0.176	U	0.181	U
alpha-BHC	0.174	U	0.176	U	0.181	U
beta-BHC	0.174	U	0.176	U	0.181	U
Chlordane (tech.)	1.74	U	1.76	U	1.81	U
delta-BHC	0.174	U	0.176	U	0.181	U

Note: Sub-floor samples are shaded.

Table 11. Pit 1 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number					
Parameter	**BLT-P01-SO-05e**		**BLT-P01-SO-05f**		**BLT-P01-SO-06g**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Dieldrin	0.349	U	0.352	U	0.362	U
Endosulfan I	0.174	U	0.176	U	0.181	U
Endosulfan II	0.349	U	0.352	U	0.362	U
Endosulfan sulfate	0.349	U	0.352	U	0.362	U
Endrin	0.349	U	0.352	U	0.362	U
Endrin aldehyde	0.349	U	0.352	U	0.362	U
Endrin ketone	0.349	U	0.352	U	0.362	U
gamma-BHC (Lindane)	0.174	U	0.176	U	0.181	U
Heptachlor	0.174	U	0.176	U	0.181	U
Heptachlor epoxide	0.174	U	0.176	U	0.181	U
Methoxychlor	1.74	U	1.76	U	1.81	U
Toxaphene	5.81	U	5.86	U	6.03	U
TCLP PCB (ug/kg)						
Aroclor-1016	1.16	U	1.17	U	1.21	U
Aroclor-1221	1.16	U	1.17	U	1.21	U
Aroclor-1232	1.16	U	1.17	U	1.21	U
Aroclor-1242	1.16	U	1.17	U	1.21	U
Aroclor-1248	1.16	U	1.17	U	1.21	U
Aroclor-1254	1.16	U	1.17	U	1.21	U
Aroclor-1260	1.16	U	1.17	U	1.21	U
Herbicides (ug/kg)						
2,4,5-T	2.9	U	2.92	U	3.01	U
2,4,5-TP	2.9	U	2.92	U	3.01	U
2,4-D	2.9	U	2.92	U	3.01	U
TOC (mg/kg)						
Total Organic Carbon #1	172		121		919	
Total Organic Carbon #2	168		130		890	
Total Organic Carbon #3	179		96.4	J	938	
Total Organic Carbon #4	186		97.3	J	902	
Total Organic Carbon Averag	176		111		912	
Cyanide (ug/kg)						
Cyanide, Amenable to CL					81.5	Uh
Cyanide, Total					74.8	U

Note: Sub-floor samples are shaded.

Table 12. Pit 1 Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																										
	BLT-P01-SO-01a				BLT-P01-SO-01b				BLT-P01-SO-02a				BLT-P01-SO-02b				BLT-P01-SO-03a				BLT-P01-SO-03b				BLT-P01-SO-04a			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (901.1mod/HASL 300)																												
Actinium-228	0.756	+/-	0.253		0.482	+/-	0.244		1.13	+/-	0.249		0.707	+/-	0.251		1.02	+/-	0.251		0.946	+/-	0.279		0.502	+/-	0.335	
Americium-241	-0.037	+/-	0.163	U	-0.0119	+/-	0.0324	U	-0.104	+/-	0.119	U	0.1	+/-	0.113	U	-0.0275	+/-	0.114	U	0.0265	+/-	0.162	U	0.0265	+/-	0.0384	U
Antimony-124	-0.0194	+/-	0.0642	U	-0.0567	+/-	0.1	U	0.016	+/-	0.0649	U	-0.000177	+/-	0.0694	U	0.02	+/-	0.0623	U	-0.0145	+/-	0.0711	U	0.0182	+/-	0.0878	U
Antimony-125	0.000338	+/-	0.0676	U	0.0665	+/-	0.0698	U	-0.0145	+/-	0.0531	U	0.0626	+/-	0.0623	U	-0.00664	+/-	0.0536	U	-0.0271	+/-	0.0571	U	-0.0209	+/-	0.0793	U
Barium-133	0.00693	+/-	0.0284	U	-0.0126	+/-	0.0351	U	0.0159	+/-	0.0293	U	0.0264	+/-	0.0312	U	-0.0111	+/-	0.0275	U	0.0203	+/-	0.0301	U	0.0281	+/-	0.0363	U
Barium-140	-0.0473	+/-	0.177	U	0.141	+/-	0.222	U	0.152	+/-	0.178	U	-0.202	+/-	0.227	U	0.0683	+/-	0.208	U	0.0208	+/-	0.216	U	-0.0452	+/-	0.32	U
Beryllium-7	-0.000465	+/-	0.194	U	-0.198	+/-	0.257	U	0.108	+/-	0.201	U	-0.0895	+/-	0.243	U	0.0124	+/-	0.212	U	0.0217	+/-	0.226	U	-0.252	+/-	0.344	U
Bismuth-212	0.552	+/-	0.32		0.512	+/-	0.38		0.389	+/-	0.363		0.536	+/-	0.245		0.58	+/-	0.341		0.734	+/-	0.358		0.818	+/-	0.442	
Bismuth-214	1.03	+/-	0.139		1.06	+/-	0.154		1.11	+/-	0.181		1.43	+/-	0.213		0.731	+/-	0.129		0.853	+/-	0.152		0.887	+/-	0.161	
Cerium-139	0.00869	+/-	0.019	U	0.00313	+/-	0.0182	U	0.0075	+/-	0.0177	U	0.00706	+/-	0.0207	U	0.0041	+/-	0.0165	U	0.00659	+/-	0.0177	U	-0.00206	+/-	0.0219	U
Cerium-141	0.0194	+/-	0.0445	U	0.0266	+/-	0.0555	U	0	+/-	0.0657	UUI	0	+/-	0.0549	UUI	0.0306	+/-	0.051	U	0	+/-	0.0642	UUI	0.0157	+/-	0.0647	U
Cerium-144	-0.128	+/-	0.114	U	-0.00583	+/-	0.118	U	0.0277	+/-	0.11	U	-0.0767	+/-	0.125	U	-0.0249	+/-	0.109	U	0.0394	+/-	0.131	U	-0.0311	+/-	0.122	U
Cesium-134	0.0223	+/-	0.0278	U	0.0262	+/-	0.0572	U	0.0259	+/-	0.042	U	0.0394	+/-	0.0309	U	0	+/-	0.0462	UUI	0.0391	+/-	0.0312	U	0.00321	+/-	0.0419	U
Cesium-136	0.0489	+/-	0.0734	U	-0.0406	+/-	0.0988	U	-0.00421	+/-	0.0902	U	-0.0413	+/-	0.0995	U	0.0181	+/-	0.0892	U	-0.013	+/-	0.0906	U	0.0628	+/-	0.14	U
Cesium-137	-0.00407	+/-	0.0248	U	0.0207	+/-	0.0323	U	-0.0189	+/-	0.0241	U	-0.0068	+/-	0.0259	U	0.0122	+/-	0.033	U	0.0168	+/-	0.0271	U	0.0125	+/-	0.0394	U
Chromium-51	-0.0378	+/-	0.256	U	0.0000224	+/-	0.261	U	0.0881	+/-	0.255	U	-0.14	+/-	0.268	U	0.0876	+/-	0.247	U	-0.0797	+/-	0.252	U	-0.163	+/-	0.316	U
Cobalt-56	-0.0158	+/-	0.0279	U	-0.00751	+/-	0.0385	U	-0.00186	+/-	0.028	U	0.00932	+/-	0.0312	U	-0.00588	+/-	0.0273	U	-0.0121	+/-	0.0287	U	0.0149	+/-	0.0477	U
Cobalt-57	0.00731	+/-	0.0136	U	0.00147	+/-	0.0141	U	0.00833	+/-	0.0136	U	0.00493	+/-	0.0153	U	0.00434	+/-	0.0299	U	-0.00178	+/-	0.0147	U	-0.00969	+/-	0.0153	U
Cobalt-58	-0.0113	+/-	0.0264	U	-0.0284	+/-	0.0403	U	0.00647	+/-	0.0265	U	0.000381	+/-	0.0299	U	-0.0133	+/-	0.0258	U	0.0052	+/-	0.029	U	-0.00992	+/-	0.0399	U
Cobalt-60	-0.0108	+/-	0.0249	U	0.0365	+/-	0.0449	U	0.00673	+/-	0.0276	U	0.00773	+/-	0.0295	U	0.0153	+/-	0.0276	U	0.0375	+/-	0.035	U	-0.0035	+/-	0.037	U
Europium-152	-0.0778	+/-	0.0575	U	0.0145	+/-	0.0688	U	-0.0433	+/-	0.0591	U	0.0178	+/-	0.0613	U	0.0442	+/-	0.0709	U	0.0564	+/-	0.0859	U	0.0253	+/-	0.0784	U
Europium-154	-0.0138	+/-	0.0809	U	-0.0268	+/-	0.104	U	0.0724	+/-	0.0786	U	-0.0492	+/-	0.104	U	-0.0039	+/-	0.078	U	-0.0501	+/-	0.0853	U	-0.028	+/-	0.127	U
Europium-155	0.0506	+/-	0.0596	U	0.0311	+/-	0.0816	U	0.00859	+/-	0.0865	U	0.0565	+/-	0.0652	U	0.0623	+/-	0.0553	U	0.0433	+/-	0.0611	U	0.0144	+/-	0.0592	U
Iridium-192	-0.00757	+/-	0.0204	U	-0.0195	+/-	0.0242	U	-0.00916	+/-	0.0217	U	0.00355	+/-	0.0225	U	-0.00447	+/-	0.021	U	0.00204	+/-	0.0215	U	0.0131	+/-	0.0279	U
Iron-59	-0.039	+/-	0.067	U	-0.0243	+/-	0.0911	U	-0.00271	+/-	0.0566	U	-0.0319	+/-	0.0655	U	0.0221	+/-	0.0617	U	-0.0395	+/-	0.0605	U	-0.0609	+/-	0.0863	U
Lead-210	0.569	+/-	3.05	U	1.32	+/-	0.686		4.14	+/-	4.21	U	1.88	+/-	3.55	U	2.78	+/-	7.55	U	1.37	+/-	3.38	U	1.24	+/-	0.658	
Lead-212	0.674	+/-	0.0792		0.689	+/-	0.0739		0.857	+/-	0.0962		0.71	+/-	0.0861		0.816	+/-	0.0907		0.809	+/-	0.0935		0.621	+/-	0.0758	
Lead-214	1.06	+/-	0.129		1.1	+/-	0.114		1.34	+/-	0.165		1.68	+/-	0.182		0.91	+/-	0.134		0.909	+/-	0.134		0.998	+/-	0.126	
Manganese-54	0.00536	+/-	0.025	U	0.00155	+/-	0.0347	U	-0.00948	+/-	0.0252	U	-0.0243	+/-	0.0283	U	0.0183	+/-	0.0245	U	-0.00754	+/-	0.0266	U	0.0071	+/-	0.0355	U
Mercury-203	0.0107	+/-	0.0229	U	0.0265	+/-	0.0296	U	0.0156	+/-	0.067	U	-0.0138	+/-	0.028	U	0.00305	+/-	0.0262	U	0.0278	+/-	0.0253	U	0.0385	+/-	0.0517	U
Neodymium-147	-0.0409	+/-	0.371	U	0.095	+/-	0.491	U	0.0586	+/-	0.482	U	-0.112	+/-	0.51	U	-0.169	+/-	0.485	U	-0.255	+/-	0.491	U	0.0023	+/-	0.709	U
Neptunium-239	0.0167	+/-	0.113	U	-0.0453	+/-	0.103	U	-0.0495	+/-	0.099	U	-0.0664	+/-	0.112	U	0.00458	+/-	0.0964	U	-0.0987	+/-	0.108	U	-0.0585	+/-	0.11	U
Niobium-94	0.00098	+/-	0.0226	U	0.0061	+/-	0.031	U	0.00638	+/-	0.0222	U	0.0141	+/-	0.0247	U	0.0199	+/-	0.0226	U	0.00413	+/-	0.0289	U	-0.00186	+/-	0.0336	U
Niobium-95	0.0342	+/-	0.041	U	-0.0418	+/-	0.0447	U	0.00084	+/-	0.0841	U	0.0577	+/-	0.0828	U	0.0177	+/-	0.0749	U	0	+/-	0.0568	UUI	0.0583	+/-	0.087	U
Potassium-40	3.51	+/-	0.684		3.28	+/-	1.02		3.96	+/-	0.779		3.74	+/-	0.942		3.51	+/-	0.778		4.17	+/-	0.812		2.82	+/-	0.938	
Promethium-144	0.00531	+/-	0.024	U	-0.002	+/-	0.032	U	0.00551	+/-	0.0233	U	-0.0231	+/-	0.0267	U	0.013	+/-	0.0236	U	-0.0153	+/-	0.0279	U	0.0282	+/-	0.0347	U
Promethium-146	0.0301	+/-	0.0269	U	0.00683	+/-	0.0553	U	0.00783	+/-	0.0248	U	0.0174	+/-	0.0305	U	0.00156	+/-	0.0263	U	0.00407	+/-	0.0279	U	0.0254	+/-	0.0466	U
Radium-228	0.756	+/-	0.253		0.482	+/-	0.244		1.13	+/-	0.249		0.707	+/-	0.251		1.02	+/-	0.251		0.946	+/-	0.279		0.502	+/-	0.335	
Ruthenium-106	0.0999	+/-	0.199	U	0.0898	+/-	0.285	U	-0.0561	+/-	0.207	U	-0.0349	+/-	0.223	U	-0.11	+/-	0.206	U	-0.0527	+/-	0.211	U	0.0378	+/-	0.321	U
Silver-110m	0.00492	+/-	0.0222	U	-0.0169	+/-	0.0289	U	0.000419	+/-	0.0219	U	-0.00949	+/-	0.0231	U	-0.0157	+/-	0.0255	U	-0.0278	+/-	0.0251	U	0.0282	+/-	0.0379	U
Sodium-22	-0.00504	+/-	0.029	U	-0.00938	+/-	0.0371	U	0.0261	+/-	0.0282	U	-0.0179	+/-	0.0373	U	-0.00149	+/-	0.028	U	-0.0179	+/-	0.0306	U	-0.0103	+/-	0.0456	U
Thallium-208	0.182	+/-	0.0546		0.149	+/-	0.0671		0.263	+/-	0.0585		0.207	+/-	0.0664		0.246	+/-	0.0504		0.263	+/-	0.0693		0.281	+/-	0.0854	
Thorium-230	1.03	+/-	0.139		1.06	+/-	0.154		1.11	+/-	0.181		1.43	+/-	0.213		0.731	+/-	0.129		0.853	+/-	0.152		0.887	+/-	0.161	
Thorium-234	2.91	+/-	1.56		2.57	+/-	0.749		4.8	+/-	2.09		6.4	+/-	2.11		2.79	+/-	1.68		2.06	+/-	1.56		2.56	+/-	0.853	
Tin-113	-0.0171	+/-	0.0261	U	-0.0195	+/-	0.0328	U	-0.00176	+/-	0.0276	U	0.0118	+/-	0.0333	U	-0.0178	+/-	0.0264	U	0.0147	+/-	0.0284	U	-0.00478	+/-	0.0364	U
Uranium-235	0.0784	+/-	0.18	U	0.107	+/-	0.223	U	0.384	+/-	0.257		0.369	+/-	0.205		0.118	+/-	0.195	U	0.299	+/-	0.228		0.0548	+/-	0.225	U
Uranium-238	2.91	+/-	1.56		2.57	+/-	0.749		4.8	+/-	2.09		6.4	+/-	2.11		2.79	+/-	1.68		2.06	+/-	1.56		2.56	+/-	0.853	
Yttrium-88	-0.0145	+/-	0.0305	U	0.0155	+/-	0.0349	U	0.0169	+/-	0.0297	U	0.0135	+/-	0.0312	U	0.0213	+/-	0.0296	U	0.0289	+/-	0.0297	U	-0.00435	+/-	0.0386	U
Zinc-65	0.0875	+/-	0.0632	U	-0.0707	+/-	0.0852	U	0.0193	+/-	0.0567	U	0	+/-	0.0763	UUI	-0.084	+/-	0.0709	U	0.0109	+/-	0.0731	U	-0.00556	+/-	0.0853	U

Note: Sub-floor samples are shaded.

Table 12. Pit 1 Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number (All results in pCi/g)																											
Parameter	**BLT-P01-SO-01a**				**BLT-P01-SO-01b**				**BLT-P01-SO-02a**				**BLT-P01-SO-02b**				**BLT-P01-SO-03a**				**BLT-P01-SO-03b**				**BLT-P01-SO-04a**			
	Result	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**	**Result**	**Uncertainty**		**Qual**
Gamma Scan (901.1mod/HASL 300)																												
Zirconium-95	0.0104	+/-	0.0473	U	-0.0115	+/-	0.0654	U	0.0176	+/-	0.0464	U	-0.0332	+/-	0.0526	U	0.0076	+/-	0.0494	U	0.000276	+/-	0.0494	U	-0.0271	+/-	0.0697	U
C-14 (EERF C-01 mod)	0.315	+/-	1.13	U	1.4	+/-	1.02	U	0.462	+/-	1.02	U	-0.251	+/-	1.02	U	0.673	+/-	0.994	U	1.03	+/-	0.987	U	0.276	+/-	0.987	U
Cl-36 (GL-Rad-A033)	0.00813	+/-	0.0759	U	-0.0347	+/-	0.054	U	0.0092	+/-	0.0468	U	-0.0121	+/-	0.0465	U	-0.0355	+/-	0.0681	U	-0.0473	+/-	0.0376	U	-0.0144	+/-	0.0742	U
Ni-63 (RESL Ni-1 mod)	0.128	+/-	2.14	U	-0.94	+/-	1.65	U	-1.65	+/-	2.38	U	0.274	+/-	2	U	-0.997	+/-	1.88	U	0	+/-	2.04	U	-1.14	+/-	1.99	U
Sr-90 (905.0 mod)	-0.0144	+/-	0.0675	U	-0.0296	+/-	0.0787	U	0.0236	+/-	0.0713	U	0.0545	+/-	0.0695	U	0.0973	+/-	0.0759	U	0.0599	+/-	0.0812	U	0.0825	+/-	0.0772	U
H-3 (906.0 mod)	0.692	+/-	0.53	U	0.671	+/-	0.514	U	0.749	+/-	0.514	U	-0.186	+/-	0.478	U	0.112	+/-	0.498	U	-0.136	+/-	0.494	U	0.376	+/-	0.497	U

Note: Sub-floor samples are shaded.

Table 12. Pit 1 Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																							
	BLT-P01-SO-04b				BLT-P01-SO-05c				BLT-P01-SO-05d				BLT-P01-SO-05e				BLT-P01-SO-05f				BLT-P01-SO-06g			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (9																								
Actinium-228	0.711	+/-	0.184		0.622	+/-	0.145		0.867	+/-	0.22		0.542	+/-	0.164		0.334	+/-	0.0984		0.862	+/-	0.155	
Americium-241	-0.0601	+/-	0.0985	U	0.0663	+/-	0.109	U	0.0123	+/-	0.136	U	0.0972	+/-	0.132	U	-0.0462	+/-	0.0657	U	0.132	+/-	0.134	U
Antimony-124	-0.000425	+/-	0.0399	U	-0.00278	+/-	0.0346	U	0.0125	+/-	0.0442	U	0.0156	+/-	0.0484	U	0.0165	+/-	0.0372	U	0.0246	+/-	0.0473	U
Antimony-125	0.0592	+/-	0.0511	U	-0.0122	+/-	0.0365	U	-0.0136	+/-	0.0555	U	-0.00534	+/-	0.0463	U	-0.00488	+/-	0.0389	U	0.00369	+/-	0.059	U
Barium-133	-0.00967	+/-	0.0267	U	0.0119	+/-	0.0204	U	0.00947	+/-	0.0316	U	0.00608	+/-	0.0262	U	0.0162	+/-	0.0195	U	-0.064	+/-	0.0299	U
Barium-140	0.027	+/-	0.173	U	0.0886	+/-	0.138	U	0.0327	+/-	0.194	U	0.145	+/-	0.183	U	0.0721	+/-	0.132	U	-0.131	+/-	0.186	U
Beryllium-7	0.203	+/-	0.217	U	0.114	+/-	0.116	U	0.111	+/-	0.2	U	0.0385	+/-	0.171	U	0.0408	+/-	0.137	U	-0.127	+/-	0.194	U
Bismuth-212	0.593	+/-	0.346		0.462	+/-	0.266		0.553	+/-	0.259		0.656	+/-	0.258		0.193	+/-	0.207	U	0	+/-	0.32	UUI
Bismuth-214	1.43	+/-	0.172		0.428	+/-	0.0757		0.592	+/-	0.124		0.464	+/-	0.102		0.304	+/-	0.0721		1.05	+/-	0.111	
Cerium-139	-0.00777	+/-	0.0208	U	-0.00859	+/-	0.0126	U	-0.00517	+/-	0.0192	U	0.00316	+/-	0.0156	U	-3.76E-05	+/-	0.0118	U	-0.00256	+/-	0.0185	U
Cerium-141	0.0575	+/-	0.0459	U	0.0245	+/-	0.0393	U	0.0294	+/-	0.0437	U	0.0316	+/-	0.0347	U	0.0132	+/-	0.0306	U	0.021	+/-	0.0366	U
Cerium-144	0.0455	+/-	0.117	U	-0.0238	+/-	0.0825	U	0.0273	+/-	0.125	U	0.00345	+/-	0.0972	U	0.0263	+/-	0.0758	U	-0.0606	+/-	0.125	U
Cesium-134	0.0286	+/-	0.0377	U	0	+/-	0.0269	UUI	0.0445	+/-	0.0285	U	0.0307	+/-	0.038	U	0.0246	+/-	0.0196	UUI	0	+/-	0.0344	UUI
Cesium-136	0.0162	+/-	0.0668	U	-0.0207	+/-	0.0507	U	0.0205	+/-	0.0739	U	0.0406	+/-	0.0633	U	0.0105	+/-	0.0541	U	0.0202	+/-	0.0745	U
Cesium-137	0.00282	+/-	0.0203	U	0.0111	+/-	0.0158	U	0.00838	+/-	0.0259	U	0.0145	+/-	0.0235	U	-0.00522	+/-	0.0148	U	0	+/-	0.0936	UUI
Chromium-51	-0.0912	+/-	0.227	U	-0.0352	+/-	0.18	U	0.158	+/-	0.269	U	0.121	+/-	0.232	U	0.0937	+/-	0.157	U	0.0593	+/-	0.255	U
Cobalt-56	0.00893	+/-	0.0222	U	-0.0105	+/-	0.0168	U	0.0128	+/-	0.0238	U	0.00537	+/-	0.0221	U	0.000368	+/-	0.016	U	0.000153	+/-	0.0216	U
Cobalt-57	0.00427	+/-	0.0149	U	0.00205	+/-	0.0104	U	-0.00456	+/-	0.0165	U	0.0049	+/-	0.0121	U	0.00263	+/-	0.00953	U	0.00509	+/-	0.0142	U
Cobalt-58	-0.0166	+/-	0.0226	U	-0.0167	+/-	0.0171	U	-0.00266	+/-	0.0284	U	0.00109	+/-	0.018	U	0.0161	+/-	0.0153	U	0.00227	+/-	0.0252	U
Cobalt-60	0.0012	+/-	0.0208	U	0.00779	+/-	0.0149	U	-0.00347	+/-	0.0231	U	0.00674	+/-	0.0213	U	-0.00146	+/-	0.0153	U	0.0169	+/-	0.02	U
Europium-152	-0.0262	+/-	0.0566	U	-0.0249	+/-	0.0456	U	0.0166	+/-	0.0671	U	0.0451	+/-	0.0514	U	-0.0003	+/-	0.0396	U	0.0605	+/-	0.0605	U
Europium-154	-0.0565	+/-	0.0604	U	0.000891	+/-	0.0426	U	-0.00836	+/-	0.0661	U	-0.0124	+/-	0.0519	U	-0.000503	+/-	0.0412	U	-0.0202	+/-	0.0613	U
Europium-155	0.0969	+/-	0.0601	U	0.0323	+/-	0.0595	U	0.0965	+/-	0.105	U	0.0156	+/-	0.0495	U	0.0533	+/-	0.0387	U	-0.0271	+/-	0.0564	U
Iridium-192	0.0197	+/-	0.0199	U	0.00822	+/-	0.0153	U	-0.00571	+/-	0.024	U	0.00335	+/-	0.0193	U	-0.0014	+/-	0.0139	U	0.0101	+/-	0.0215	U
Iron-59	0.0182	+/-	0.0477	U	0.0203	+/-	0.0337	U	0.0115	+/-	0.0538	U	0.0153	+/-	0.0431	U	0.0105	+/-	0.0351	U	0.0129	+/-	0.0508	U
Lead-210	1.49	+/-	3.52	U	0.74	+/-	5.92	U	0.662	+/-	4.08	U	1.29	+/-	6.88	U	0.549	+/-	1.8	U	1.41	+/-	2.94	U
Lead-212	0.795	+/-	0.0846		0.729	+/-	0.0852		0.841	+/-	0.105		0.641	+/-	0.0844		0.323	+/-	0.0431		0.886	+/-	0.0659	
Lead-214	1.43	+/-	0.162		0.514	+/-	0.088		0.822	+/-	0.13		0.581	+/-	0.0992		0.277	+/-	0.0633		1.12	+/-	0.0946	
Manganese-54	-0.0249	+/-	0.0208	U	-0.00429	+/-	0.0159	U	0.00221	+/-	0.045	UUI	-0.00485	+/-	0.0181	U	-0.00444	+/-	0.0149	U	0.0181	+/-	0.0226	U
Mercury-203	0.00301	+/-	0.0275	U	0.0213	+/-	0.0243	U	0.0164	+/-	0.0461	U	0.0097	+/-	0.0351	U	0.00938	+/-	0.0327	U	0.043	+/-	0.032	U
Neodymium-147	0.0439	+/-	0.376	U	0.0822	+/-	0.308	U	-0.0034	+/-	0.404	U	0.249	+/-	0.365	U	0.219	+/-	0.292	U	-0.163	+/-	0.425	U
Neptunium-239	0.0174	+/-	0.109	U	-0.0126	+/-	0.0776	U	-0.062	+/-	0.12	U	-0.000519	+/-	0.0893	U	0.0324	+/-	0.0677	U	0.0363	+/-	0.103	U
Niobium-94	0.0188	+/-	0.0184	U	-0.0011	+/-	0.0139	U	0.0158	+/-	0.0234	U	0.00464	+/-	0.0178	U	-0.00095	+/-	0.0149	U	0.00908	+/-	0.0194	U
Niobium-95	0.0205	+/-	0.0604	U	0.00894	+/-	0.0244	U	0.0406	+/-	0.0361	U	0.0044	+/-	0.0296	U	0.0202	+/-	0.0286	U	0.0227	+/-	0.0348	U
Potassium-40	2.69	+/-	0.556		1.77	+/-	0.444		5.7	+/-	0.858		3.69	+/-	0.567		0.937	+/-	0.444		4.35	+/-	0.591	
Promethium-144	-0.00308	+/-	0.018	U	-0.00339	+/-	0.0157	U	-0.00121	+/-	0.0229	U	-0.000388	+/-	0.0192	U	0.00496	+/-	0.0154	U	0.00858	+/-	0.0184	U
Promethium-146	0.0173	+/-	0.0259	U	0.00829	+/-	0.018	U	0.0153	+/-	0.0268	U	0.0028	+/-	0.0212	U	0.0155	+/-	0.0172	U	0.0198	+/-	0.027	U
Radium-228	0.711	+/-	0.184		0.622	+/-	0.145		0.867	+/-	0.22		0.542	+/-	0.164		0.334	+/-	0.0984		0.862	+/-	0.155	
Ruthenium-106	0.164	+/-	0.178	U	-0.0665	+/-	0.14	U	0.0507	+/-	0.185	U	-0.0552	+/-	0.157	U	0.0585	+/-	0.128	U	-0.0355	+/-	0.19	U
Silver-110m	-0.00134	+/-	0.019	U	-0.013	+/-	0.0145	U	0.00391	+/-	0.024	U	0.00944	+/-	0.0169	U	0.00501	+/-	0.0136	U	0.00339	+/-	0.0199	U
Sodium-22	-0.0203	+/-	0.0216	U	0.000279	+/-	0.0153	U	-0.00317	+/-	0.0236	U	-0.00436	+/-	0.0186	U	-0.000253	+/-	0.0148	U	-0.00731	+/-	0.022	U
Thallium-208	0.238	+/-	0.049		0.199	+/-	0.0398		0.219	+/-	0.0576		0.167	+/-	0.0416		0.109	+/-	0.036		0.281	+/-	0.0476	
Thorium-230	1.43	+/-	0.172		0.428	+/-	0.0757		0.592	+/-	0.124		0.464	+/-	0.102		0.304	+/-	0.0721		1.05	+/-	0.111	
Thorium-234	3.43	+/-	1.48		0.434	+/-	0.985	U	0.96	+/-	1.31	U	0.309	+/-	1.39	U	0.0558	+/-	0.982	UUI	1.89	+/-	1.31	
Tin-113	-0.0436	+/-	0.0262	U	0.00818	+/-	0.0198	U	0.0159	+/-	0.0294	U	0.00921	+/-	0.0234	U	-0.0064	+/-	0.019	U	-0.00767	+/-	0.0282	U
Uranium-235	0.23	+/-	0.182	U	0.0915	+/-	0.142	U	0.111	+/-	0.141	U	0.121	+/-	0.125	U	0.127	+/-	0.0879	U	0.0839	+/-	0.145	U
Uranium-238	3.43	+/-	1.48		0.434	+/-	0.985	U	0.96	+/-	1.31	U	0.309	+/-	1.39	U	0.0558	+/-	0.982	UUI	1.89	+/-	1.31	
Yttrium-88	0.00859	+/-	0.0216	U	0.0018	+/-	0.0191	U	-0.000631	+/-	0.0233	U	0.0171	+/-	0.0182	U	0.00127	+/-	0.0203	U	0.0155	+/-	0.0231	U
Zinc-65	0.0575	+/-	0.058	U	-0.0409	+/-	0.0362	U	0.0373	+/-	0.048	U	0.00674	+/-	0.0411	U	0.0229	+/-	0.0375	U	-0.00425	+/-	0.0541	U

Note: Sub-floor samples are shaded.

Table 12. Pit 1 Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																							
	BLT-P01-SO-04b				BLT-P01-SO-05c				BLT-P01-SO-05d				BLT-P01-SO-05e				BLT-P01-SO-05f				BLT-P01-SO-06g			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (9																								
Zirconium-95	0.0258	+/-	0.0423	U	-0.0143	+/-	0.0292	U	0.0195	+/-	0.0469	U	0.00475	+/-	0.0695	U	0.00906	+/-	0.0311	U	0.000903	+/-	0.0415	U
C-14 (EERF C-01 mod)	0	+/-	0.97	U		+/-			0.123	+/-	0.719	U	-0.346	+/-	0.734	U	-0.0714	+/-	0.686	U	-0.266	+/-	0.925	U
Cl-36 (GL-Rad-A033)	0.0302	+/-	0.0542	U		+/-			-0.00813	+/-	0.0426	U	0.0383	+/-	0.0603	U	0.0326	+/-	0.044	U	-0.00357	+/-	0.0741	U
Ni-63 (RESL Ni-1 mod)	-0.633	+/-	2.09	U	0.313	+/-	1.87	U	-0.187	+/-	2.13	U	0.677	+/-	1.93	U	0.47	+/-	1.83	U	-1.52	+/-	1.8	U
Sr-90 (905.0 mod)	-0.000332	+/-	0.0656	U	-0.00134	+/-	0.0367	U	-0.0108	+/-	0.0398	U	0.0344	+/-	0.0474	U	0.0582	+/-	0.047	U	-0.0239	+/-	0.0565	U
H-3 (906.0 mod)	0.174	+/-	0.496	U		+/-			0.622	+/-	0.601	U	0.523	+/-	0.614	U	-0.186	+/-	0.66	U	0.342	+/-	0.504	U

Note: Sub-floor samples are shaded.

Table 13. Pit 1 Groundwater - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	Sample Number											
		BLT-P01-SO-061		BLT-P01-TW-01f		BLT-P01-TW-01u		BLT-P01-TW-02u		BLT-P01-TW-06j		BLT-P01-MW-99	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/l)													
Acetone	5475	1.36	J	11		12.9		14.7		3.46	J	5.61	
Carbon disulfide	NA	8.98		1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
m,p-Xylenes	NA	0.25	U	0.507	J	0.25	U	0.25	U	0.25	U	0.671	BJ
tert-Butyl methyl ether	NA	0.25	U	0.254	BJ	0.47	BJ	0.25	U	0.25	U	0.25	U
Toluene	2271.1	0.25	U	1.14		0.25	U	0.25	U	0.25	U	2.55	
Xylenes (total)	212.6	0.25	U	0.507	J	0.25	U	0.25	U	0.25	U	0.671	BJ
RCRA SVOC (ug/l)													
1,1'-Biphenyl		2.83	U	2.91		2.86	U	2.87					
1,2,4-Trichlorobenzene		1.89	U	1.94		1.9	U	1.91					
1,2-Dichlorobenzene		1.89	U	1.94		1.9	U	1.91					
1,3-Dichlorobenzene		1.89	U	1.94		1.9	U	1.91					
1,4-Dichlorobenzene		1.89	U	1.94		1.9	U	1.91					
2,4,5-Trichlorophenol		0.943	U	0.971		0.952	U	0.957					
2,4,6-Trichlorophenol		1.89	U	1.94		1.9	U	1.91					
2,4-Dichlorophenol		1.89	U	1.94		1.9	U	1.91					
2,4-Dimethylphenol		1.89	U	1.94		1.9	U	1.91					
2,4-Dinitrophenol		9.43	U	9.71		9.52	U	9.57					
2,4-Dinitrotoluene		1.89	U	1.94		1.9	U	1.91					
2,6-Dinitrotoluene		1.89	U	1.94		1.9	U	1.91					
2-Chloronaphthalene		0.33	U	0.34		0.333	U	0.335					
2-Chlorophenol		1.89	U	1.94		1.9	U	1.91					
2-Methyl-4,6-dinitrophenol		2.83	U	2.91		2.86	U	2.87					
2-Methylnaphthalene		0.283	U	0.291		0.286	U	0.287					
2-Nitrophenol		1.89	U	1.94		1.9	U	1.91					
3,3'-Dichlorobenzidine		0.943	U	0.971		0.952	U	0.957					
4-Bromophenylphenylether		1.89	U	1.94		1.9	U	1.91					
4-Chloro-3-methylphenol		1.89	U	1.94		1.9	U	1.91					
4-Chloroaniline		1.89	U	1.94		1.9	U	1.91					
4-Chlorophenylphenylether		1.89	U	1.94		1.9	U	1.91					
4-Nitrophenol		1.89	U	1.94		1.9	U	1.91					
Acenaphthene		0.292	U	0.301		0.295	U	0.297					
Acenaphthylene		0.189	U	0.194		0.19	U	0.191					
alpha-Terpineol		2.83	U	2.91		2.86	U	2.87					
Anthracene		0.189	U	0.194		0.19	U	0.191					
Atrazine		1.89	U	1.94		1.9	U	1.91					
Benzaldehyde		2.83	U	2.91		2.86	U	2.87					
Benzo(a)anthracene		0.189	U	0.194		0.19	U	0.191					
Benzo(a)pyrene		0.189	U	0.194		0.19	U	0.191					
Benzo(b)fluoranthene		0.189	U	0.194		0.19	U	0.191					
Benzo(ghi)perylene		0.189	U	0.194		0.19	U	0.191					
Benzo(k)fluoranthene		0.189	U	0.194		0.19	U	0.191					
bis(2-Chloroethoxy)methane		2.83	U	2.91		2.86	U	2.87					
bis(2-Chloroethyl) ether		1.89	U	1.94		1.9	U	1.91					
bis(2-Chloroisopropyl)ether		1.89	U	1.94		1.9	U	1.91					
bis(2-Ethylhexyl)phthalate		1.89	U	1.94		1.9	U	1.91					
Butylbenzylphthalate		1.89	U	1.94		1.9	U	1.91					
Carbazole		0.189	U	0.194		0.19	U	0.191					
Chrysene		0.189	U	0.194		0.19	U	0.191					
Dibenzo(a,h)anthracene		0.189	U	0.194		0.19	U	0.191					
Dibenzofuran		1.89	U	1.94		1.9	U	1.91					
Diethylphthalate		1.89	U	1.94		1.9	U	1.91					
Dimethylphthalate		1.89	U	1.94		1.9	U	1.91					
Di-n-butylphthalate		1.89	U	1.94		1.9	U	1.91					
Di-n-octylphthalate		2.83	U	2.91		2.86	U	2.87					
Diphenylamine		2.83	U	2.91		2.86	U	2.87					
Fluoranthene		0.189	U	0.194		0.19	U	0.191					
Fluorene		0.189	U	0.194		0.19	U	0.191					
Hexachlorobenzene		1.89	U	1.94		1.9	U	1.91					
Hexachlorobutadiene		1.89	U	1.94		1.9	U	1.91					
Hexachlorocyclopentadiene		1.89	U	1.94		1.9	U	1.91					
Hexachloroethane		1.89	U	1.94		1.9	U	1.91					
Indeno(1,2,3-cd)pyrene		0.189	U	0.194		0.19	U	0.191					
Isophorone		1.89	U	1.94		1.9	U	1.91					

Table 13. Pit 1 Groundwater - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	Sample Number											
		BLT-P01-SO-061		BLT-P01-TW-01f		BLT-P01-TW-01u		BLT-P01-TW-02u		BLT-P01-TW-06j		BLT-P01-MW-99	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
m,p-Cresols		2.83	U	2.91		2.86	U	2.87					
m-Nitroaniline		1.89	U	1.94		1.9	U	1.91					
Naphthalene		0.283	U	0.291		0.286	U	0.287					
Nitrobenzene		2.83	U	2.91		2.86	U	2.87					
N-Nitrosodipropylamine		1.89	U	1.94		1.9	U	1.91					
o-Cresol		1.89	U	1.94		1.9	U	1.91					
o-Nitroaniline		1.89	U	1.94		1.9	U	1.91					
Pentachlorophenol		1.89	U	1.94		1.9	U	1.91					
Phenanthrene		0.189	U	0.194		0.19	U	0.191					
Phenol		0.943	U	0.971		0.952	U	0.957					
p-Nitroaniline		2.83	U	2.91		2.86	U	2.87					
Pyrene		0.283	U	0.291		0.286	U	0.287					
RCRA Metals (ug/l)													
Aluminum	NA	68	U	68	U	30300		250					
Arsenic	0.04	6	U	6	U	96.8	J	6	U				
Barium	7300	1.03	J	60.3		251		54.6					
Beryllium	73	1	U	1	U	1.01	J	1	U				
Calcium	NA	127		6730		9050		8000					
Chromium	109.5	1	U	1	U	355		3.95	J				
Cobalt	NA	1	U	3.22	J	6.92		3.8	J				
Copper	1460	3	U	3	U	262		3	U				
Iron	10950	70.1	J	2440		**133000**		5610					
Lead	NA	2.5	U	2.5	U	44.8	J	2.5	U				
Magnesium	NA	85	U	4570		6700		4800					
Manganese	730	2	U	100		308		166					
Nickel	730	1.38	J	12.5		62.9		22.8					
Potassium	NA	50	U	1940		5180		2250					
Sodium	NA	49	J	13300		12000		13600					
Vanadium	36.5	1	U	1	U	**340**		2.08	J				
Zinc	10950	10.9		56.6		315		83					
RCRA Pesticide (ug/l)													
4,4'-DDT	NA	0.00971	U	0.0121	JP	0.00952	U	0.0096	U				
TCL PCB (ug/l)													
Aroclor-1254	0.03	0.12		0.0323	U	0.0326	U	0.032	U				
Herbicides (ug/l)													
TOC (mg/l)													
Total Organic Carbon #1		0.33	U	1.48		1.5		1.53					
Total Organic Carbon #2		0.33	U	1.5		1.5		1.55					
Total Organic Carbon #3		0.33	U	1.45		1.48		1.53					
Total Organic Carbon #4		0.33	U	1.48		1.5		1.56					
Total Organic Carbon Average		0.33	U	1.48		1.5		1.55					
Cyanide (ug/l)													
Cyanide, Amenable to CL		1.5	U					1.5	U				
Cyanide, Total		1.5	U					1.5	U				
pH				6.13	H	6	H	5.67	H				

Table 14. Pit 1 Groundwater - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	MCL	Sample Number (All Results in pCi/L)							
		BLT-P01-SO-061		BLT-P01-TW-01f		BLT-P01-TW-01u		BLT-P01-TW-02u	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual
Gamma Scan (901.1mod/HASL 300)									
Actinium-228	NA	4.78	U	13.9	U	0	UUI	29.7	
Lead-212	NA	1.23	U	0	UUI	15.7		14.1	
Lead-214	NA	3.48	U	3.99	U	26.6		0	UUI
Potassium-40	NA	10.8	U	1.79	U	133		50.1	
Radium-228[1]	5	4.78	U	**13.9**	U	0	UUI	**29.7**	
Thorium-230[2]	15	3.78	U	7.22	U	**26**		0	UUI
H-3 (906.0 mod)				-97.1	U	-26	U	116	U

[1] Existing MCL is 5 pCi/L combined for Ra-226 and Ra-228

[2] Existing MCL is 15 pCi/L, with the concentration level combined for all alpha emitters, except radon and uranium

Table 15. Pit 1 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number											
	BLT-P01-SO-061		BLT-P01-TW-01f		BLT-P01-TW-01u		BLT-P01-TW-02u		BLT-P01-TW-06j		BLT-P01-MW-99	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/l)												
1,1,1,2-Tetrachloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,1-Trichloroethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,1,2,2-Tetrachloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,2-Trichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1-Dichloroethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,1-Dichloroethylene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,1-Dichloropropene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2,3-Trichlorobenzene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2,3-Trichloropropane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2,4-Trichlorobenzene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2,4-Trimethylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dibromo-3-chloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichloroethylene (total)	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2-Dichloropropane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,3,5-Trimethylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,3-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,3-Dichloropropane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,4-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
2,2-Dichloropropane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
2-Butanone	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
2-Chloro-1,3-butadiene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
2-Chloroethylvinyl ether	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
2-Chlorotoluene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
2-Hexanone	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
2-Nitropropane	1	U	1	U	1	U	1	U	1	U	1	U
4-Chlorotoluene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
4-Isopropyltoluene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
4-Methyl-2-pentanone	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
Acetone	1.36	J	11		12.9		14.7		3.46	J	5.61	
Acetonitrile	6.25	U	6.25	U	6.25	U	6.25	U	6.25	U	6.25	U
Acrolein	3	U	3	U	3	U	3	U	3	U	3	U
Acrylonitrile	1	U	1	U	1	U	1	U	1	U	1	U
Allyl chloride	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U
Benzene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Benzyl chloride	1	U	1	U	1	U	1	U	1	U	1	U
bis(2-Chloroisopropyl)ether	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Bromobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromochloromethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Bromodichloromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromoform	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide	8.98		1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
Carbon tetrachloride	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Chlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Chloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
cis-1,3-Dichloropropylene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
cis-1,4-Dichloro-2-butene	1	U	1	U	1	U	1	U	1	U	1	U
Cyclohexane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Cyclohexanone	15	U	15	U	15	U	15	U	15	U	15	U
Dibromochloromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Dibromomethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethyl ether	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Ethyl methacrylate	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Hexachlorobutadiene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Iodomethane	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U

Table 15. Pit 1 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number											
	BLT-P01-SO-061		BLT-P01-TW-01f		BLT-P01-TW-01u		BLT-P01-TW-02u		BLT-P01-TW-06j		BLT-P01-MW-99	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Isobutyl alcohol	12.5	U	12.5	U	12.5	U	12.5	U	12.5	U	12.5	U
Isopropylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
m,p-Xylenes	0.25	U	0.507	J	0.25	U	0.25	U	0.25	U	0.671	BJ
Methacrylonitrile	1	U	1	U	1	U	1	U	1	U	1	U
Methyl acetate	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
Methyl methacrylate	1	U	1	U	1	U	1	U	1	U	1	U
Methylcyclohexane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Methylene chloride	2	U	2	U	2	U	2	U	2	U	2	U
Naphthalene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
n-Butyl alcohol	13	U	13	U	13	U	13	U	13	U	13	U
n-Butylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
n-Propylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
o-Xylene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Pentachloroethane	1	U	1	U	1	U	1	U	1	U	1	U
Propionitrile	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
sec-Butylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Styrene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
tert-Butyl methyl ether	0.25	U	0.254	BJ	0.47	BJ	0.25	U	0.25	U	0.25	U
tert-Butylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Tetrachloroethylene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Toluene	0.25	U	1.14		0.25	U	0.25	U	0.25	U	2.55	
trans-1,2-Dichloroethylene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
trans-1,3-Dichloropropylene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
trans-1,4-Dichloro-2-butene	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethylene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Trichlorofluoromethane	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U
Trichlorotrifluoroethane	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl acetate	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylenes (total)	0.25	U	0.507	J	0.25	U	0.25	U	0.25	U	0.671	BJ
RCRA SVOC (ug/l)												
1,1'-Biphenyl	2.83	U	2.91		2.86	U	2.87					
1,2,4-Trichlorobenzene	1.89	U	1.94		1.9	U	1.91					
1,2-Dichlorobenzene	1.89	U	1.94		1.9	U	1.91					
1,3-Dichlorobenzene	1.89	U	1.94		1.9	U	1.91					
1,4-Dichlorobenzene	1.89	U	1.94		1.9	U	1.91					
2,4,5-Trichlorophenol	0.943	U	0.971		0.952	U	0.957					
2,4,6-Trichlorophenol	1.89	U	1.94		1.9	U	1.91					
2,4-Dichlorophenol	1.89	U	1.94		1.9	U	1.91					
2,4-Dimethylphenol	1.89	U	1.94		1.9	U	1.91					
2,4-Dinitrophenol	9.43	U	9.71		9.52	U	9.57					
2,4-Dinitrotoluene	1.89	U	1.94		1.9	U	1.91					
2,6-Dinitrotoluene	1.89	U	1.94		1.9	U	1.91					
2-Chloronaphthalene	0.33	U	0.34		0.333	U	0.335					
2-Chlorophenol	1.89	U	1.94		1.9	U	1.91					
2-Methyl-4,6-dinitrophenol	2.83	U	2.91		2.86	U	2.87					
2-Methylnaphthalene	0.283	U	0.291		0.286	U	0.287					
2-Nitrophenol	1.89	U	1.94		1.9	U	1.91					
3,3'-Dichlorobenzidine	0.943	U	0.971		0.952	U	0.957					
4-Bromophenylphenylether	1.89	U	1.94		1.9	U	1.91					
4-Chloro-3-methylphenol	1.89	U	1.94		1.9	U	1.91					
4-Chloroaniline	1.89	U	1.94		1.9	U	1.91					
4-Chlorophenylphenylether	1.89	U	1.94		1.9	U	1.91					
4-Nitrophenol	1.89	U	1.94		1.9	U	1.91					
Acenaphthene	0.292	U	0.301		0.295	U	0.297					
Acenaphthylene	0.189	U	0.194		0.19	U	0.191					
alpha-Terpineol	2.83	U	2.91		2.86	U	2.87					
Anthracene	0.189	U	0.194		0.19	U	0.191					
Atrazine	1.89	U	1.94		1.9	U	1.91					
Benzaldehyde	2.83	U	2.91		2.86	U	2.87					
Benzo(a)anthracene	0.189	U	0.194		0.19	U	0.191					
Benzo(a)pyrene	0.189	U	0.194		0.19	U	0.191					
Benzo(b)fluoranthene	0.189	U	0.194		0.19	U	0.191					
Benzo(ghi)perylene	0.189	U	0.194		0.19	U	0.191					

Table 15. Pit 1 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number											
	BLT-P01-SO-061		BLT-P01-TW-01f		BLT-P01-TW-01u		BLT-P01-TW-02u		BLT-P01-TW-06j		BLT-P01-MW-99	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Benzo(k)fluoranthene	0.189	U	0.194		0.19	U	0.191					
bis(2-Chloroethoxy)methane	2.83	U	2.91		2.86	U	2.87					
bis(2-Chloroethyl) ether	1.89	U	1.94		1.9	U	1.91					
bis(2-Chloroisopropyl)ether	1.89	U	1.94		1.9	U	1.91					
bis(2-Ethylhexyl)phthalate	1.89	U	1.94		1.9	U	1.91					
Butylbenzylphthalate	1.89	U	1.94		1.9	U	1.91					
Carbazole	0.189	U	0.194		0.19	U	0.191					
Chrysene	0.189	U	0.194		0.19	U	0.191					
Dibenzo(a,h)anthracene	0.189	U	0.194		0.19	U	0.191					
Dibenzofuran	1.89	U	1.94		1.9	U	1.91					
Diethylphthalate	1.89	U	1.94		1.9	U	1.91					
Dimethylphthalate	1.89	U	1.94		1.9	U	1.91					
Di-n-butylphthalate	1.89	U	1.94		1.9	U	1.91					
Di-n-octylphthalate	2.83	U	2.91		2.86	U	2.87					
Diphenylamine	2.83	U	2.91		2.86	U	2.87					
Fluoranthene	0.189	U	0.194		0.19	U	0.191					
Fluorene	0.189	U	0.194		0.19	U	0.191					
Hexachlorobenzene	1.89	U	1.94		1.9	U	1.91					
Hexachlorobutadiene	1.89	U	1.94		1.9	U	1.91					
Hexachlorocyclopentadiene	1.89	U	1.94		1.9	U	1.91					
Hexachloroethane	1.89	U	1.94		1.9	U	1.91					
Indeno(1,2,3-cd)pyrene	0.189	U	0.194		0.19	U	0.191					
Isophorone	1.89	U	1.94		1.9	U	1.91					
m,p-Cresols	2.83	U	2.91		2.86	U	2.87					
m-Nitroaniline	1.89	U	1.94		1.9	U	1.91					
Naphthalene	0.283	U	0.291		0.286	U	0.287					
Nitrobenzene	2.83	U	2.91		2.86	U	2.87					
N-Nitrosodipropylamine	1.89	U	1.94		1.9	U	1.91					
o-Cresol	1.89	U	1.94		1.9	U	1.91					
o-Nitroaniline	1.89	U	1.94		1.9	U	1.91					
Pentachlorophenol	1.89	U	1.94		1.9	U	1.91					
Phenanthrene	0.189	U	0.194		0.19	U	0.191					
Phenol	0.943	U	0.971		0.952	U	0.957					
p-Nitroaniline	2.83	U	2.91		2.86	U	2.87					
Pyrene	0.283	U	0.291		0.286	U	0.287					
RCRA Metals (ug/l)												
Aluminum	68	U	68	U	30300		250					
Antimony	4	U	4	U	40	U	4	U				
Arsenic	6	U	6	U	96.8	J	6	U				
Barium	1.03	J	60.3		251		54.6					
Beryllium	1	U	1	U	1.01	J	1	U				
Cadmium	1	U	1	U	10	U	1	U				
Calcium	127		6730		9050		8000					
Chromium	1	U	1	U	355		3.95	J				
Cobalt	1	U	3.22	J	6.92		3.8	J				
Copper	3	U	3	U	262		3	U				
Iron	70.1	J	2440		133000		5610					
Lead	2.5	U	2.5	U	44.8	J	2.5	U				
Magnesium	85	U	4570		6700		4800					
Manganese	2	U	100		308		166					
Mercury	0.05	U	0.05	U	0.05	U	0.05	U				
Nickel	1.38	J	12.5		62.9		22.8					
Potassium	50	U	1940		5180		2250					
Selenium	6	U	6	U	60	U	6	U				
Silver	1	U	1	U	10	U	1	U				
Sodium	49	J	13300		12000		13600					
Thallium	5	U	5	U	5	U	5	U				
Vanadium	1	U	1	U	340		2.08	J				
Zinc	10.9		56.6		315		83					
RCRA Pesticide (ug/l)												
4,4'-DDD	0.00485	U	0.0049	U	0.00476	U	0.0048	U				
4,4'-DDE	0.00485	U	0.0049	U	0.00476	U	0.0048	U				
4,4'-DDT	0.00971	U	0.0121	JP	0.00952	U	0.0096	U				
Aldrin	0.00485	U	0.0049	U	0.00476	U	0.0048	U				

Table 15. Pit 1 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number											
	BLT-P01-SO-061		BLT-P01-TW-01f		BLT-P01-TW-01u		BLT-P01-TW-02u		BLT-P01-TW-06j		BLT-P01-MW-99	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
alpha-BHC	0.00485	U	0.0049	U	0.00476	U	0.0048	U				
beta-BHC	0.0082	U	0.00828	U	0.00805	U	0.0081	U				
Chlordane (tech.)	0.0743	U	0.075	U	0.0729	U	0.0736	U				
delta-BHC	0.00485	U	0.0049	U	0.00476	U	0.0048	U				
Dieldrin	0.00485	U	0.0049	U	0.00476	U	0.0048	U				
Endosulfan I	0.00485	U	0.0049	U	0.00476	U	0.0048	U				
Endosulfan II	0.00485	U	0.0049	U	0.00476	U	0.0048	U				
Endosulfan sulfate	0.00485	U	0.0049	U	0.00476	U	0.0048	U				
Endrin	0.00485	U	0.0049	U	0.00476	U	0.0048	U				
Endrin aldehyde	0.00485	U	0.0049	U	0.00476	U	0.0048	U				
Endrin ketone	0.0122	U	0.0123	U	0.012	U	0.0121	U				
gamma-BHC (Lindane)	0.00485	U	0.0049	U	0.00476	U	0.0048	U				
Heptachlor	0.00636	U	0.00642	U	0.00624	U	0.0063	U				
Heptachlor epoxide	0.00485	U	0.0049	U	0.00476	U	0.0048	U				
Methoxychlor	0.0485	U	0.049	U	0.0476	U	0.0481	U				
Toxaphene	0.146	U	0.147	U	0.143	U	0.144	U				
TCL PCB (ug/l)												
Aroclor-1016	0.0323	U	0.0323	U	0.0326	U	0.032	U				
Aroclor-1221	0.0323	U	0.0323	U	0.0326	U	0.032	U				
Aroclor-1232	0.0323	U	0.0323	U	0.0326	U	0.032	U				
Aroclor-1242	0.0323	U	0.0323	U	0.0326	U	0.032	U				
Aroclor-1248	0.0323	U	0.0323	U	0.0326	U	0.032	U				
Aroclor-1254	0.12		0.0323	U	0.0326	U	0.032	U				
Aroclor-1260	0.0323	U	0.0323	U	0.0326	U	0.032	U				
Herbicides (ug/l)												
2,4,5-T	0.0783	U	0.0892	U	0.0787	U	0.0822	U				
2,4,5-TP	0.0783	U	0.0892	U	0.0787	U	0.0822	U				
2,4-D	0.0783	U	0.0892	U	0.0787	U	0.0822	U				
TOC (mg/l)												
Total Organic Carbon #1	0.33	U	1.48		1.5		1.53					
Total Organic Carbon #2	0.33	U	1.5		1.5		1.55					
Total Organic Carbon #3	0.33	U	1.45		1.48		1.53					
Total Organic Carbon #4	0.33	U	1.48		1.5		1.56					
Total Organic Carbon Average	0.33	U	1.48		1.5		1.55					
Cyanide (ug/l)												
Cyanide, Amenable to CL	1.5	U					1.5	U				
Cyanide, Total	1.5	U					1.5	U				
pH			6.13	H	6	H	5.67	H				

Table 16. Pit 1 Groundwater - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All Results in pCi/L)															
	BLT-P01-SO-061				BLT-P01-TW-01f				BLT-P01-TW-01u				BLT-P01-TW-02u			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (901.1mod/HASL 300)																
Actinium-228	4.78	+/-	10.3	U	13.9	+/-	9.89	U	0	+/-	22.6	UUI	29.7	+/-	14.1	
Americium-241	-16.3	+/-	25.3	U	2.46	+/-	4.46	U	-30.7	+/-	20.8	U	-0.0487	+/-	19	U
Antimony-124	-6.36	+/-	9.26	U	1.4	+/-	5.31	U	-0.428	+/-	6.15	U	-3.36	+/-	5.29	U
Antimony-125	7.4	+/-	8.49	U	-4.75	+/-	5.82	U	0.6	+/-	6.52	U	-3.95	+/-	5.11	U
Barium-133	1.91	+/-	3.34	U	-1.16	+/-	2.89	U	0.114	+/-	3.52	U	1.56	+/-	2.97	U
Barium-140	7.18	+/-	30.9	U	-8.75	+/-	18.8	U	-1.95	+/-	23.1	U	-4.19	+/-	18.6	U
Beryllium-7	0.837	+/-	30.7	U	1.1	+/-	20.7	U	-11	+/-	24.7	U	-1.68	+/-	21	U
Bismuth-212	28.5	+/-	23.3	U	8.71	+/-	18.9	U	2.7	+/-	20.4	U	11.5	+/-	18.8	U
Bismuth-214	3.78	+/-	7.89	U	7.22	+/-	11.6	U	0	+/-	10.9	UUI	0	+/-	9.5	UUI
Cerium-139	-2.23	+/-	3.45	U	0.149	+/-	1.85	U	-2.45	+/-	2.65	U	0.208	+/-	2.06	U
Cerium-141	0.889	+/-	8.17	U	-1.93	+/-	3.82	U	1.42	+/-	5.72	U	1.99	+/-	4.56	U
Cerium-144	2.27	+/-	24.7	U	-6.89	+/-	12	U	-7	+/-	18	U	10.4	+/-	14.6	U
Cesium-134	-0.769	+/-	3.53	U	3.35	+/-	2.85	U	1.03	+/-	2.82	U	-0.0224	+/-	2.27	U
Cesium-136	0.448	+/-	9.25	U	-2.09	+/-	7.33	U	5.36	+/-	7.88	U	3.63	+/-	6.07	U
Cesium-137	2.56	+/-	2.49	U	0.966	+/-	2.25	U	1.64	+/-	2.51	U	-0.576	+/-	2.16	U
Chromium-51	11.7	+/-	36.8	U	1.86	+/-	23.7	U	13	+/-	29.2	U	-23.9	+/-	24.1	U
Cobalt-56	2.24	+/-	3.18	U	-0.77	+/-	2.83	U	0.547	+/-	2.72	U	-0.687	+/-	2.27	U
Cobalt-57	3.91	+/-	3.03	U	-0.856	+/-	1.51	U	2.07	+/-	2.31	U	-0.742	+/-	1.86	U
Cobalt-58	2.67	+/-	4.41	U	1.5	+/-	2.68	U	1.12	+/-	3.3	U	-1.6	+/-	2.03	U
Cobalt-60	2.51	+/-	3.06	U	-0.428	+/-	2.32	U	0.282	+/-	2.2	U	0.504	+/-	2.24	U
Europium-152	4.86	+/-	8.8	U	-2.28	+/-	6.83	U	-0.0023	+/-	7.08	U	0.417	+/-	5.65	U
Europium-154	6.85	+/-	39.7	U	0.596	+/-	7.25	U	8.56	+/-	7.02	U	-1.54	+/-	6.51	U
Europium-155	-9.48	+/-	14.6	U	-0.759	+/-	6.08	U	4.12	+/-	9.49	U	5.17	+/-	8.13	U
Iridium-192	-0.583	+/-	3.41	U	-0.97	+/-	2.24	U	-1.68	+/-	2.6	U	2.31	+/-	2.25	U
Iron-59	-6.4	+/-	8.65	U	4.89	+/-	9.43	U	-1.35	+/-	6.55	U	-2.45	+/-	4.46	U
Lead-210	-261	+/-	627	U	33.2	+/-	76.1	U	-34.9	+/-	526	U	390	+/-	692	U
Lead-212	1.23	+/-	8.39	U	0	+/-	3.8	UUI	15.7	+/-	10.4		14.1	+/-	5.75	
Lead-214	3.48	+/-	8.76	U	3.99	+/-	4.71	U	26.6	+/-	9.94		0	+/-	9.47	UUI
Manganese-54	1.06	+/-	3.17	U	-0.456	+/-	2.75	U	2.42	+/-	6.66	U	-0.361	+/-	1.98	U
Mercury-203	0.102	+/-	3.95	U	-1.83	+/-	2.54	U	-0.609	+/-	3.37	U	0.27	+/-	2.77	U
Neodymium-147	-18	+/-	71.1	U	21.4	+/-	41.1	U	27.7	+/-	50.1	U	12.8	+/-	39.7	U
Neptunium-239	-13.3	+/-	25.3	U	-2.4	+/-	11.4	U	-20	+/-	17.4	U	-6	+/-	13.6	U
Niobium-94	-0.669	+/-	2.98	U	-0.401	+/-	2.42	U	-0.0182	+/-	2.33	U	-0.596	+/-	1.92	U
Niobium-95	1.89	+/-	4.43	U	3.07	+/-	3.24	U	1.01	+/-	3.38	U	1.57	+/-	2.9	U
Potassium-40	10.8	+/-	35.4	U	1.79	+/-	29.8	U	133	+/-	48.9		50.1	+/-	45.3	
Promethium-144	-2.94	+/-	2.72	U	0.753	+/-	2.42	U	-2.02	+/-	2.38	U	2.02	+/-	2.08	U
Promethium-146	1.64	+/-	3.44	U	-0.069	+/-	2.85	U	4.26	+/-	3.18	U	1.35	+/-	2.65	U
Radium-228	4.78	+/-	10.3	U	13.9	+/-	9.89	U	0	+/-	22.6	UUI	29.7	+/-	14.1	
Ruthenium-106	-14.2	+/-	27.8	U	6.17	+/-	27.1	U	0.655	+/-	21.6	U	-14.8	+/-	22.7	U
Silver-110m	-1.07	+/-	2.78	U	0.626	+/-	2.55	U	-1.31	+/-	2.32	U	-0.0809	+/-	1.94	U
Sodium-22	2.46	+/-	14.2	U	0.214	+/-	2.6	U	3.08	+/-	2.51	U	-0.55	+/-	2.33	U
Thallium-208	-0.0575	+/-	2.77	U	2.27	+/-	2.8	U	0	+/-	5.09	UUI	0	+/-	4.6	UUI
Thorium-230	3.78	+/-	7.89	U	7.22	+/-	11.6	U	26	+/-	10.9		0	+/-	9.5	UUI
Thorium-234	122	+/-	194	U	61.3	+/-	70.2	U	38.4	+/-	158	U	113	+/-	190	U
Tin-113	2.63	+/-	3.86	U	0.261	+/-	3.07	U	1.44	+/-	3.26	U	1.52	+/-	2.66	U
Uranium-235	-1.15	+/-	26.3	U	5.94	+/-	13.3	U	7.87	+/-	20	U	7.86	+/-	14.2	U
Uranium-238	122	+/-	194	U	61.3	+/-	70.2	U	38.4	+/-	158	U	113	+/-	190	U
Yttrium-88	0.817	+/-	2.8	U	1.44	+/-	2.35	U	0.71	+/-	2.84	U	1.83	+/-	2.62	U
Zinc-65	-1.27	+/-	5.63	U	-3.26	+/-	5.84	U	1.49	+/-	5.95	U	3.27	+/-	4.59	U
Zirconium-95	-4.83	+/-	6.3	U	2.09	+/-	5.37	U	5.57	+/-	5.08	U	0.502	+/-	3.99	U
C-14 (EERF C-01 mod)		+/-			10.1	+/-	17.9	U	-0.508	+/-	17.7	U	6.93	+/-	18.1	U
Cl-36 (GL-Rad-A033)	1.38	+/-	7.39	U	4.65	+/-	5.73	U	-0.867	+/-	6.01	U	-3.64	+/-	6.16	U
Ni-63 (RESL Ni-1 mod)	4.69	+/-	18.8	U	-0.963	+/-	19.2	U	-3.17	+/-	19.4	U	-18.7	+/-	19.5	U
Sr-90 (905.0 mod)	0.146	+/-	0.542	U	0.189	+/-	0.478	U	-0.108	+/-	0.475	U	0.116	+/-	0.448	U
H-3 (906.0 mod)		+/-			-97.1	+/-	223	U	-26	+/-	230	U	116	+/-	255	U

Table 17. Pit 1 Waste Solid - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	TCLP	UTS	Sample Number											
			BLT-P01-WS-01		BLT-P01-WS-02		BLT-P01-WS-03		BLT-P01-WS-04		BLT-P01-WS-05		BLT-P01-WS-06	
			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
TCLP VOC (mg/l)														
Acetone	NA	0.28	0.0446	J	0.0223	J	0.0184	J	0.0231	J	0.0236	J	0.0212	J
Carbon disulfide	NA	3.8	0.0125	U	0.0125	U	0.0134	J	0.162		0.0125	U	0.016	J
Xylenes (total)	NA	0.32	0.00371	J	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
TCLP SVOC (mg/l)														
TCLP Metals (mg/l)														
Barium	100	1.2	0.175		0.339		0.202		0.174		0.364		0.204	
Chromium	5	2.77	0.0113	J	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Lead	5	0.69	0.025	U	0.251		0.025	U	0.025	U	0.025	U	0.025	U
Mercury	0.2	0.15	0.0005	U	0.000991	J	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Silver	5	0.43	0.01	U	0.0205	J	0.01	U	0.01	U	0.01	U	0.01	U
RCRA PCB (ug/kg)														
TCLP Pesticides (mg/l)														
Aroclor-1260	NA	0.1	1.16	U	1.21	U	1.21	U	***2.2***	J	***37.7***		***1.2***	U
pH/Corrosivity	--		4.85	H	5.03	H	5	H	5.12	H	6.65	H	4.66	H
Reactive Sulfide (mg/kg)	--		55.6	J										
Reactive Cyanide (ug/kg)	--		14.9	J	8.08	U	8	U	8.02	U	7.95	U	8.08	U
NA = Not Available; bolded/italicized results exceed the Universal Treatment Standard														

Table 18. Pit 1 Waste Solid - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Sample Number (All results in pCi/g)													
Parameter	**NRC Screening Value[1]**	**BLT-P01-WS-01**		**BLT-P01-WS-02**		**BLT-P01-WS-03**		**BLT-P01-WS-04**		**BLT-P01-WS-05**		**BLT-P01-WS-06**	
		Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Gamma Scan (901.1mod/HASL 300)													
Actinium-228	NA	0.65		0.58		0.65		0.60		0.73		0.87	
Bismuth-212	NA	0.77		0.43		0.56		0.64		0.43		0.82	
Bismuth-214	NA	0.87		1.52		1.39		1.29		1.14		1.66	
Cesium-137	11	0.01	U	0.00	U	-0.01	U	0.00	U	0.14		0.01	U
Cobalt-60	3.8	0.02	U	0.01	U	-0.01	U	0.03	U	0.59		0.00	U
Europium-152	8.7	0.04	U	0.06	U	0.03	U	0.00	U	1.24		0.00	U
Lead-210	0.9	**14.30**		1.37	U	1.91	U	1.42	U	-0.08	U	0.58	U
Lead-212	NA	0.88		0.66		0.90		0.75		0.61		0.92	
Lead-214	NA	1.11		1.47		1.63		1.48		1.27		1.95	
Potassium-40	NA	5.55		3.48		4.71		3.68		5.19		4.31	
Radium-226	0.7	**0.87**		**1.52**		**1.39**		**1.29**		**1.14**		**1.66**	
Radium-228	NA	0.65		0.58		0.65		0.60		0.73		0.87	
Thallium-208	NA	0.20		0.25		0.24		0.26		0.17		0.35	
Thorium-230	1.8	0.87		1.52		1.39		1.29		1.14		1.66	
Thorium-234	14	2.39		4.13		3.39		6.69		2.45		4.55	
Uranium-235	8	0.13	U	0.38		0.15	U	0.35		0.26		0.36	
Uranium-238	14	2.39		4.13		3.39		6.69		2.45		4.55	
C-14 (EERF C-01 mod)	12	0.14	U	0.39	U	0.63	U	0.45	U	**27.40**		0.83	U
H-3 (906.0 mod)	110	0.22	U	0.27	U	0.50	U	0.44	U	2.09		0.42	U
1 From NUREG 1757, Appendix B, Table B-2													
NA = Not available for this radionuclide													
Concentration that exceeds NRC screening value was highlighted.													

Table 19. Pit 1 Waste Solid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number											
	BLT-P01-WS-01		BLT-P01-WS-02		BLT-P01-WS-03		BLT-P01-WS-04		BLT-P01-WS-05		BLT-P01-WS-06	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
TCLP VOC (mg/l)												
1,1,1-Trichloroethane	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U
1,1,2,2-Tetrachloroethane	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
1,1,2-Trichloroethane	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
1,1-Dichloroethane	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U
1,1-Dichloroethylene	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U
1,2-Dichloroethane	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
1,2-Dichloropropane	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
1,4-Dichlorobenzene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
2-Butanone	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U
2-Hexanone	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U
4-Methyl-2-pentanone	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U
Acetone	0.0446	J	0.0223	J	0.0184	J	0.0231	J	0.0236	J	0.0212	J
Benzene	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U
Bromodichloromethane	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Bromoform	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Bromomethane	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
Carbon disulfide	0.0125	U	0.0125	U	0.0134	J	0.162		0.0125	U	0.016	J
Carbon tetrachloride	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Chlorobenzene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Chloroethane	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
Chloroform	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Chloromethane	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
cis-1,3-Dichloropropylene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Dibromochloromethane	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Ethylbenzene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Methylene chloride	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Styrene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Tetrachloroethylene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Toluene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
trans-1,3-Dichloropropylene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Trichloroethylene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Vinyl acetate	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U
Vinyl chloride	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
Xylenes (total)	0.00371	J	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
TCLP SVOC (mg/l)												
1,4-Dichlorobenzene	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
2,4,5-Trichlorophenol	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
2,4,6-Trichlorophenol	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
2,4-Dinitrotoluene	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Hexachlorobenzene	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Hexachlorobutadiene	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U

Table 19. Pit 1 Waste Solid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number											
	BLT-P01-WS-01		BLT-P01-WS-02		BLT-P01-WS-03		BLT-P01-WS-04		BLT-P01-WS-05		BLT-P01-WS-06	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Hexachloroethane	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
m,p-Cresols	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U
Nitrobenzene	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U
o-Cresol	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Pentachlorophenol	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Pyridine	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
TCLP Metals (mg/l)												
Arsenic	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U
Barium	0.175		0.339		0.202		0.174		0.364		0.204	
Cadmium	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Chromium	0.0113	J	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Lead	0.025	U	0.251		0.025	U	0.025	U	0.025	U	0.025	U
Mercury	0.0005	U	0.000991	J	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Selenium	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U
Silver	0.01	U	0.0205	J	0.01	U	0.01	U	0.01	U	0.01	U
RCRA PCB (ug/kg)												
Chlordane (tech.)	0.000765	U	0.000765	U	0.000765	U	0.000765	U	0.000765	U	0.000765	U
Endrin	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
gamma-BHC (Lindane)	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
Heptachlor	0.000066	U	0.000066	U	0.000066	U	0.000066	U	0.000066	U	0.000066	U
Heptachlor epoxide	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
Methoxychlor	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Toxaphene	0.0015	U	0.0015	U	0.0015	U	0.0015	U	0.0015	U	0.0015	U
TCLP Pesticides (mg/l)												
Aroclor-1016	1.16	U	1.21	U	1.21	U	1.2	U	3.63	U	1.2	U
Aroclor-1221	1.16	U	1.21	U	1.21	U	1.2	U	3.63	U	1.2	U
Aroclor-1232	1.16	U	1.21	U	1.21	U	1.2	U	3.63	U	1.2	U
Aroclor-1242	1.16	U	1.21	U	1.21	U	1.2	U	3.63	U	1.2	U
Aroclor-1248	1.16	U	1.21	U	1.21	U	1.2	U	3.63	U	1.2	U
Aroclor-1254	1.16	U	1.21	U	1.21	U	1.2	U	3.63	U	1.2	U
Aroclor-1260	1.16	U	1.21	U	1.21	U	2.2	J	37.7		1.2	U
pH/Corrosivity	4.85	H	5.03	H	5	H	5.12	H	6.65	H	4.66	H
Reactive Sulfide (mg/kg)	55.6	J										
Reactive Cyanide (ug/kg)	14.9	J	8.08	U	8	U	8.02	U	7.95	U	8.08	U

Table 20. Pit 1 Waste Solid - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																	
	BLT-P01-WS-01			BLT-P01-WS-02			BLT-P01-WS-03			BLT-P01-WS-04			BLT-P01-WS-05			BLT-P01-WS-06		
	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual
Gamma Scan (901.1mod/HASL 300)																		
Actinium-228	0.65	0.21		0.58	0.15		0.65	0.17		0.60	0.15		0.73	0.21		0.87	0.19	
Americium-241	0.00	0.15	U	0.10	0.11	U	-0.15	0.11	U	-0.01	0.14	U	0.08	0.09	U	-0.04	0.17	U
Antimony-124	0.35	0.19	U	0.19	0.17	U	0.00	0.16	U	0.05	0.14	U	0.04	0.14	U	-0.21	0.21	U
Antimony-125	-0.01	0.06	U	0.01	0.05	U	-0.03	0.06	U	0.03	0.05	U	-0.04	0.06	U	-0.04	0.07	U
Barium-133	-0.08	0.03	U	0.01	0.03	U	-0.01	0.03	U	0.01	0.03	U	-0.01	0.03	U	-0.01	0.04	U
Barium-140	0.00	41.10	UI	-16.20	30.70	U	-6.17	38.30	U	-4.13	36.70	U	-4.94	41.90	U	0.00	40.90	UI
Beryllium-7	0.52	0.78	U	-0.52	0.62	U	-0.10	0.74	U	-0.10	0.63	U	0.14	0.73	U	-0.04	0.92	U
Bismuth-212	0.77	0.38		0.43	0.25		0.56	0.32		0.64	0.29		0.43	0.29		0.82	0.35	
Bismuth-214	0.87	0.14		1.52	0.12		1.39	0.14		1.29	0.11		1.14	0.11		1.66	0.13	
Cerium-139	0.00	0.03	U	-0.01	0.03	U	-0.01	0.04	U	0.03	0.04	U	-0.01	0.03	U	0.01	0.04	U
Cerium-141	0.28	0.42	U	0.00	0.45	UI	0.28	0.40	U	0.00	0.44	UI	0.51	0.41	U	0.34	0.35	U
Cerium-144	0.01	0.15	U	-0.07	0.14	U	0.02	0.16	U	-0.02	0.15	U	0.14	0.16	U	-0.02	0.18	U
Cesium-134	0.00	0.03	U	0.03	0.03	U	0.06	0.04	U	0.04	0.03	U	0.04	0.03	U	0.05	0.04	U
Cesium-136	-3.62	16.10	U	-2.81	10.30	U	0.00	12.70	UI	0.00	11.10	UI	-8.47	16.40	U	-5.10	18.60	U
Cesium-137	0.01	0.04	U	0.00	0.02	U	-0.01	0.02	U	0.00	0.02	U	0.14	0.05		0.01	0.03	U
Chromium-51	1.23	3.41	U	-0.03	2.69	U	-2.22	3.02	U	2.43	2.51	U	1.19	3.12	U	0.23	3.51	U
Cobalt-56	-0.02	0.07	U	-0.02	0.06	U	0.04	0.06	U	-0.04	0.06	U	0.10	0.06	U	0.05	0.08	U
Cobalt-57	0.01	0.02	U	0.00	0.02	U	0.02	0.02	U	0.00	0.02	U	0.00	0.04	UI	0.01	0.02	U
Cobalt-58	0.04	0.07	U	-0.06	0.05	U	-0.07	0.07	U	0.04	0.06	U	0.00	0.08	U	-0.01	0.07	U
Cobalt-60	0.02	0.03	U	0.01	0.02	U	-0.01	0.02	U	0.03	0.02	U	0.59	0.08		0.00	0.03	U
Europium-152	0.04	0.06	U	0.06	0.05	U	0.03	0.07	U	0.00	0.06	U	1.24	0.14		0.00	0.08	U
Europium-154	-0.02	0.08	U	0.03	0.05	U	-0.06	0.08	U	0.06	0.06	U	-0.06	0.07	U	0.01	0.09	U
Europium-155	0.05	0.07	U	0.03	0.06	U	0.05	0.07	U	0.05	0.09	U	0.08	0.07	U	-0.02	0.08	U
Iridium-192	0.02	0.06	U	-0.02	0.05	U	0.06	0.06	U	0.00	0.05	U	-0.01	0.06	U	0.01	0.07	U
Iron-59	-0.11	0.33	U	0.15	0.22	U	0.09	0.24	U	-0.13	0.20	U	0.10	0.31	U	0.04	0.28	U
Lead-210	14.30	11.90		1.37	2.36	U	1.91	2.67	U	1.42	5.78	U	-0.08	2.73	U	0.58	3.54	U
Lead-212	0.88	0.11		0.66	0.07		0.90	0.08		0.75	0.07		0.61	0.07		0.92	0.08	
Lead-214	1.11	0.14		1.47	0.11		1.63	0.14		1.48	0.11		1.27	0.11		1.95	0.14	
Manganese-54	0.01	0.03	U	0.00	0.02	U	0.01	0.03	U	-0.02	0.03	U	-0.02	0.03	U	0.01	0.03	U
Mercury-203	0.11	0.12	U	0.10	0.10	U	0.13	0.12	U	0.08	0.11	U	-0.04	0.11	U	0.01	0.14	U
Neodymium-147	0.00	238.00	UI	-34.2	172.00	U	-172.0	200.00	U	-119.0	192.00	U	-99.5	231.00	U	-111.0	224.00	U
Neptunium-239	-0.08	0.11	U	-0.06	0.10	U	-0.03	0.12	U	-0.05	0.12	U	-0.04	0.12	U	0.01	0.14	U
Niobium-94	-0.01	0.02	U	-0.01	0.02	U	0.01	0.02	U	0.01	0.02	U	0.01	0.02	U	0.00	0.02	U
Niobium-95	0.00	0.44	UI	0.12	0.18	U	0.27	0.28	U	0.39	0.22	U	0.19	0.29	U	0.38	0.33	U
Potassium-40	5.55	0.83		3.48	0.61		4.71	0.75		3.68	0.59		5.19	0.70		4.31	0.75	
Promethium-144	0.00	0.03	U	0.00	0.02	U	-0.01	0.03	U	0.00	0.02	U	0.00	0.03	U	-0.01	0.03	U
Promethium-146	0.01	0.03	U	0.00	0.02	U	0.02	0.03	U	0.00	0.02	U	-0.03	0.03	U	0.00	0.03	U
Radium-226	0.87	0.14		1.52	0.12		1.39	0.14		1.29	0.11		1.14	0.11		1.66	0.13	
Radium-228	0.65	0.21		0.58	0.15		0.65	0.17		0.60	0.15		0.73	0.21		0.87	0.19	

Table 20. Pit 1 Waste Solid - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	BLT-P01-WS-01			BLT-P01-WS-02			BLT-P01-WS-03			BLT-P01-WS-04			BLT-P01-WS-05			BLT-P01-WS-06		
	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual
Ruthenium-106	-0.09	0.25	U	0.00	0.18	U	0.05	0.23	U	-0.04	0.19	U	-0.10	0.24	U	-0.07	0.27	U
Silver-110m	0.03	0.04	U	-0.02	0.02	U	-0.02	0.02	U	0.00	0.02	U	0.00	0.03	U	-0.03	0.03	U
Sodium-22	-0.01	0.03	U	0.01	0.02	U	-0.02	0.03	U	0.02	0.02	U	-0.02	0.03	U	0.00	0.03	U
Thallium-208	0.20	0.05		0.25	0.04		0.24	0.05		0.26	0.04		0.17	0.05		0.35	0.06	
Thorium-230	0.87	0.14		1.52	0.12		1.39	0.14		1.29	0.11		1.14	0.11		1.66	0.13	
Thorium-234	2.39	2.20		4.13	1.30		3.39	1.25		6.69	2.01		2.45	1.21		4.55	1.63	
Tin-113	-0.07	0.06	U	-0.02	0.05	U	0.05	0.05	U	-0.01	0.04	U	0.03	0.05	U	-0.05	0.06	U
Uranium-235	0.13	0.19	U	0.38	0.21		0.15	0.21	U	0.35	0.20		0.26	0.20		0.36	0.20	
Uranium-238	2.39	2.20		4.13	1.30		3.39	1.25		6.69	2.01		2.45	1.21		4.55	1.63	
Yttrium-88	0.01	0.05	U	-0.02	0.04	U	-0.01	0.05	U	0.00	0.04	U	0.00	0.03	U	0.01	0.07	U
Zinc-65	0.12	0.09	U	0.02	0.06	U	0.00	0.07	U	0.00	0.06	U	-0.02	0.14	U	0.01	0.09	U
Zirconium-95	-0.04	0.13	U	0.06	0.11	U	-0.03	0.13	U	0.03	0.12	U	0.11	0.15	U	-0.02	0.15	U
C-14 (EERF C-01 mod)	0.14	0.81	U	0.39	1.06	U	0.63	0.99	U	0.45	1.15	U	27.40	1.77		0.83	1.15	U
Cl-36 (GL-Rad-A033)	-0.01	0.05	U	-0.02	0.06	U	0.10	0.06	U	0.03	0.05	U	0.08	0.08	U	0.04	0.06	U
Ni-63 (RESL Ni-1 mod)	-0.65	1.68	U	0.16	1.87	U	0.38	1.35	U	0.15	1.49	U	-0.92	1.46	U	-0.69	1.89	U
Sr-90 (905.0 mod)	-0.05	0.07	U	0.12	0.10	U	-0.02	0.08	U	-0.05	0.06	U	0.05	0.08	U	0.02	0.08	U
H-3 (906.0 mod)	0.22	0.57	U	0.27	0.51	U	0.50	0.50	U	0.44	0.51	U	2.09	0.55		0.42	0.50	U

Table 21. Pit 1 Waste Liquid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	UTS	Sample Number			
		BLT-P01-WL-01		BLT-P01-WL-02	
		Result	Qual	Result	Qual
TCLP VOC (mg/l)					
1,1,1-Trichloroethane	0.054	0.3		0.3	U
1,1,2,2-Tetrachloroethane	0.057	0.25		0.25	U
1,1,2-Trichloroethane	0.054	0.25		0.25	U
1,1-Dichloroethane	0.059	0.3		0.3	U
1,1-Dichloroethylene	0.025	***0.3***		***0.3***	
1,2-Dichloroethane	0.21	***0.25***		***0.25***	
1,2-Dichloropropane	0.85	***0.25***		***0.25***	
1,4-Dichlorobenzene		0.25		0.25	
2-Butanone		1.27		1.25	
2-Hexanone		1.25		1.25	
4-Methyl-2-pentanone		1.25		1.25	
Acetone	0.28	***1.69***		***2.3***	
Benzene	0.14	***0.3***		***0.3***	
Bromodichloromethane	0.35	***0.25***		***0.25***	
Bromoform		0.25		0.25	
Bromomethane		0.5		0.5	
Carbon disulfide	3.8	***1.25***		***1.25***	
Carbon tetrachloride	0.057	***0.25***		***0.25***	
Chlorobenzene	0.057	***0.25***		***0.25***	
Chloroethane	0.27	***0.5***		***0.5***	
Chloroform	0.046	***0.25***		***0.25***	
Chloromethane		0.5		0.5	
cis-1,3-Dichloropropylene	0.036	***0.25***		***0.25***	
Dibromochloromethane		0.25		0.25	
Ethylbenzene		0.25		0.25	
Methylene chloride	0.089	***2***		***2***	
Styrene		0.25		0.25	
Tetrachloroethylene	0.056	***0.25***		***0.25***	
Toluene	0.08	***0.25***		***0.25***	
trans-1,3-Dichloropropylene	0.036	***0.25***		***0.25***	
Trichloroethylene	0.054	***0.25***		***0.25***	
Vinyl acetate		1.5		1.5	
Vinyl chloride	0.27	***0.5***		***0.5***	
Xylenes (total)		0.25		0.25	
1,1,1,2-Tetrachloroethane	0.057	***0.25***		0.25	U
1,1-Dichloropropene		0.25		0.25	
1,2,3-Trichlorobenzene		0.3		0.3	
1,2,3-Trichloropropane	0.85	***0.3***		***0.3***	
1,2,4-Trichlorobenzene	0.055	***0.3***		***0.3***	
1,2,4-Trimethylbenzene		0.25		0.25	
1,2-Dibromo-3-chloropropane	0.11	***0.5***		***0.5***	
1,2-Dibromoethane		0.25		0.25	
1,2-Dichlorobenzene		0.25		0.25	
1,2-Dichloroethylene (total)		0.3		0.3	
1,3,5-Trimethylbenzene		0.25		0.25	
1,3-Dichlorobenzene		0.25		0.25	
1,3-Dichloropropane		0.25		0.25	

Table 21. Pit 1 Waste Liquid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	UTS	Sample Number			
		BLT-P01-WL-01		BLT-P01-WL-02	
		Result	Qual	Result	Qual
2,2-Dichloropropane		0.3		0.3	
2-Chloro-1,3-butadiene	0.057	***0.3***		***0.3***	
2-Chloroethylvinyl ether		1.5		1.5	
2-Chlorotoluene		0.25		0.25	
2-Nitropropane		1		1	
4-Chlorotoluene		0.25		0.25	
4-Isopropyltoluene		0.25		0.25	
Acetonitrile	5.6	***6.25***		***6.25***	
Acrolein	0.29	***3***		***3***	
Acrylonitrile	0.24	***1***		***1***	
Allyl chloride		3.7		3.7	
Benzyl chloride		1		1	
bis(2-Chloroisopropyl)ether	0.055	***1.5***		***1.5***	
Bromobenzene		0.25		0.25	
Bromochloromethane		0.3		0.3	
cis-1,2-Dichloroethylene		0.3		0.3	
cis-1,4-Dichloro-2-butene		1		1	
Cyclohexane		0.3		0.3	
Cyclohexanone	0.36	***15***		***15***	
Dibromomethane	0.11	***0.3***		***0.3***	
Dichlorodifluoromethane	0.23	***0.5***		***0.5***	
Ethyl ether	0.12	***0.3***		***0.3***	
Ethyl methacrylate	0.14	***1***		***1***	
Hexachlorobutadiene	0.055	***0.25***		***0.25***	
Iodomethane	0.19	***1.25***		***1.25***	
Isobutyl alcohol	5.6	***12.5***		***12.5***	
Isopropylbenzene		0.25		0.25	
m,p-Xylenes		0.25		0.25	
Methacrylonitrile	0.24	***1***		***1***	
Methyl acetate		1.25		1.25	
Methyl methacrylate	0.14	***1***		***1***	
Methylcyclohexane		0.25		0.25	
Naphthalene	0.059	***0.25***		***0.25***	
n-Butyl alcohol	5.6	***13***		***13***	
n-Butylbenzene		0.25		0.25	
n-Propylbenzene		0.25		0.25	
o-Xylene		0.25		0.25	
Pentachloroethane	0.055	***1***		***1***	
Propionitrile		1.5		1.5	
sec-Butylbenzene		0.25		0.25	
tert-Butyl methyl ether		0.25		0.25	
tert-Butylbenzene		0.25		0.25	
trans-1,2-Dichloroethylene	0.054	***0.3***		***0.3***	
trans-1,4-Dichloro-2-butene		1		1	
Trichlorofluoromethane		0.31		0.31	
Trichlorotrifluoroethane		1		1	

Note: Bolded/italicized results exceed the Universal Treatment Standard

Table 22. Pit 14 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

		Sample Number																	
	RBC	BLT-P14-SO-01a		BLT-P14-SO-01a-02		BLT-P14-SO-01b		BLT-P14-SO-01b-02		BLT-P14-SO-02a		BLT-P14-SO-02a-02		BLT-P14-SO-02b		BLT-P14-SO-02b-02		BLT-P14-SO-03a	
Parameter		**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA VOC (ug/kg)																			
1,2,4-Trichlorobenzene	10220000	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.315	J
2-Butanone	NA	2.07	U	1.56	U	1.81	U	1.53	U	2.47	U	2.9	J	1.75	U	1.42	U	1.72	U
4-Methyl-2-pentanone	NA	1.33	U	0.999	U	1.16	U	0.983	U	1.58	U	2.53	J	1.12	U	0.908	U	1.11	U
Acetone	919800000	10.1		2.36	U	3.45	J	2.33	U	5.25	J	3.19	J	2.66	U	2.26	J	2.62	U
Acetonitrile	NA	11.1	U	8.35	U	9.68	U	8.21	U	13.2	U	8.79	U	9.38	U	9.22	J	9.24	U
Carbon disulfide	102200000	4.38	J	1.15	U	1.33	U	1.13	U	3.58	J	1.21	U	1.29	U	1.04	U	1.27	U
Chloroform	10220000	0.243	U	0.183	U	0.213	U	0.53	J	0.29	U	0.193	U	0.206	U	0.256	J	0.203	U
m,p-Xylenes	NA	0.317	J	0.25	J	0.266	U	0.225	U	0.363	U	0.241	U	0.257	U	0.208	U	0.254	U
Methylene chloride	381546.7	2.43	U	4.39	J	2.13	U	4.81		2.9	U	4.83		2.06	U	3.89	J	2.03	U
Naphthalene	20440000	0.243	U	0.183	U	0.297	BJ	0.18	U	0.364	BJ	0.193	U	0.206	U	0.167	U	0.557	BJ
Styrene	204400000	0.243	U	0.183	U	0.295	J	0.18	U	0.42	J	0.193	U	0.295	J	0.167	U	0.203	U
tert-Butyl methyl ether	NA	0.803	J	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U
Toluene	81760000	2.3		0.266	U	0.308	U	0.261	U	0.421	U	0.28	U	0.299	U	0.242	U	0.294	U
Xylenes (total)	204400000	0.317	J	0.25	J	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U
RCRA SVOC (ug/kg)																			
RCRA Metals (mg/kg)																			
Aluminum	NA	9400		11800		12200		12100		9490		12700		10100		15200		8360	
Antimony	408.8	0.41	U	0.455	U	0.412	U	0.5	J	0.422	U	0.648	J	0.409	U	0.453	J	0.402	U
Arsenic	1.91	**2.02**		**3.6**		**3.06**		**3**		**2.88**		**3.31**		**2.26**		**4.07**		1.85	
Barium	204400	25.7		21.1		32.8		16.3		22.9		17.6		24.9		19.8		20.3	
Beryllium	2044	0.232	J	0.134	J	0.3	J	0.123	J	0.24	J	0.162	J	0.229	J	0.164	J	0.186	J
Calcium	NA	72.4		142		107		111		76.7		67.1		77.1		75.9		70.5	
Chromium	3066	10.7		14.7		16.1		12.9		12.9		16.5		11.7		16.7		9.95	
Cobalt	NA	2.02		0.998		2.67		0.8		1.77		0.941		1.93		1.08		1.58	
Copper	40880	5.08		7.59		7.85		8.18		5.78		8.07		5.91		9.66		4.84	
Iron	306600	8510		10800		12100		8500		10900		11600		9220		12900		7610	
Lead	NA	3.9		4.6		5.1		5.51		4.2		4.63		4.29		5.41		3.85	
Magnesium	NA	596		377		794		364		524		388		575		452		405	
Manganese	20440	36.9		19.2		49.8		10.2		36.6		12.1		36.8		14.8		30.6	
Mercury	NA	27.5		22.4		29.7		11.4		23.4		15.9		24.4		21.3		20.1	
Nickel	20440	5.59		5.33		7.26		4.4		5.15		4.66		6.95		5.77		5.09	
Potassium	NA	395		378		507		372		369		404		408		449		321	
Selenium	5110	0.616	U	0.748	J	0.618	U	0.725	J	0.633	U	0.967	J	0.614	U	0.741	J	0.603	U
Sodium	NA	15.3	J	21.5		17.3		17.5		12.4	J	21.1		14.5	J	22.4		11.2	J
Vanadium	1022	16.7		22.5		23.7		20.4		19.2		24.1		18.3		27.4		15.1	
Zinc	306600	16.7		64.5		21.9		53		17.9		12.5		16.3		17.7		15.8	
RCRA Pesticide (ug/kg)																			
TCLP PCB (ug/kg)																			
Aroclor-1242	1430.8	1.26	U	1.2	U	1.24	U	1.24	U	1.27	U	1.22	U	1.27	U	1.23	U	1.16	U
Aroclor-1248	1430.8	1.26	U	1.2	U	1.24	U	1.24	U	2	J	1.22	U	1.27	U	1.23	U	1.16	U
Herbicides (ug/kg)																			

Note: Sub-floor samples are shaded.

Table 22. Pit 14 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

		Sample Number																	
	RBC	BLT-P14-SO-03a-02		BLT-P14-SO-03b		BLT-P14-SO-03b-02		BLT-P14-SO-04a		BLT-P14-SO-04a-02		BLT-P14-SO-04b		BLT-P14-SO-04b-02		BLT-P14-SO-05a		BLT-P14-SO-05b	
Parameter		**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA VOC (ug/kg)																			
1,2,4-Trichlorobenzene	10220000	0.343	U	0.259	U	0.279	U	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U
2-Butanone	NA	5.58	J	1.47	U	2.2	J	1.95	U	1.54	U	1.86	U	1.55	U	1.93	U	1.63	U
4-Methyl-2-pentanone	NA	1.73	J	0.942	U	1.74	J	1.25	U	0.988	U	1.19	U	0.994	U	1.24	U	1.04	U
Acetone	919800000	15.2		2.23	U	2.43	J	2.96	U	2.34	U	2.89	J	2.35	U	2.93	U	2.47	U
Acetonitrile	NA	10.4	U	7.87	U	8.49	U	10.4	U	8.26	U	9.97	U	8.3	U	10.3	U	8.73	U
Carbon disulfide	102200000	1.43	U	4.83		1.16	U	5.76		1.13	U	3.55	J	1.29	J	2.68	J	1.2	U
Chloroform	10220000	0.229	U	0.173	U	0.186	U	0.229	U	0.181	U	0.219	U	0.185	J	0.227	U	0.192	U
m,p-Xylenes	NA	0.286	U	0.216	U	0.233	U	0.286	U	0.227	U	0.274	U	0.228	U	0.284	U	0.24	U
Methylene chloride	381546.7	6.1		1.73	U	5.09		2.29	U	4.81		2.19	U	4.78		7.92		1.92	U
Naphthalene	20440000	0.229	U	0.263	BJ	0.186	U	0.33	BJ	0.181	U	0.219	U	0.182	U	0.227	U	0.254	BJ
Styrene	204400000	0.229	U	0.173	U	0.186	U	0.229	U	0.181	U	0.27	J	0.182	U	0.227	U	0.192	U
tert-Butyl methyl ether	NA	0.229	U	0.173	U	0.186	U	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U
Toluene	81760000	0.332	U	0.251	U	0.27	U	0.332	U	0.263	U	0.317	U	0.264	U	0.329	U	0.278	U
Xylenes (total)	204400000	0.229	U	0.173	U	0.186	U	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U
RCRA SVOC (ug/kg)																			
RCRA Metals (mg/kg)																			
Aluminum	NA	14000		5710		7790		7270		9440		6790		8440		11100		8680	
Antimony	408.8	0.436	U	0.403	U	0.574	J	0.414	U	0.764	J	0.406	U	0.441	J	0.416	U	0.402	U
Arsenic	1.91	**4.37**		1.38	J	**2.01**		1.64		**3.17**		1.4	J	1.8		**2.28**		**1.91**	
Barium	204400	19.8		16.2		11.7		17		15.3		15.7		14.5		28.7		20.1	
Beryllium	2044	0.15	J	0.147	J	0.109	U	0.153	J	0.113	U	0.136	J	0.107	U	0.272	U	0.189	J
Calcium	NA	57.2		59.7		24.1		62.6		37.7		112		32.3		116		67.6	
Chromium	3066	22.4		7.56		8.97		8.56		13.8		7.99		8.64		11.7		9.28	
Cobalt	NA	0.946		1.16		0.542	J	1.21		0.565	J	1.04		0.606		2.05		1.58	
Copper	40880	9.85		3.07		4.97		4.49		6.75		4.07		5.17		5.57		4.61	
Iron	306600	13600		5940		5590		6360		9900		5900		5640		9700		7380	
Lead	NA	5.25		3.34		4.02		3.5		4.2		3.04		4.48		4.45		3.76	
Magnesium	NA	442		331		215		316		297		297		254		629		394	
Manganese	20440	13.6		23.2		9		23.8		10.4		20.2		8.89		40.7		30.4	
Mercury	NA	40.9		20.9		11		13.1		14.1		17.3		12.4		16.3		11.2	
Nickel	20440	5.99		3.09		2.74		3.55		3.21		3.43		2.79		5.91		4.49	
Potassium	NA	421		245		272		285		325		262		354		399		314	
Selenium	5110	0.909	J	0.605	U	0.656	U	0.621	U	0.68	U	0.609	U	0.644	U	0.625	U	0.602	U
Sodium	NA	18.4		7.44	J	12.2	J	9.5	J	14.9	J	8.41	J	13.2	J	13.6	J	10.7	J
Vanadium	1022	27.7		12.4		13.7		13.4		20.8		12.2		14.5		18.9		15	
Zinc	306600	8.64		10		5.3		15.8		5.57		16.1		5.47		23.2		15.3	
RCRA Pesticide (ug/kg)																			
TCLP PCB (ug/kg)																			
Aroclor-1242	1430.8	1.24	U	2.1	J	1.16	U	1.23	U	1.26	U	1.28	U	1.31	U	1.33	U	1.18	U
Aroclor-1248	1430.8	1.24	U	1.15	U	1.16	U	1.23	U	1.26	U	1.28	U	1.31	U	1.33	U	1.18	U
Herbicides (ug/kg)																			

Note: Sub-floor samples are shaded.

Table 22. Pit 14 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

		Sample Number							
	RBC	BLT-P14-SO-05c		BLT-P14-SO-05d		BLT-P14-SO-05e		BLT-P14-SO-05f	
Parameter		Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)									
1,2,4-Trichlorobenzene	10220000	0.295	U	0.268	U	0.357	U	0.274	U
2-Butanone	NA	1.67	U	1.52	U	2.02	U	1.55	U
4-Methyl-2-pentanone	NA	1.07	U	0.973	U	1.3	U	0.994	U
Acetone	919800000	2.53	U	2.3	U	3.07	U	2.35	U
Acetonitrile	NA	8.95	U	8.13	U	10.8	U	8.31	U
Carbon disulfide	102200000	1.23	U	1.12	U	1.49	U	1.14	U
Chloroform	10220000	0.196	U	0.178	U	0.238	U	0.182	U
m,p-Xylenes	NA	0.245	U	0.223	U	0.297	U	0.698	BJ
Methylene chloride	381546.7	5.67		5.41		6.56		1.82	U
Naphthalene	20440000	0.196	U	0.178	U	0.238	U	0.182	U
Styrene	204400000	0.196	U	0.178	U	0.238	U	0.182	U
tert-Butyl methyl ether	NA	0.196	U	0.178	U	0.238	U	0.182	U
Toluene	81760000	0.285	U	0.259	U	0.345	U	0.264	U
Xylenes (total)	204400000	0.196	U	0.178	U	0.238	U	0.698	BJ
RCRA SVOC (ug/kg)									
RCRA Metals (mg/kg)									
Aluminum	NA	9440		1350		1560		1400	
Antimony	408.8	0.639	J	0.659	J	0.41	U	0.424	U
Arsenic	1.91	**2.94**		**6.62**		0.929	J	0.636	U
Barium	204400	13.9		3.98		4.45		4.65	
Beryllium	2044	0.108	U	0.1	U	0.102	U	0.106	U
Calcium	NA	44.6		12.5		16		27.7	
Chromium	3066	11.3		19		3.85		3.86	
Cobalt	NA	0.58		1.04		0.205	U	0.212	U
Copper	40880	6.92		17.1		3.08		2.86	
Iron	306600	7580		15200		1930		1360	
Lead	NA	3.8		1.98		1.23		1.58	
Magnesium	NA	293		33.5		46.4		45.5	
Manganese	20440	8.35		3.93		2.3		3.2	
Mercury	NA	17.2		22		5.88	J	15.2	
Nickel	20440	2.89		1.48		0.651		0.557	
Potassium	NA	297		89.6		101		175	
Selenium	5110	0.651	U	1.94		0.615	U	0.636	U
Sodium	NA	15.2	J	8.58	J	8.58	J	4.77	U
Vanadium	1022	17.9		16		6.05		5.03	
Zinc	306600	5.9		7.9		1.4		3.96	
RCRA Pesticide (ug/kg)									
TCLP PCB (ug/kg)									
Aroclor-1242	1430.8	4.5		1.2	U	1.25	U	1.17	U
Aroclor-1248	1430.8	1.19	U	1.2	U	1.25	U	1.17	U
Herbicides (ug/kg)									

Note: Sub-floor samples are shaded.

Table 23. Pit 14 Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number (All results in pCi/g)							
Parameter	**NRC Screening Values[1]**	**DCGL**	**BLT-P14-SO-01a**		**BLT-P14-SO-01b**		**BLT-P14-SO-02a**		**BLT-P14-SO-02b**	
			Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Gamma Scan (901.1mod/HASL 300)										
Actinium-228	NA		0	UUI	0.403		0.33		0.816	
Bismuth-212	NA		0.512		0.125	U	0.423		0.682	
Bismuth-214	NA		0.263		0.334		0.322		0	UUI
Lead-212	NA	1.62	0.375		0.378		0.412		0.768	
Lead-214	NA		0.302		0.285		0.284		0.665	
Potassium-40	NA		2.23		2.42		2.69		3.77	
Radium-226	0.7									
Radium-228	NA	1.34	0	UUI	0.403		0.33		0.816	
Thallium-208	NA		0.137		0.133		0.151		0.226	
Thorium-230	1.8		0.263		0.334		0.322		0.552	
C-14 (EERF C-01 mod)	12		4.64		7.51		6.57		5.91	
1 From NUREG 1757, Appendix B, Table B-2										
NA = Not available for this radionuclide										
Concentration that exceeds NRC screening value was highlighted.										

Note: Sub-floor samples are shaded.

Table 23. Pit 14 Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number (All results in pCi/g)							
Parameter	**NRC Screening Values[1]**	**DCGL**	**BLT-P14-SO-03a**		**BLT-P14-SO-03b**		**BLT-P14-SO-04a**		**BLT-P14-SO-04b**	
			Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Gamma Scan (901.1mod/HASL 300)										
Actinium-228	NA		0.78		0.415		0.31		0.399	
Bismuth-212	NA		0.334		0.148	U	0.0924	U	0.401	
Bismuth-214	NA		0.37		0.21		0.218		0.407	
Lead-212	NA	1.62	0.549		0.329		0.286		0.39	
Lead-214	NA		0.498		0.277		0.241		0.393	
Potassium-40	NA		1.94		1.31		1.03		1.87	
Radium-226	0.7									
Radium-228	NA	1.34	0.78		0.415		0.31		0.399	
Thallium-208	NA		0.154		0.0996		0	UUI	0.179	
Thorium-230	1.8		0.37		0.21		0.218		0.407	
C-14 (EERF C-01 mod)	12		10.3		**15.7**		4.01		5.43	
1 From NUREG 1757, Appendix B, Table B-2										
NA = Not available for this radionuclide										
Concentration that exceeds NRC screening value was high										

Note: Sub-floor samples are shaded.

Table 23. Pit 14 Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number (All results in pCi/g)							
Parameter	**NRC Screening Values[1]**	**DCGL**	**BLT-P14-SO-05a**		**BLT-P14-SO-05b**		**BLT-P14-SO-05c**		**BLT-P14-SO-05d**	
			Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Gamma Scan (901.1mod/HASL 300)										
Actinium-228	NA		0	UUI	0.259		0.44		0.248	
Bismuth-212	NA		0.314	U	0.2	U	0.463		0.296	
Bismuth-214	NA		0.252		0.211		0.252		0.346	
Lead-212	NA	1.62	0.349		0.334		0.486		0.295	
Lead-214	NA		0.235		0.293		0.335		0.37	
Potassium-40	NA		1.39		1.43		1.45		0.676	
Radium-226	0.7		0.118				0.252		0.346	
Radium-228	NA	1.34	0	UUI	0.259		0.44		0.248	
Thallium-208	NA		0.133		0.107		0.134		0.0725	
Thorium-230	1.8		0.252		0.211		0.252		0.346	
C-14 (EERF C-01 mod)	12		10.2		9.33		0.722	U	-0.0204	U
1 From NUREG 1757, Appendix B, Table B-2										
NA = Not available for this radionuclide										
Concentration that exceeds NRC screening value was high										

Note: Sub-floor samples are shaded.

Table 23. Pit 14 Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number (All results in pCi/g)			
Parameter	**NRC Screening Values[1]**	**DCGL**	**BLT-P14-SO-05e**		**BLT-P14-SO-05f**	
			Result	**Qual**	**Result**	**Qual**
Gamma Scan (901.1mod/HASL 300)						
Actinium-228	NA		0	UI	0.658	
Bismuth-212	NA		0.188	U	0.561	
Bismuth-214	NA		0.235		0.527	
Lead-212	NA	1.62	0.319		0.66	
Lead-214	NA		0.2		0.503	
Potassium-40	NA		1.1		2.58	
Radium-226	0.7		0.235		0.527	
Radium-228	NA	1.34	0	UI	0.658	
Thallium-208	NA		0.129		0.175	
Thorium-230	1.8		0.234		0.527	
C-14 (EERF C-01 mod)	12		0.0816	U	-0.349	U
1 From NUREG 1757, Appendix B, Table B-2						
NA = Not available for this radionuclide						
Concentration that exceeds NRC screening value was high						

Note: Sub-floor samples are shaded.

Table 24. Pit 14 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																							
	BLT-P14-SO-01a		BLT-P14-SO-01a-02		BLT-P14-SO-01b		BLT-P14-SO-01b-02		BLT-P14-SO-02a		BLT-P14-SO-02a-02		BLT-P14-SO-02b		BLT-P14-SO-02b-02		BLT-P14-SO-03a		BLT-P14-SO-03a-02		BLT-P14-SO-03b		BLT-P14-SO-03b-02	
Parameter	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA VOC (ug/kg)																								
1,1,1,2-Tetrachloroethane	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
1,1,1-Trichloroethane	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U
1,1,2,2-Tetrachloroethane	0.304	U	0.229	U	0.266	U	0.225	U	0.363	U	0.241	U	0.257	U	0.208	U	0.254	U	0.286	U	0.216	U	0.233	U
1,1,2-Trichloroethane	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U
1,1-Dichloroethane	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U
1,1-Dichloroethylene	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U
1,1-Dichloropropene	0.304	U	0.229	U	0.266	U	0.225	U	0.363	U	0.241	U	0.257	U	0.208	U	0.254	U	0.286	U	0.216	U	0.233	U
1,2,3-Trichlorobenzene	0.304	U	0.229	U	0.266	U	0.225	U	0.363	U	0.241	U	0.257	U	0.208	U	0.254	U	0.286	U	0.216	U	0.233	U
1,2,3-Trichloropropane	0.609	U	0.458	U	0.531	U	0.451	U	0.726	U	0.483	U	0.515	U	0.416	U	0.507	U	0.572	U	0.432	U	0.466	U
1,2,4-Trichlorobenzene	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.315	J	0.343	U	0.259	U	0.279	U
1,2,4-Trimethylbenzene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
1,2-Dibromo-3-chloropropane	0.609	U	0.458	U	0.531	U	0.451	U	0.726	U	0.483	U	0.515	U	0.416	U	0.507	U	0.572	U	0.432	U	0.466	U
1,2-Dibromoethane	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
1,2-Dichlorobenzene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
1,2-Dichloroethane	0.304	U	0.229	U	0.266	U	0.225	U	0.363	U	0.241	U	0.257	U	0.208	U	0.254	U	0.286	U	0.216	U	0.233	U
1,2-Dichloroethylene (total)	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U
1,2-Dichloropropane	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U
1,3,5-Trimethylbenzene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
1,3-Dichlorobenzene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
1,3-Dichloropropane	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U
1,4-Dichlorobenzene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
2,2-Dichloropropane	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U
2-Butanone	2.07	U	1.56	U	1.81	U	1.53	U	2.47	U	2.9	J	1.75	U	1.42	U	1.72	U	5.58	J	1.47	U	2.2	J
2-Chloro-1,3-butadiene	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U
2-Chloroethylvinyl ether	1.52	U	1.15	U	1.33	U	1.13	U	1.81	U	1.21	U	1.29	U	1.04	U	1.27	U	1.43	U	1.08	U	1.16	U
2-Chlorotoluene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
2-Hexanone	1.85	U	1.39	U	1.62	U	1.37	U	2.21	U	1.47	U	1.56	U	1.27	U	1.54	U	1.74	U	1.31	U	1.42	U
2-Nitropropane	1.1	U	0.825	U	0.956	U	0.811	U	1.31	U	0.869	U	0.926	U	0.75	U	0.913	U	1.03	U	0.778	U	0.838	U
4-Chlorotoluene	0.292	U	0.22	U	0.255	U	0.216	U	0.348	U	0.232	U	0.247	U	0.2	U	0.243	U	0.275	U	0.207	U	0.224	U
4-Isopropyltoluene	0.304	U	0.229	U	0.266	U	0.225	U	0.363	U	0.241	U	0.257	U	0.208	U	0.254	U	0.286	U	0.216	U	0.233	U
4-Methyl-2-pentanone	1.33	U	0.999	U	1.16	U	0.983	U	1.58	U	2.53	J	1.12	U	0.908	U	1.11	U	1.73	J	0.942	U	1.74	J
Acetone	10.1		2.36	U	3.45	J	2.33	U	5.25	J	3.19	J	2.66	U	2.26	J	2.62	U	15.2		2.23	U	2.43	J
Acetonitrile	11.1	U	8.35	U	9.68	U	8.21	U	13.2	U	8.79	U	9.38	U	9.22	J	9.24	U	10.4	U	7.87	U	8.49	U
Acrolein	3.65	U	2.75	U	3.19	U	2.7	U	4.35	U	2.9	U	3.09	U	2.5	U	3.04	U	3.43	U	2.59	U	2.79	U
Acrylonitrile	1.22	U	0.917	U	1.06	U	0.902	U	1.45	U	0.965	U	1.03	U	0.833	U	1.01	U	1.14	U	0.864	U	0.931	U
Allyl chloride	2.43	U	1.83	U	2.13	U	1.8	U	2.9	U	1.93	U	2.06	U	1.67	U	2.03	U	2.29	U	1.73	U	1.86	U
Benzene	0.402	U	0.302	U	0.351	U	0.298	U	0.479	U	0.318	U	0.34	U	0.275	U	0.335	U	0.378	U	0.285	U	0.307	U
Benzyl chloride	0.73	U	0.55	U	0.638	U	0.541	U	0.871	U	0.579	U	0.618	U	0.5	U	0.608	U	0.687	U	0.518	U	0.559	U
bis(2-Chloroisopropyl)ether	1.83	U	1.37	U	1.59	U	1.35	U	2.18	U	1.45	U	1.54	U	1.25	U	1.52	U	1.72	U	1.3	U	1.4	U
Bromobenzene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
Bromochloromethane	0.609	U	0.458	U	0.531	U	0.451	U	0.726	U	0.483	U	0.515	U	0.416	U	0.507	U	0.572	U	0.432	U	0.466	U
Bromodichloromethane	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
Bromoform	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U
Bromomethane	0.609	U	0.458	U	0.531	U	0.451	U	0.726	U	0.483	U	0.515	U	0.416	U	0.507	U	0.572	U	0.432	U	0.466	U
Carbon disulfide	4.38	J	1.15	U	1.33	U	1.13	U	3.58	J	1.21	U	1.29	U	1.04	U	1.27	U	1.43	U	4.83		1.16	U
Carbon tetrachloride	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
Chlorobenzene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
Chloroethane	0.609	U	0.458	U	0.531	U	0.451	U	0.726	U	0.483	U	0.515	U	0.416	U	0.507	U	0.572	U	0.432	U	0.466	U
Chloroform	0.243	U	0.183	U	0.213	U	0.53	J	0.29	U	0.193	U	0.206	U	0.256	J	0.203	U	0.229	U	0.173	U	0.186	U
Chloromethane	0.609	U	0.458	U	0.531	U	0.451	U	0.726	U	0.483	U	0.515	U	0.416	U	0.507	U	0.572	U	0.432	U	0.466	U
cis-1,2-Dichloroethylene	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U
cis-1,3-Dichloropropylene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
cis-1,4-Dichloro-2-butene	0.609	U	0.458	U	0.531	U	0.451	U	0.726	U	0.483	U	0.515	U	0.416	U	0.507	U	0.572	U	0.432	U	0.466	U
Cyclohexane	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U

Note: Sub-floor samples are shaded.

Table 24. Pit 14 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																							
	BLT-P14-SO-01a		BLT-P14-SO-01a-02		BLT-P14-SO-01b		BLT-P14-SO-01b-02		BLT-P14-SO-02a		BLT-P14-SO-02a-02		BLT-P14-SO-02b		BLT-P14-SO-02b-02		BLT-P14-SO-03a		BLT-P14-SO-03a-02		BLT-P14-SO-03b		BLT-P14-SO-03b-02	
Parameter	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Cyclohexanone	18.3	U	13.7	U	15.9	U	13.5	U	21.8	U	14.5	U	15.4	U	12.5	U	15.2	U	17.2	U	13	U	14	U
Dibromochloromethane	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U
Dibromomethane	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U
Dichlorodifluoromethane	0.609	U	0.458	U	0.531	U	0.451	U	0.726	U	0.483	U	0.515	U	0.416	U	0.507	U	0.572	U	0.432	U	0.466	U
Ethyl ether	0.304	U	0.229	U	0.266	U	0.225	U	0.363	U	0.241	U	0.257	U	0.208	U	0.254	U	0.286	U	0.216	U	0.233	U
Ethyl methacrylate	0.609	U	0.458	U	0.531	U	0.451	U	0.726	U	0.483	U	0.515	U	0.416	U	0.507	U	0.572	U	0.432	U	0.466	U
Ethylbenzene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
Hexachlorobutadiene	0.609	U	0.458	U	0.531	U	0.451	U	0.726	U	0.483	U	0.515	U	0.416	U	0.507	U	0.572	U	0.432	U	0.466	U
Iodomethane	2.03	U	1.53	U	1.77	U	1.51	U	2.42	U	1.61	U	1.72	U	1.39	U	1.69	U	1.91	U	1.44	U	1.56	U
Isobutyl alcohol	12.2	U	9.17	U	10.6	U	9.02	U	14.5	U	9.65	U	10.3	U	8.33	U	10.1	U	11.4	U	8.64	U	9.31	U
Isopropylbenzene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
m,p-Xylenes	0.317	J	0.25	J	0.266	U	0.225	U	0.363	U	0.241	U	0.257	U	0.208	U	0.254	U	0.286	U	0.216	U	0.233	U
Methacrylonitrile	0.852	U	0.642	U	0.744	U	0.631	U	1.02	U	0.676	U	0.721	U	0.583	U	0.71	U	0.801	U	0.605	U	0.652	U
Methyl acetate	2.03	U	1.53	U	1.77	U	1.51	U	2.42	U	1.61	U	1.72	U	1.39	U	1.69	U	1.91	U	1.44	U	1.56	U
Methyl methacrylate	1.22	U	0.917	U	1.06	U	0.902	U	1.45	U	0.965	U	1.03	U	0.833	U	1.01	U	1.14	U	0.864	U	0.931	U
Methylcyclohexane	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U
Methylene chloride	2.43	U	4.39	J	2.13	U	4.81		2.9	U	4.83		2.06	U	3.89	J	2.03	U	6.1		1.73	U	5.09	
Naphthalene	0.243	U	0.183	U	0.297	BJ	0.18	U	0.364	BJ	0.193	U	0.206	U	0.167	U	0.557	BJ	0.229	U	0.263	BJ	0.186	U
n-Butyl alcohol	32.9	U	24.7	U	28.7	U	24.3	U	39.2	U	26.1	U	27.8	U	22.5	U	27.4	U	30.9	U	23.3	U	25.1	U
n-Butylbenzene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
n-Propylbenzene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
o-Xylene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
Pentachloroethane	1.83	U	1.37	U	1.59	U	1.35	U	2.18	U	1.45	U	1.54	U	1.25	U	1.52	U	1.72	U	1.3	U	1.4	U
Propionitrile	1.22	U	0.917	U	1.06	U	0.902	U	1.45	U	0.965	U	1.03	U	0.833	U	1.01	U	1.14	U	0.864	U	0.931	U
sec-Butylbenzene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
Styrene	0.243	U	0.183	U	0.295	J	0.18	U	0.42	J	0.193	U	0.295	J	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
tert-Butyl methyl ether	0.803	J	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
tert-Butylbenzene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
Tetrachloroethylene	0.243	U	0.183	U	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
Toluene	2.3		0.266	U	0.308	U	0.261	U	0.421	U	0.28	U	0.299	U	0.242	U	0.294	U	0.332	U	0.251	U	0.27	U
trans-1,2-Dichloroethylene	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U
trans-1,3-Dichloropropylene	0.365	U	0.275	U	0.319	U	0.27	U	0.435	U	0.29	U	0.309	U	0.25	U	0.304	U	0.343	U	0.259	U	0.279	U
trans-1,4-Dichloro-2-butene	0.609	U	0.458	U	0.531	U	0.451	U	0.726	U	0.483	U	0.515	U	0.416	U	0.507	U	0.572	U	0.432	U	0.466	U
Trichloroethylene	0.304	U	0.229	U	0.266	U	0.225	U	0.363	U	0.241	U	0.257	U	0.208	U	0.254	U	0.286	U	0.216	U	0.233	U
Trichlorofluoromethane	0.609	U	0.458	U	0.531	U	0.451	U	0.726	U	0.483	U	0.515	U	0.416	U	0.507	U	0.572	U	0.432	U	0.466	U
Trichlorotrifluoroethane	1.22	U	0.917	U	1.06	U	0.902	U	1.45	U	0.965	U	1.03	U	0.833	U	1.01	U	1.14	U	0.864	U	0.931	U
Vinyl acetate	1.52	U	1.15	U	1.33	U	1.13	U	1.81	U	1.21	U	1.29	U	1.04	U	1.27	U	1.43	U	1.08	U	1.16	U
Vinyl chloride	0.609	U	0.458	U	0.531	U	0.451	U	0.726	U	0.483	U	0.515	U	0.416	U	0.507	U	0.572	U	0.432	U	0.466	U
Xylenes (total)	0.317	J	0.25	J	0.213	U	0.18	U	0.29	U	0.193	U	0.206	U	0.167	U	0.203	U	0.229	U	0.173	U	0.186	U
RCRA SVOC (ug/kg)																								
1,1'-Biphenyl	108	U	112	U	112	U	114	U	110	U	114	U	111	U	104	U	112	U	103	U	105	U	111	U
1,2,4-Trichlorobenzene	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
1,2-Dichlorobenzene	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
1,3-Dichlorobenzene	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
1,4-Dichlorobenzene	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
2,4,5-Trichlorophenol	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
2,4,6-Trichlorophenol	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
2,4-Dichlorophenol	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
2,4-Dimethylphenol	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
2,4-Dinitrophenol	137	U	142	U	141	U	145	U	139	U	145	U	141	U	132	U	142	U	131	U	133	U	141	U
2,4-Dinitrotoluene	36.1	U	37.3	U	37.2	U	38.1	U	36.6	U	38.1	U	37.1	U	34.8	U	37.3	U	34.5	U	34.9	U	37.1	U
2,6-Dinitrotoluene	36.1	U	37.3	U	37.2	U	38.1	U	36.6	U	38.1	U	37.1	U	34.8	U	37.3	U	34.5	U	34.9	U	37.1	U
2-Chloronaphthalene	12.6	U	13.1	U	13	U	13.4	U	12.8	U	13.3	U	13	U	12.2	U	13.1	U	12.1	U	12.2	U	13	U
2-Chlorophenol	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
2-Methyl-4,6-dinitrophenol	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U

Note: Sub-floor samples are shaded.

Table 24. Pit 14 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																							
	BLT-P14-SO-01a		BLT-P14-SO-01a-02		BLT-P14-SO-01b		BLT-P14-SO-01b-02		BLT-P14-SO-02a		BLT-P14-SO-02a-02		BLT-P14-SO-02b		BLT-P14-SO-02b-02		BLT-P14-SO-03a		BLT-P14-SO-03a-02		BLT-P14-SO-03b		BLT-P14-SO-03b-02	
Parameter	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
2-Methylnaphthalene	7.21	U	7.46	U	7.44	U	7.63	U	7.33	U	7.61	U	7.41	U	6.96	U	7.46	U	6.9	U	6.98	U	7.42	U
2-Nitrophenol	36.1	U	37.3	U	37.2	U	38.1	U	36.6	U	38.1	U	37.1	U	34.8	U	37.3	U	34.5	U	34.9	U	37.1	U
3,3'-Dichlorobenzidine	108	U	112	U	112	U	114	U	110	U	114	U	111	U	104	U	112	U	103	U	105	U	111	U
4-Bromophenylphenylether	36.1	U	37.3	U	37.2	U	38.1	U	36.6	U	38.1	U	37.1	U	34.8	U	37.3	U	34.5	U	34.9	U	37.1	U
4-Chloro-3-methylphenol	36.1	U	37.3	U	37.2	U	38.1	U	36.6	U	38.1	U	37.1	U	34.8	U	37.3	U	34.5	U	34.9	U	37.1	U
4-Chloroaniline	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
4-Chlorophenylphenylether	36.1	U	37.3	U	37.2	U	38.1	U	36.6	U	38.1	U	37.1	U	34.8	U	37.3	U	34.5	U	34.9	U	37.1	U
4-Nitrophenol	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Acenaphthene	12	U	12.5	U	12.4	U	12.7	U	12.2	U	12.7	U	12.4	U	11.6	U	12.5	U	11.5	U	11.7	U	12.4	U
Acenaphthylene	10.8	U	11.2	U	11.2	U	11.4	U	11	U	11.4	U	11.1	U	10.4	U	11.2	U	10.3	U	10.5	U	11.1	U
alpha-Terpineol	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Anthracene	7.21	U	7.46	U	7.44	U	7.63	U	7.33	U	7.61	U	7.41	U	6.96	U	7.46	U	6.9	U	6.98	U	7.42	U
Atrazine	108	U	112	U	112	U	114	U	110	U	114	U	111	U	104	U	112	U	103	U	105	U	111	U
Benzaldehyde	108	U	112	U	112	U	114	U	110	U	114	U	111	U	104	U	112	U	103	U	105	U	111	U
Benzo(a)anthracene	10.8	U	11.2	U	11.2	U	11.4	U	11	U	11.4	U	11.1	U	10.4	U	11.2	U	10.3	U	10.5	U	11.1	U
Benzo(a)pyrene	10.8	U	11.2	U	11.2	U	11.4	U	11	U	11.4	U	11.1	U	10.4	U	11.2	U	10.3	U	10.5	U	11.1	U
Benzo(b)fluoranthene	10.8	U	11.2	U	11.2	U	11.4	U	11	U	11.4	U	11.1	U	10.4	U	11.2	U	10.3	U	10.5	U	11.1	U
Benzo(ghi)perylene	10.8	U	11.2	U	11.2	U	11.4	U	11	U	11.4	U	11.1	U	10.4	U	11.2	U	10.3	U	10.5	U	11.1	U
Benzo(k)fluoranthene	10.8	U	11.2	U	11.2	U	11.4	U	11	U	11.4	U	11.1	U	10.4	U	11.2	U	10.3	U	10.5	U	11.1	U
bis(2-Chloroethoxy)methane	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
bis(2-Chloroethyl) ether	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
bis(2-Chloroisopropyl)ether	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
bis(2-Ethylhexyl)phthalate	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Butylbenzylphthalate	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Carbazole	10.8	U	11.2	U	11.2	U	11.4	U	11	U	11.4	U	11.1	U	10.4	U	11.2	U	10.3	U	10.5	U	11.1	U
Chrysene	10.8	U	11.2	U	11.2	U	11.4	U	11	U	11.4	U	11.1	U	10.4	U	11.2	U	10.3	U	10.5	U	11.1	U
Dibenzo(a,h)anthracene	10.8	U	11.2	U	11.2	U	11.4	U	11	U	11.4	U	11.1	U	10.4	U	11.2	U	10.3	U	10.5	U	11.1	U
Dibenzofuran	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Diethylphthalate	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Dimethylphthalate	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Di-n-butylphthalate	36.1	U	37.3	U	37.2	U	38.1	U	36.6	U	38.1	U	37.1	U	34.8	U	37.3	U	34.5	U	34.9	U	37.1	U
Di-n-octylphthalate	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Diphenylamine	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Fluoranthene	10.8	U	11.2	U	11.2	U	11.4	U	11	U	11.4	U	11.1	U	10.4	U	11.2	U	10.3	U	10.5	U	11.1	U
Fluorene	10.8	U	11.2	U	11.2	U	11.4	U	11	U	11.4	U	11.1	U	10.4	U	11.2	U	10.3	U	10.5	U	11.1	U
Hexachlorobenzene	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Hexachlorobutadiene	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Hexachlorocyclopentadiene	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Hexachloroethane	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Indeno(1,2,3-cd)pyrene	10.8	U	11.2	U	11.2	U	11.4	U	11	U	11.4	U	11.1	U	10.4	U	11.2	U	10.3	U	10.5	U	11.1	U
Isophorone	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
m,p-Cresols	144	U	149	U	149	U	153	U	147	U	152	U	148	U	139	U	149	U	138	U	140	U	148	U
m-Nitroaniline	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Naphthalene	10.8	U	11.2	U	11.2	U	11.4	U	11	U	11.4	U	11.1	U	10.4	U	11.2	U	10.3	U	10.5	U	11.1	U
Nitrobenzene	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
N-Nitrosodipropylamine	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
o-Cresol	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
o-Nitroaniline	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Pentachlorophenol	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Phenanthrene	10.8	U	11.2	U	11.2	U	11.4	U	11	U	11.4	U	11.1	U	10.4	U	11.2	U	10.3	U	10.5	U	11.1	U
Phenol	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
p-Nitroaniline	72.1	U	74.6	U	74.4	U	76.3	U	73.3	U	76.1	U	74.1	U	69.6	U	74.6	U	69	U	69.8	U	74.2	U
Pyrene	11.3	U	11.7	U	11.7	U	12	U	11.5	U	12	U	11.6	U	10.9	U	11.7	U	10.8	U	11	U	11.6	U
RCRA Metals (mg/kg)																								
Aluminum	9400		11800		12200		12100		9490		12700		10100		15200		8360		14000		5710		7790	

Note: Sub-floor samples are shaded.

Table 24. Pit 14 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																							
	BLT-P14-SO-01a		BLT-P14-SO-01a-02		BLT-P14-SO-01b		BLT-P14-SO-01b-02		BLT-P14-SO-02a		BLT-P14-SO-02a-02		BLT-P14-SO-02b		BLT-P14-SO-02b-02		BLT-P14-SO-03a		BLT-P14-SO-03a-02		BLT-P14-SO-03b		BLT-P14-SO-03b-02	
Parameter	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Antimony	0.41	U	0.455	U	0.412	U	0.5	J	0.422	U	0.648	J	0.409	U	0.453	J	0.402	U	0.436	U	0.403	U	0.574	J
Arsenic	2.02		3.6		3.06		3		2.88		3.31		2.26		4.07		1.85		4.37		1.38	J	2.01	
Barium	25.7		21.1		32.8		16.3		22.9		17.6		24.9		19.8		20.3		19.8		16.2		11.7	
Beryllium	0.232	J	0.134	J	0.3	J	0.123	J	0.24	J	0.162	J	0.229	J	0.164	J	0.186	J	0.15	J	0.147	J	0.109	U
Cadmium	0.103	U	0.114	U	0.103	U	0.106	U	0.106	U	0.11	U	0.102	U	0.107	U	0.1	U	0.109	U	0.101	U	0.109	U
Calcium	72.4		142		107		111		76.7		67.1		77.1		75.9		70.5		57.2		59.7		24.1	
Chromium	10.7		14.7		16.1		12.9		12.9		16.5		11.7		16.7		9.95		22.4		7.56		8.97	
Cobalt	2.02		0.998		2.67		0.8		1.77		0.941		1.93		1.08		1.58		0.946		1.16		0.542	J
Copper	5.08		7.59		7.85		8.18		5.78		8.07		5.91		9.66		4.84		9.85		3.07		4.97	
Iron	8510		10800		12100		8500		10900		11600		9220		12900		7610		13600		5940		5590	
Lead	3.9		4.6		5.1		5.51		4.2		4.63		4.29		5.41		3.85		5.25		3.34		4.02	
Magnesium	596		377		794		364		524		388		575		452		405		442		331		215	
Manganese	36.9		19.2		49.8		10.2		36.6		12.1		36.8		14.8		30.6		13.6		23.2		9	
Mercury	27.5		22.4		29.7		11.4		23.4		15.9		24.4		21.3		20.1		40.9		20.9		11	
Nickel	5.59		5.33		7.26		4.4		5.15		4.66		6.95		5.77		5.09		5.99		3.09		2.74	
Potassium	395		378		507		372		369		404		408		449		321		421		245		272	
Selenium	0.616	U	0.748	J	0.618	U	0.725	J	0.633	U	0.967	J	0.614	U	0.741	J	0.603	U	0.909	J	0.605	U	0.656	U
Silver	0.103	U	0.114	U	0.103	U	0.106	U	0.106	U	0.11	U	0.102	U	0.107	U	0.1	U	0.109	U	0.101	U	0.109	U
Sodium	15.3	J	21.5		17.3		17.5		12.4	J	21.1		14.5	J	22.4		11.2	J	18.4		7.44	J	12.2	J
Thallium	0.513	U	0.568	U	0.515	U	0.531	U	0.528	U	0.55	U	0.512	U	0.535	U	0.502	U	0.545	U	0.504	U	0.546	U
Vanadium	16.7		22.5		23.7		20.4		19.2		24.1		18.3		27.4		15.1		27.7		12.4		13.7	
Zinc	16.7		64.5		21.9		53		17.9		12.5		16.3		17.7		15.8		8.64		10		5.3	
RCRA Pesticide (ug/kg)																								
4,4'-DDD			0.379	U			0.361	U			0.373	U			0.372	U			0.381	U			0.366	U
4,4'-DDE			0.379	U			0.361	U			0.373	U			0.372	U			0.381	U			0.366	U
4,4'-DDT			0.379	U			0.361	U			0.373	U			0.372	U			0.381	U			0.366	U
Aldrin			0.189	U			0.18	U			0.187	U			0.186	U			0.191	U			0.183	U
alpha-BHC			0.189	U			0.18	U			0.187	U			0.186	U			0.191	U			0.183	U
beta-BHC			0.189	U			0.18	U			0.187	U			0.186	U			0.191	U			0.183	U
Chlordane (tech.)			1.89	U			1.8	U			1.87	U			1.86	U			1.91	U			1.83	U
delta-BHC			0.189	U			0.18	U			0.187	U			0.186	U			0.191	U			0.183	U
Dieldrin			0.379	U			0.361	U			0.373	U			0.372	U			0.381	U			0.366	U
Endosulfan I			0.189	U			0.18	U			0.187	U			0.186	U			0.191	U			0.183	U
Endosulfan II			0.379	U			0.361	U			0.373	U			0.372	U			0.381	U			0.366	U
Endosulfan sulfate			0.379	U			0.361	U			0.373	U			0.372	U			0.381	U			0.366	U
Endrin			0.379	U			0.361	U			0.373	U			0.372	U			0.381	U			0.366	U
Endrin aldehyde			0.379	U			0.361	U			0.373	U			0.372	U			0.381	U			0.366	U
Endrin ketone			0.379	U			0.361	U			0.373	U			0.372	U			0.381	U			0.366	U
gamma-BHC (Lindane)			0.189	U			0.18	U			0.187	U			0.186	U			0.191	U			0.183	U
Heptachlor			0.189	U			0.18	U			0.187	U			0.186	U			0.191	U			0.183	U
Heptachlor epoxide			0.189	U			0.18	U			0.187	U			0.186	U			0.191	U			0.183	U
Methoxychlor			1.89	U			1.8	U			1.87	U			1.86	U			1.91	U			1.83	U
Toxaphene			6.31	U			6	U			6.21	U			6.19	U			6.35	U			6.1	U
TCLP PCB (ug/kg)																								
Aroclor-1016	1.26	U	1.2	U	1.24	U	1.24	U	1.27	U	1.22	U	1.27	U	1.23	U	1.16	U	1.24	U	1.15	U	1.16	U
Aroclor-1221	1.26	U	1.2	U	1.24	U	1.24	U	1.27	U	1.22	U	1.27	U	1.23	U	1.16	U	1.24	U	1.15	U	1.16	U
Aroclor-1232	1.26	U	1.2	U	1.24	U	1.24	U	1.27	U	1.22	U	1.27	U	1.23	U	1.16	U	1.24	U	1.15	U	1.16	U
Aroclor-1242	1.26	U	1.2	U	1.24	U	1.24	U	1.27	U	1.22	U	1.27	U	1.23	U	1.16	U	1.24	U	2.1	J	1.16	U
Aroclor-1248	1.26	U	1.2	U	1.24	U	1.24	U	2	J	1.22	U	1.27	U	1.23	U	1.16	U	1.24	U	1.15	U	1.16	U
Aroclor-1254	1.26	U	1.2	U	1.24	U	1.24	U	1.27	U	1.22	U	1.27	U	1.23	U	1.16	U	1.24	U	1.15	U	1.16	U
Aroclor-1260	1.26	U	1.2	U	1.24	U	1.24	U	1.27	U	1.22	U	1.27	U	1.23	U	1.16	U	1.24	U	1.15	U	1.16	U
Herbicides (ug/kg)																								
2,4,5-T			3.14	U			2.99	U			3.1	U			3.09	U			3.17	U			3.04	U
2,4,5-TP			3.14	U			2.99	U			3.1	U			3.09	U			3.17	U			3.04	U
2,4-D			3.14	U			2.99	U			3.1	U			3.09	U			3.17	U			3.04	U

Note: Sub-floor samples are shaded.

Table 24. Pit 14 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																							
	BLT-P14-SO-01a		BLT-P14-SO-01a-02		BLT-P14-SO-01b		BLT-P14-SO-01b-02		BLT-P14-SO-02a		BLT-P14-SO-02a-02		BLT-P14-SO-02b		BLT-P14-SO-02b-02		BLT-P14-SO-03a		BLT-P14-SO-03a-02		BLT-P14-SO-03b		BLT-P14-SO-03b-02	
Parameter	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
TOC (mg/kg)																								
Total Organic Carbon #1	1340		291		1190		360		777		345		1410		355		1010		315		1390		200	
Total Organic Carbon #2	1410		321		1790		382		799		330		939		376		1070		319		1490		186	
Total Organic Carbon #3	1610		299		1330		324		899		327		1100		395		988		288		1550		180	
Total Organic Carbon #4	1680		287		1440		347		931		310		1030		363		897		281		1880		174	
Total Organic Carbon Averag	1510		300		1440		353		852		328		1120		372		990		301		1580		185	
Cyanide (ug/kg)																								
Cyanide, Amenable to CL																								
Cyanide, Total																								

Note: Sub-floor samples are shaded.

Table 24. Pit 14 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																			
	BLT-P14-SO-04a		BLT-P14-SO-04a-02		BLT-P14-SO-04b		BLT-P14-SO-04b-02		BLT-P14-SO-05a		BLT-P14-SO-05b		BLT-P14-SO-05c		BLT-P14-SO-05d		BLT-P14-SO-05e		BLT-P14-SO-05f	
Parameter	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA VOC (ug/kg)																				
1,1,1,2-Tetrachloroethane	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
1,1,1-Trichloroethane	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
1,1,2,2-Tetrachloroethane	0.286	U	0.227	U	0.274	U	0.228	U	0.284	U	0.24	U	0.245	U	0.223	U	0.297	U	0.228	U
1,1,2-Trichloroethane	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
1,1-Dichloroethane	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
1,1-Dichloroethylene	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
1,1-Dichloropropene	0.286	U	0.227	U	0.274	U	0.228	U	0.284	U	0.24	U	0.245	U	0.223	U	0.297	U	0.228	U
1,2,3-Trichlorobenzene	0.286	U	0.227	U	0.274	U	0.228	U	0.284	U	0.24	U	0.245	U	0.223	U	0.297	U	0.228	U
1,2,3-Trichloropropane	0.573	U	0.453	U	0.547	U	0.456	U	0.568	U	0.479	U	0.491	U	0.446	U	0.595	U	0.456	U
1,2,4-Trichlorobenzene	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
1,2,4-Trimethylbenzene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
1,2-Dibromo-3-chloropropane	0.573	U	0.453	U	0.547	U	0.456	U	0.568	U	0.479	U	0.491	U	0.446	U	0.595	U	0.456	U
1,2-Dibromoethane	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
1,2-Dichlorobenzene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
1,2-Dichloroethane	0.286	U	0.227	U	0.274	U	0.228	U	0.284	U	0.24	U	0.245	U	0.223	U	0.297	U	0.228	U
1,2-Dichloroethylene (total)	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
1,2-Dichloropropane	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
1,3,5-Trimethylbenzene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
1,3-Dichlorobenzene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
1,3-Dichloropropane	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
1,4-Dichlorobenzene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
2,2-Dichloropropane	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
2-Butanone	1.95	U	1.54	U	1.86	U	1.55	U	1.93	U	1.63	U	1.67	U	1.52	U	2.02	U	1.55	U
2-Chloro-1,3-butadiene	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
2-Chloroethylvinyl ether	1.43	U	1.13	U	1.37	U	1.14	U	1.42	U	1.2	U	1.23	U	1.12	U	1.49	U	1.14	U
2-Chlorotoluene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
2-Hexanone	1.74	U	1.38	U	1.66	U	1.39	U	1.73	U	1.46	U	1.49	U	1.36	U	1.81	U	1.39	U
2-Nitropropane	1.03	U	0.816	U	0.985	U	0.82	U	1.02	U	0.862	U	0.884	U	0.803	U	1.07	U	0.821	U
4-Chlorotoluene	0.275	U	0.218	U	0.263	U	0.219	U	0.272	U	0.23	U	0.236	U	0.214	U	0.285	U	0.219	U
4-Isopropyltoluene	0.286	U	0.227	U	0.274	U	0.228	U	0.284	U	0.24	U	0.245	U	0.223	U	0.297	U	0.228	U
4-Methyl-2-pentanone	1.25	U	0.988	U	1.19	U	0.994	U	1.24	U	1.04	U	1.07	U	0.973	U	1.3	U	0.994	U
Acetone	2.96	U	2.34	U	2.89	J	2.35	U	2.93	U	2.47	U	2.53	U	2.3	U	3.07	U	2.35	U
Acetonitrile	10.4	U	8.26	U	9.97	U	8.3	U	10.3	U	8.73	U	8.95	U	8.13	U	10.8	U	8.31	U
Acrolein	3.44	U	2.72	U	3.28	U	2.73	U	3.41	U	2.87	U	2.95	U	2.68	U	3.57	U	2.74	U
Acrylonitrile	1.15	U	0.906	U	1.09	U	0.912	U	1.14	U	0.958	U	0.982	U	0.892	U	1.19	U	0.912	U
Allyl chloride	2.29	U	1.81	U	2.19	U	1.82	U	2.27	U	1.92	U	1.96	U	1.78	U	2.38	U	1.82	U
Benzene	0.378	U	0.299	U	0.361	U	0.301	U	0.375	U	0.316	U	0.324	U	0.294	U	0.393	U	0.301	U
Benzyl chloride	0.687	U	0.544	U	0.657	U	0.547	U	0.681	U	0.575	U	0.589	U	0.535	U	0.714	U	0.547	U
bis(2-Chloroisopropyl)ether	1.72	U	1.36	U	1.64	U	1.37	U	1.7	U	1.44	U	1.47	U	1.34	U	1.78	U	1.37	U
Bromobenzene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
Bromochloromethane	0.573	U	0.453	U	0.547	U	0.456	U	0.568	U	0.479	U	0.491	U	0.446	U	0.595	U	0.456	U
Bromodichloromethane	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
Bromoform	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
Bromomethane	0.573	U	0.453	U	0.547	U	0.456	U	0.568	U	0.479	U	0.491	U	0.446	U	0.595	U	0.456	U
Carbon disulfide	5.76		1.13	U	3.55	J	1.29	J	2.68	J	1.2	U	1.23	U	1.12	U	1.49	U	1.14	U
Carbon tetrachloride	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
Chlorobenzene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
Chloroethane	0.573	U	0.453	U	0.547	U	0.456	U	0.568	U	0.479	U	0.491	U	0.446	U	0.595	U	0.456	U
Chloroform	0.229	U	0.181	U	0.219	U	0.185	J	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
Chloromethane	0.573	U	0.453	U	0.547	U	0.456	U	0.568	U	0.479	U	0.491	U	0.446	U	0.595	U	0.456	U
cis-1,2-Dichloroethylene	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
cis-1,3-Dichloropropylene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
cis-1,4-Dichloro-2-butene	0.573	U	0.453	U	0.547	U	0.456	U	0.568	U	0.479	U	0.491	U	0.446	U	0.595	U	0.456	U
Cyclohexane	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U

Note: Sub-floor samples are shaded.

Table 24. Pit 14 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																			
	BLT-P14-SO-04a		BLT-P14-SO-04a-02		BLT-P14-SO-04b		BLT-P14-SO-04b-02		BLT-P14-SO-05a		BLT-P14-SO-05b		BLT-P14-SO-05c		BLT-P14-SO-05d		BLT-P14-SO-05e		BLT-P14-SO-05f	
Parameter	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Cyclohexanone	17.2	U	13.6	U	16.4	U	13.7	U	17	U	14.4	U	14.7	U	13.4	U	17.8	U	13.7	U
Dibromochloromethane	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
Dibromomethane	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
Dichlorodifluoromethane	0.573	U	0.453	U	0.547	U	0.456	U	0.568	U	0.479	U	0.491	U	0.446	U	0.595	U	0.456	U
Ethyl ether	0.286	U	0.227	U	0.274	U	0.228	U	0.284	U	0.24	U	0.245	U	0.223	U	0.297	U	0.228	U
Ethyl methacrylate	0.573	U	0.453	U	0.547	U	0.456	U	0.568	U	0.479	U	0.491	U	0.446	U	0.595	U	0.456	U
Ethylbenzene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
Hexachlorobutadiene	0.573	U	0.453	U	0.547	U	0.456	U	0.568	U	0.479	U	0.491	U	0.446	U	0.595	U	0.456	U
Iodomethane	1.91	U	1.51	U	1.83	U	1.52	U	1.9	U	1.6	U	1.64	U	1.49	U	1.99	U	1.52	U
Isobutyl alcohol	11.5	U	9.06	U	10.9	U	9.12	U	11.4	U	9.58	U	9.82	U	8.92	U	11.9	U	9.12	U
Isopropylbenzene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
m,p-Xylenes	0.286	U	0.227	U	0.274	U	0.228	U	0.284	U	0.24	U	0.245	U	0.223	U	0.297	U	0.698	BJ
Methacrylonitrile	0.802	U	0.634	U	0.766	U	0.638	U	0.795	U	0.671	U	0.687	U	0.625	U	0.833	U	0.638	U
Methyl acetate	1.91	U	1.51	U	1.83	U	1.52	U	1.9	U	1.6	U	1.64	U	1.49	U	1.99	U	1.52	U
Methyl methacrylate	1.15	U	0.906	U	1.09	U	0.912	U	1.14	U	0.958	U	0.982	U	0.892	U	1.19	U	0.912	U
Methylcyclohexane	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
Methylene chloride	2.29	U	4.81		2.19	U	4.78		7.92		1.92	U	5.67		5.41		6.56		1.82	U
Naphthalene	0.33	BJ	0.181	U	0.219	U	0.182	U	0.227	U	0.254	BJ	0.196	U	0.178	U	0.238	U	0.182	U
n-Butyl alcohol	30.9	U	24.5	U	29.6	U	24.6	U	30.6	U	25.9	U	26.5	U	24.1	U	32.1	U	24.6	U
n-Butylbenzene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
n-Propylbenzene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
o-Xylene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
Pentachloroethane	1.72	U	1.36	U	1.64	U	1.37	U	1.7	U	1.44	U	1.47	U	1.34	U	1.78	U	1.37	U
Propionitrile	1.15	U	0.906	U	1.09	U	0.912	U	1.14	U	0.958	U	0.982	U	0.892	U	1.19	U	0.912	U
sec-Butylbenzene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
Styrene	0.229	U	0.181	U	0.27	J	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
tert-Butyl methyl ether	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
tert-Butylbenzene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
Tetrachloroethylene	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.182	U
Toluene	0.332	U	0.263	U	0.317	U	0.264	U	0.329	U	0.278	U	0.285	U	0.259	U	0.345	U	0.264	U
trans-1,2-Dichloroethylene	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
trans-1,3-Dichloropropylene	0.344	U	0.272	U	0.328	U	0.273	U	0.341	U	0.287	U	0.295	U	0.268	U	0.357	U	0.274	U
trans-1,4-Dichloro-2-butene	0.573	U	0.453	U	0.547	U	0.456	U	0.568	U	0.479	U	0.491	U	0.446	U	0.595	U	0.456	U
Trichloroethylene	0.286	U	0.227	U	0.274	U	0.228	U	0.284	U	0.24	U	0.245	U	0.223	U	0.297	U	0.228	U
Trichlorofluoromethane	0.573	U	0.453	U	0.547	U	0.456	U	0.568	U	0.479	U	0.491	U	0.446	U	0.595	U	0.456	U
Trichlorotrifluoroethane	1.15	U	0.906	U	1.09	U	0.912	U	1.14	U	0.958	U	0.982	U	0.892	U	1.19	U	0.912	U
Vinyl acetate	1.43	U	1.13	U	1.37	U	1.14	U	1.42	U	1.2	U	1.23	U	1.12	U	1.49	U	1.14	U
Vinyl chloride	0.573	U	0.453	U	0.547	U	0.456	U	0.568	U	0.479	U	0.491	U	0.446	U	0.595	U	0.456	U
Xylenes (total)	0.229	U	0.181	U	0.219	U	0.182	U	0.227	U	0.192	U	0.196	U	0.178	U	0.238	U	0.698	BJ
RCRA SVOC (ug/kg)																				
1,1'-Biphenyl	113	U	116	U	118	U	120	U	1070	U	107	U	108	U	113	U	106	U	106	U
1,2,4-Trichlorobenzene	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
1,2-Dichlorobenzene	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
1,3-Dichlorobenzene	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
1,4-Dichlorobenzene	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
2,4,5-Trichlorophenol	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
2,4,6-Trichlorophenol	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
2,4-Dichlorophenol	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
2,4-Dimethylphenol	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
2,4-Dinitrophenol	143	U	147	U	150	U	152	U	1350	U	135	U	137	U	143	U	134	U	135	U
2,4-Dinitrotoluene	37.7	U	38.6	U	39.5	U	40.1	U	355	U	35.6	U	36	U	37.7	U	35.2	U	35.4	U
2,6-Dinitrotoluene	37.7	U	38.6	U	39.5	U	40.1	U	355	U	35.6	U	36	U	37.7	U	35.2	U	35.4	U
2-Chloronaphthalene	13.2	U	13.5	U	13.8	U	14	U	124	U	12.5	U	12.6	U	13.2	U	12.3	U	12.4	U
2-Chlorophenol	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
2-Methyl-4,6-dinitrophenol	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U

Note: Sub-floor samples are shaded.

Table 24. Pit 14 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																			
	BLT-P14-SO-04a		BLT-P14-SO-04a-02		BLT-P14-SO-04b		BLT-P14-SO-04b-02		BLT-P14-SO-05a		BLT-P14-SO-05b		BLT-P14-SO-05c		BLT-P14-SO-05d		BLT-P14-SO-05e		BLT-P14-SO-05f	
Parameter	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
2-Methylnaphthalene	7.55	U	7.72	U	7.89	U	8.01	U	71.1	U	7.13	U	7.2	U	7.54	U	7.03	U	7.08	U
2-Nitrophenol	37.7	U	38.6	U	39.5	U	40.1	U	355	U	35.6	U	36	U	37.7	U	35.2	U	35.4	U
3,3'-Dichlorobenzidine	113	U	116	U	118	U	120	U	1070	U	107	U	108	U	113	U	106	U	106	U
4-Bromophenylphenylether	37.7	U	38.6	U	39.5	U	40.1	U	355	U	35.6	U	36	U	37.7	U	35.2	U	35.4	U
4-Chloro-3-methylphenol	37.7	U	38.6	U	39.5	U	40.1	U	355	U	35.6	U	36	U	37.7	U	35.2	U	35.4	U
4-Chloroaniline	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
4-Chlorophenylphenylether	37.7	U	38.6	U	39.5	U	40.1	U	355	U	35.6	U	36	U	37.7	U	35.2	U	35.4	U
4-Nitrophenol	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
Acenaphthene	12.6	U	12.9	U	13.2	U	13.4	U	119	U	11.9	U	12	U	12.6	U	11.7	U	11.8	U
Acenaphthylene	11.3	U	11.6	U	11.8	U	12	U	107	U	10.7	U	10.8	U	11.3	U	10.6	U	10.6	U
alpha-Terpineol	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
Anthracene	7.55	U	7.72	U	7.89	U	8.01	U	71.1	U	7.13	U	7.2	U	7.54	U	7.03	U	7.08	U
Atrazine	113	U	116	U	118	U	120	U	1070	U	107	U	108	U	113	U	106	U	106	U
Benzaldehyde	113	U	116	U	118	U	120	U	1070	U	107	U	108	U	113	U	106	U	106	U
Benzo(a)anthracene	11.3	U	11.6	U	11.8	U	12	U	107	U	10.7	U	10.8	U	11.3	U	10.6	U	10.6	U
Benzo(a)pyrene	11.3	U	11.6	U	11.8	U	12	U	107	U	10.7	U	10.8	U	11.3	U	10.6	U	10.6	U
Benzo(b)fluoranthene	11.3	U	11.6	U	11.8	U	12	U	107	U	10.7	U	10.8	U	11.3	U	10.6	U	10.6	U
Benzo(ghi)perylene	11.3	U	11.6	U	11.8	U	12	U	107	U	10.7	U	10.8	U	11.3	U	10.6	U	10.6	U
Benzo(k)fluoranthene	11.3	U	11.6	U	11.8	U	12	U	107	U	10.7	U	10.8	U	11.3	U	10.6	U	10.6	U
bis(2-Chloroethoxy)methane	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
bis(2-Chloroethyl) ether	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
bis(2-Chloroisopropyl)ether	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
bis(2-Ethylhexyl)phthalate	197		261		78.9	U	80.1	U	8050		1340		397		846		439		559	
Butylbenzylphthalate	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
Carbazole	11.3	U	11.6	U	11.8	U	12	U	107	U	10.7	U	10.8	U	11.3	U	10.6	U	10.6	U
Chrysene	11.3	U	11.6	U	11.8	U	12	U	107	U	10.7	U	10.8	U	11.3	U	10.6	U	10.6	U
Dibenzo(a,h)anthracene	11.3	U	11.6	U	11.8	U	12	U	107	U	10.7	U	10.8	U	11.3	U	10.6	U	10.6	U
Dibenzofuran	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
Diethylphthalate	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
Dimethylphthalate	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
Di-n-butylphthalate	37.7	U	38.6	U	39.5	U	40.1	U	355	U	35.6	U	36	U	37.7	U	35.2	U	35.4	U
Di-n-octylphthalate	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
Diphenylamine	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
Fluoranthene	11.3	U	11.6	U	11.8	U	12	U	107	U	10.7	U	10.8	U	11.3	U	10.6	U	10.6	U
Fluorene	11.3	U	11.6	U	11.8	U	12	U	107	U	10.7	U	10.8	U	11.3	U	10.6	U	10.6	U
Hexachlorobenzene	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
Hexachlorobutadiene	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
Hexachlorocyclopentadiene	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
Hexachloroethane	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
Indeno(1,2,3-cd)pyrene	11.3	U	11.6	U	11.8	U	12	U	107	U	10.7	U	10.8	U	11.3	U	10.6	U	10.6	U
Isophorone	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
m,p-Cresols	151	U	154	U	158	U	160	U	1420	U	143	U	144	U	151	U	141	U	142	U
m-Nitroaniline	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
Naphthalene	80.9		52.2		50		12	U	107	U	10.7	U	10.8	U	11.3	U	10.6	U	10.6	U
Nitrobenzene	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
N-Nitrosodipropylamine	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
o-Cresol	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
o-Nitroaniline	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
Pentachlorophenol	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
Phenanthrene	11.3	U	11.6	U	11.8	U	12	U	107	U	10.7	U	10.8	U	11.3	U	10.6	U	10.6	U
Phenol	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
p-Nitroaniline	75.5	U	77.2	U	78.9	U	80.1	U	711	U	71.3	U	72	U	75.4	U	70.3	U	70.8	U
Pyrene	11.8	U	12.1	U	12.4	U	12.6	U	112	U	11.2	U	11.3	U	11.8	U	11	U	11.1	U
RCRA Metals (mg/kg)																				
Aluminum	7270		9440		6790		8440		11100		8680		9440		1350		1560		1400	

Note: Sub-floor samples are shaded.

Table 24. Pit 14 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																			
	BLT-P14-SO-04a		BLT-P14-SO-04a-02		BLT-P14-SO-04b		BLT-P14-SO-04b-02		BLT-P14-SO-05a		BLT-P14-SO-05b		BLT-P14-SO-05c		BLT-P14-SO-05d		BLT-P14-SO-05e		BLT-P14-SO-05f	
Parameter	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Antimony	0.414	U	0.764	J	0.406	U	0.441	J	0.416	U	0.402	U	0.639	J	0.659	J	0.41	U	0.424	U
Arsenic	1.64		3.17		1.4	J	1.8		2.28		1.91		2.94		6.62		0.929	J	0.636	U
Barium	17		15.3		15.7		14.5		28.7		20.1		13.9		3.98		4.45		4.65	
Beryllium	0.153	J	0.113	U	0.136	J	0.107	U	0.272	U	0.189	J	0.108	U	0.1	U	0.102	U	0.106	U
Cadmium	0.104	U	0.113	U	0.101	U	0.107	U	0.104	U	0.1	U	0.108	U	0.1	U	0.102	U	0.106	U
Calcium	62.6		37.7		112		32.3		116		67.6		44.6		12.5		16		27.7	
Chromium	8.56		13.8		7.99		8.64		11.7		9.28		11.3		19		3.85		3.86	
Cobalt	1.21		0.565	J	1.04		0.606		2.05		1.58		0.58		1.04		0.205	U	0.212	U
Copper	4.49		6.75		4.07		5.17		5.57		4.61		6.92		17.1		3.08		2.86	
Iron	6360		9900		5900		5640		9700		7380		7580		15200		1930		1360	
Lead	3.5		4.2		3.04		4.48		4.45		3.76		3.8		1.98		1.23		1.58	
Magnesium	316		297		297		254		629		394		293		33.5		46.4		45.5	
Manganese	23.8		10.4		20.2		8.89		40.7		30.4		8.35		3.93		2.3		3.2	
Mercury	13.1		14.1		17.3		12.4		16.3		11.2		17.2		22		5.88	J	15.2	
Nickel	3.55		3.21		3.43		2.79		5.91		4.49		2.89		1.48		0.651		0.557	
Potassium	285		325		262		354		399		314		297		89.6		101		175	
Selenium	0.621	U	0.68	U	0.609	U	0.644	U	0.625	U	0.602	U	0.651	U	1.94		0.615	U	0.636	U
Silver	0.104	U	0.113	U	0.101	U	0.107	U	0.104	U	0.1	U	0.108	U	0.1	U	0.102	U	0.106	U
Sodium	9.5	J	14.9	J	8.41	J	13.2	J	13.6	J	10.7	J	15.2	J	8.58	J	8.58	J	4.77	U
Thallium	0.518	U	0.566	U	0.507	U	0.537	U	0.52	U	0.502	U	0.542	U	0.5	U	0.512	U	0.53	U
Vanadium	13.4		20.8		12.2		14.5		18.9		15		17.9		16		6.05		5.03	
Zinc	15.8		5.57		16.1		5.47		23.2		15.3		5.9		7.9		1.4		3.96	
RCRA Pesticide (ug/kg)																				
4,4'-DDD			0.381	U			0.371	U	0.348	U			0.373	U	0.345	U	0.349	U	0.371	U
4,4'-DDE			0.381	U			0.371	U	0.348	U			0.373	U	0.345	U	0.349	U	0.371	U
4,4'-DDT			0.381	U			0.371	U	0.348	U			0.373	U	0.345	U	0.349	U	0.371	U
Aldrin			0.19	U			0.185	U	0.174	U			0.187	U	0.172	U	0.174	U	0.185	U
alpha-BHC			0.19	U			0.185	U	0.174	U			0.187	U	0.172	U	0.174	U	0.185	U
beta-BHC			0.19	U			0.185	U	0.174	U			0.187	U	0.172	U	0.174	U	0.185	U
Chlordane (tech.)			1.9	U			1.85	U	1.74	U			1.87	U	1.72	U	1.74	U	1.85	U
delta-BHC			0.19	U			0.185	U	0.174	U			0.187	U	0.172	U	0.174	U	0.185	U
Dieldrin			0.381	U			0.371	U	0.348	U			0.373	U	0.345	U	0.349	U	0.371	U
Endosulfan I			0.19	U			0.185	U	0.174	U			0.187	U	0.172	U	0.174	U	0.185	U
Endosulfan II			0.381	U			0.371	U	0.348	U			0.373	U	0.345	U	0.349	U	0.371	U
Endosulfan sulfate			0.381	U			0.371	U	0.348	U			0.373	U	0.345	U	0.349	U	0.371	U
Endrin			0.381	U			0.371	U	0.348	U			0.373	U	0.345	U	0.349	U	0.371	U
Endrin aldehyde			0.381	U			0.371	U	0.348	U			0.373	U	0.345	U	0.349	U	0.371	U
Endrin ketone			0.381	U			0.371	U	0.348	U			0.373	U	0.345	U	0.349	U	0.371	U
gamma-BHC (Lindane)			0.19	U			0.185	U	0.174	U			0.187	U	0.172	U	0.174	U	0.185	U
Heptachlor			0.19	U			0.185	U	0.174	U			0.187	U	0.172	U	0.174	U	0.185	U
Heptachlor epoxide			0.19	U			0.185	U	0.174	U			0.187	U	0.172	U	0.174	U	0.185	U
Methoxychlor			1.9	U			1.85	U	1.74	U			1.87	U	1.72	U	1.74	U	1.85	U
Toxaphene			6.34	U			6.17	U	5.8	U			6.21	U	5.74	U	5.81	U	6.17	U
TCLP PCB (ug/kg)																				
Aroclor-1016	1.23	U	1.26	U	1.28	U	1.31	U	1.33	U	1.18	U	1.19	U	1.2	U	1.25	U	1.17	U
Aroclor-1221	1.23	U	1.26	U	1.28	U	1.31	U	1.33	U	1.18	U	1.19	U	1.2	U	1.25	U	1.17	U
Aroclor-1232	1.23	U	1.26	U	1.28	U	1.31	U	1.33	U	1.18	U	1.19	U	1.2	U	1.25	U	1.17	U
Aroclor-1242	1.23	U	1.26	U	1.28	U	1.31	U	1.33	U	1.18	U	4.5		1.2	U	1.25	U	1.17	U
Aroclor-1248	1.23	U	1.26	U	1.28	U	1.31	U	1.33	U	1.18	U	1.19	U	1.2	U	1.25	U	1.17	U
Aroclor-1254	1.23	U	1.26	U	1.28	U	1.31	U	1.33	U	1.18	U	2.8	JP	1.2	U	1.25	U	1.17	U
Aroclor-1260	1.23	U	1.26	U	1.28	U	1.31	U	1.33	U	1.18	U	1.79	J	1.71	J	1.25	U	1.17	U
Herbicides (ug/kg)																				
2,4,5-T			3.16	U			3.08	U	2.89	U			3.1	U	2.86	U	2.9	U	1.85	U
2,4,5-TP			3.16	U			3.08	U	2.89	U			3.1	U	2.86	U	2.9	U	1.85	U
2,4-D			3.16	U			3.08	U	2.89	U			3.1	U	2.86	U	2.9	U	1.85	U

Note: Sub-floor samples are shaded.

Table 24. Pit 14 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																			
	BLT-P14-SO-04a		BLT-P14-SO-04a-02		BLT-P14-SO-04b		BLT-P14-SO-04b-02		BLT-P14-SO-05a		BLT-P14-SO-05b		BLT-P14-SO-05c		BLT-P14-SO-05d		BLT-P14-SO-05e		BLT-P14-SO-05f	
Parameter	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
TOC (mg/kg)																				
Total Organic Carbon #1	627		180		607		168		1070		823		263		727		77.7	J	208	
Total Organic Carbon #2	726		201		662		171		1200		845		250		823		79.9	J	225	
Total Organic Carbon #3	605		165		668		173		1250		815		255		680		70.6	J	211	
Total Organic Carbon #4	777		184		628		213		1170		771		244		687		103		181	
Total Organic Carbon Averag	684		183		641		181		1170		813		253		729		82.7	J	206	
Cyanide (ug/kg)																				
Cyanide, Amenable to CL																				
Cyanide, Total																				

Note: Sub-floor samples are shaded.

Table 25. Pit 14 Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																											
	BLT-P14-SO-01a				BLT-P14-SO-01b				BLT-P14-SO-02a				BLT-P14-SO-02b				BLT-P14-SO-03a				BLT-P14-SO-03b				BLT-P14-SO-04a			
	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual
Gamma Scan (901.1mod/HASL 300)																												
Actinium-228	0	+/-	0.222	UUI	0.403	+/-	0.105		0.33	+/-	0.135		0.816	+/-	0.22		0.78	+/-	0.171		0.415	+/-	0.141		0.31	+/-	0.113	
Americium-241	0.042	+/-	0.095	U	0.0341	+/-	0.0619	U	0.0316	+/-	0.0893	U	-0.0385	+/-	0.103	U	-0.0415	+/-	0.126	U	0.0782	+/-	0.126	U	-0.0342	+/-	0.109	U
Antimony-124	-0.00456	+/-	0.0424	U	-0.00584	+/-	0.027	U	-0.0357	+/-	0.0537	U	0.00458	+/-	0.0601	U	-0.0082	+/-	0.0555	U	0.00166	+/-	0.0445	U	0.00374	+/-	0.0343	U
Antimony-125	0.0235	+/-	0.0538	U	0.00861	+/-	0.0363	U	-0.00693	+/-	0.0505	U	-0.0356	+/-	0.0582	U	0.0178	+/-	0.0605	U	-0.0265	+/-	0.0449	U	0.0118	+/-	0.0377	U
Barium-133	0.00814	+/-	0.0288	U	0.0103	+/-	0.0187	U	0.0193	+/-	0.0265	U	0.00167	+/-	0.0344	U	-0.0167	+/-	0.0328	U	0.00301	+/-	0.0233	U	0.00264	+/-	0.0181	U
Barium-140	0.0247	+/-	0.16	U	0.198	+/-	0.139	U	-0.0134	+/-	0.158	U	-0.0177	+/-	0.169	U	0.0499	+/-	0.171	U	0.138	+/-	0.148	U	0.0353	+/-	0.125	U
Beryllium-7	0.152	+/-	0.196	U	0.0247	+/-	0.134	U	-0.0594	+/-	0.196	U	0.148	+/-	0.248	U	-0.00103	+/-	0.19	U	-0.0244	+/-	0.157	U	-0.0232	+/-	0.146	U
Bismuth-212	0.512	+/-	0.272		0.125	+/-	0.173	U	0.423	+/-	0.22		0.682	+/-	0.349		0.334	+/-	0.312		0.148	+/-	0.301	U	0.0924	+/-	0.173	U
Bismuth-214	0.263	+/-	0.104		0.334	+/-	0.0688		0.322	+/-	0.0848		0	+/-	0.115	UUI	0.37	+/-	0.116		0.21	+/-	0.0735		0.218	+/-	0.0771	
Cerium-139	-0.00344	+/-	0.0158	U	-0.00394	+/-	0.0131	U	-0.00349	+/-	0.0167	U	-0.0184	+/-	0.0213	U	0.00675	+/-	0.0187	U	-0.00044	+/-	0.0151	U	-0.0167	+/-	0.0134	U
Cerium-141	-0.0327	+/-	0.0378	U	-0.00757	+/-	0.0314	U	0.00131	+/-	0.0316	U	0.0428	+/-	0.05	U	-0.00589	+/-	0.0392	U	0.0109	+/-	0.0291	U	-0.0243	+/-	0.029	U
Cerium-144	-0.0381	+/-	0.111	U	-0.0721	+/-	0.0907	U	-0.00521	+/-	0.105	U	0.0445	+/-	0.148	U	-0.00474	+/-	0.126	U	0.0473	+/-	0.0948	U	-0.084	+/-	0.0886	U
Cesium-134	0.0106	+/-	0.0242	U	0	+/-	0.018	UUI	0.00162	+/-	0.0229	U	0.00411	+/-	0.0306	U	0.0128	+/-	0.0293	U	0.0171	+/-	0.0229	U	0.0165	+/-	0.0157	U
Cesium-136	0.0314	+/-	0.0699	U	0.0126	+/-	0.0385	U	0.00139	+/-	0.0628	U	-0.0894	+/-	0.0857	U	-0.0196	+/-	0.0654	U	0.0276	+/-	0.0508	U	-0.0034	+/-	0.0455	U
Cesium-137	0.00149	+/-	0.0205	U	0.00176	+/-	0.0148	U	0.00378	+/-	0.0209	U	0.00225	+/-	0.0277	U	-0.00527	+/-	0.0232	U	0.0094	+/-	0.0267	U	0.00829	+/-	0.0152	U
Chromium-51	0.0512	+/-	0.216	U	-0.19	+/-	0.161	U	-0.0258	+/-	0.238	U	0.129	+/-	0.261	U	0.0167	+/-	0.269	U	-0.154	+/-	0.205	U	0.243	+/-	0.222	U
Cobalt-56	0.00559	+/-	0.0271	U	0.00776	+/-	0.0166	U	0.0104	+/-	0.0217	U	-0.0129	+/-	0.0287	U	0.0278	+/-	0.0227	U	-5.8E-05	+/-	0.0202	U	-0.00726	+/-	0.0152	U
Cobalt-57	-0.00285	+/-	0.0137	U	-0.003	+/-	0.0111	U	-0.00513	+/-	0.0124	U	0.00472	+/-	0.0179	U	0.0052	+/-	0.0154	U	-0.00298	+/-	0.0121	U	0.00491	+/-	0.0116	U
Cobalt-58	-0.00169	+/-	0.0206	U	0.00692	+/-	0.0156	U	0.0159	+/-	0.0285	U	-0.00502	+/-	0.0244	U	-0.0119	+/-	0.0228	U	-0.0132	+/-	0.021	U	-0.0169	+/-	0.0177	U
Cobalt-60	0.00646	+/-	0.0209	U	-0.00307	+/-	0.0136	U	-0.00232	+/-	0.0215	U	0.013	+/-	0.0228	U	0.0221	+/-	0.0307	U	0.00264	+/-	0.0178	U	0.00126	+/-	0.0145	U
Europium-152	-0.0133	+/-	0.0548	U	0.0181	+/-	0.0395	U	-0.0651	+/-	0.0587	U	0.00108	+/-	0.0685	U	0.0558	+/-	0.0701	U	0.0562	+/-	0.052	U	0.00511	+/-	0.0428	U
Europium-154	-0.00991	+/-	0.0722	U	0.0187	+/-	0.0395	U	-0.0119	+/-	0.0645	U	-0.0317	+/-	0.0768	U	0.0437	+/-	0.0757	U	-0.0212	+/-	0.0485	U	0.000153	+/-	0.0384	U
Europium-155	0.0295	+/-	0.0555	U	0.0221	+/-	0.0501	U	0.00164	+/-	0.0551	U	0.0563	+/-	0.0752	U	0.027	+/-	0.0627	U	-0.0318	+/-	0.0511	U	-0.00441	+/-	0.048	U
Iridium-192	-0.00655	+/-	0.0196	U	0.00489	+/-	0.0145	U	-0.0118	+/-	0.0201	U	-0.00861	+/-	0.0222	U	0.000241	+/-	0.0238	U	0.014	+/-	0.0184	U	-0.00405	+/-	0.0177	U
Iron-59	0.0465	+/-	0.055	U	-0.0335	+/-	0.0325	U	0.0238	+/-	0.0656	U	-0.0124	+/-	0.0509	U	0.0256	+/-	0.0532	U	0.0325	+/-	0.0341	U	0.0162	+/-	0.0354	U
Lead-210	0.749	+/-	2.79	U	0.342	+/-	1.24	U	-1.49	+/-	2.19	U	1.04	+/-	3.92	U	2.96	+/-	3.03	U	-2.64	+/-	7.19	U	1.02	+/-	3.13	U
Lead-212	0.375	+/-	0.0561		0.378	+/-	0.0538		0.412	+/-	0.0562		0.768	+/-	0.0977		0.549	+/-	0.0712		0.329	+/-	0.0585		0.286	+/-	0.0621	
Lead-214	0.302	+/-	0.0897		0.285	+/-	0.0635		0.284	+/-	0.069		0.665	+/-	0.119		0.498	+/-	0.0988		0.277	+/-	0.0864		0.241	+/-	0.0668	
Manganese-54	0.00316	+/-	0.0223	U	0.0083	+/-	0.0129	U	0.0173	+/-	0.0213	U	-0.00752	+/-	0.0259	U	0.00842	+/-	0.0206	U	0.0264	+/-	0.0207	U	-0.00602	+/-	0.0145	U
Mercury-203	0.00991	+/-	0.0245	U	0.0102	+/-	0.0171	U	0.0185	+/-	0.0229	U	0.0427	+/-	0.0423	U	0.027	+/-	0.0553	U	-0.00236	+/-	0.0209	U	-0.00973	+/-	0.0199	U
Neodymium-147	0.162	+/-	0.387	U	0.0769	+/-	0.239	U	-0.172	+/-	0.35	U	-0.253	+/-	0.385	U	-0.148	+/-	0.35	U	-0.135	+/-	0.29	U	-0.0799	+/-	0.254	U
Neptunium-239	-0.0116	+/-	0.0966	U	-0.0234	+/-	0.0911	U	-0.0183	+/-	0.0972	U	-0.0451	+/-	0.125	U	-0.0764	+/-	0.11	U	-0.0521	+/-	0.0918	U	0.0509	+/-	0.09	U
Niobium-94	0.014	+/-	0.0193	U	-0.00674	+/-	0.0148	U	0.0079	+/-	0.0202	U	-0.00471	+/-	0.0235	U	-0.00795	+/-	0.0213	U	0.000898	+/-	0.0166	U	0.0109	+/-	0.0159	U
Niobium-95	0.00606	+/-	0.029	U	0.0174	+/-	0.0223	U	0.0128	+/-	0.0303	U	0	+/-	0.0689	UUI	-0.0017	+/-	0.0322	U	0.0197	+/-	0.027	U	0.0163	+/-	0.0365	U
Potassium-40	2.23	+/-	0.638		2.42	+/-	0.39		2.69	+/-	0.593		3.77	+/-	0.761		1.94	+/-	0.653		1.31	+/-	0.545		1.03	+/-	0.367	
Promethium-144	-0.00496	+/-	0.0217	U	-0.00424	+/-	0.0157	U	-0.00357	+/-	0.021	U	-0.00057	+/-	0.0226	U	-0.00574	+/-	0.0225	U	0.000605	+/-	0.017	U	0.00289	+/-	0.0161	U
Promethium-146	-0.00247	+/-	0.0254	U	-0.00978	+/-	0.0185	U	0.00971	+/-	0.022	U	0.0233	+/-	0.0316	U	-0.00836	+/-	0.0307	U	-0.00653	+/-	0.0205	U	-0.00382	+/-	0.0166	U
Radium-226		+/-				+/-				+/-				+/-				+/-				+/-				+/-		
Radium-228	0	+/-	0.222	UUI	0.403	+/-	0.105		0.33	+/-	0.135		0.816	+/-	0.22		0.78	+/-	0.171		0.415	+/-	0.141		0.31	+/-	0.113	
Ruthenium-106	0.0289	+/-	0.18	U	-0.148	+/-	0.134	U	0.0702	+/-	0.184	U	-0.2	+/-	0.259	U	-0.0418	+/-	0.2	U	-0.0403	+/-	0.161	U	0.0275	+/-	0.142	U
Silver-110m	0.0128	+/-	0.0208	U	-0.00229	+/-	0.014	U	-0.00442	+/-	0.0185	U	-0.0102	+/-	0.0231	U	-0.00452	+/-	0.0203	U	-0.0176	+/-	0.0172	U	0.00302	+/-	0.0155	U
Sodium-22	-0.00373	+/-	0.0259	U	0.0067	+/-	0.0142	U	-0.00425	+/-	0.0231	U	-0.0113	+/-	0.0275	U	0.0155	+/-	0.0271	U	-0.00759	+/-	0.0174	U	0.000105	+/-	0.0138	U
Thallium-208	0.137	+/-	0.0386		0.133	+/-	0.0338		0.151	+/-	0.0372		0.226	+/-	0.0629		0.154	+/-	0.061		0.0996	+/-	0.0357		0	+/-	0.0372	UUI
Thorium-230	0.263	+/-	0.104		0.334	+/-	0.0688		0.322	+/-	0.0848		0.552	+/-	0.115		0.37	+/-	0.116		0.21	+/-	0.0735		0.218	+/-	0.0771	
Thorium-234	0.226	+/-	0.638	U	0.428	+/-	0.667	U	0.0467	+/-	0.742	U	0.427	+/-	1.39	U	0.933	+/-	1.51	U	0.764	+/-	1.44	U	0.469	+/-	1.09	U
Tin-113	-0.0143	+/-	0.0281	U	-0.0195	+/-	0.0187	U	0.00101	+/-	0.0252	U	-0.0271	+/-	0.0313	U	0.0138	+/-	0.0325	U	0.0136	+/-	0.0224	U	0.011	+/-	0.0191	U
Uranium-235	0.0472	+/-	0.116	U	0.0513	+/-	0.102	U	0.00583	+/-	0.105	U	0.182	+/-	0.17	U	0.116	+/-	0.133	U	0.0348	+/-	0.0929	U	0.087	+/-	0.0969	U

Note: Sub-floor samples are shaded.

Table 25. Pit 14 Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																										
	BLT-P14-SO-01a				BLT-P14-SO-01b				BLT-P14-SO-02a				BLT-P14-SO-02b				BLT-P14-SO-03a				BLT-P14-SO-03b				BLT-P14-SO-04a			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (901.1mod/HASL 300)																												
Uranium-238	0.226	+/-	0.638	U	0.428	+/-	0.667	U	0.0467	+/-	0.742	U	0.427	+/-	1.39	U	0.933	+/-	1.51	U	0.764	+/-	1.44	U	0.469	+/-	1.09	U
Yttrium-88	-0.0227	+/-	0.0245	U	0.00549	+/-	0.0128	U	0.0108	+/-	0.0278	U	-0.00783	+/-	0.0279	U	-0.00096	+/-	0.0218	U	0.0142	+/-	0.0219	U	0.00215	+/-	0.0158	U
Zinc-65	-0.00781	+/-	0.056	U	-0.0663	+/-	0.04	U	-0.0348	+/-	0.0462	U	0.0332	+/-	0.0667	U	-0.0159	+/-	0.0642	U	-0.0205	+/-	0.0418	U	0.0109	+/-	0.0388	U
Zirconium-95	0.0116	+/-	0.0443	U	-0.0197	+/-	0.0269	U	-0.00011	+/-	0.037	U	0.0186	+/-	0.0484	U	0.0141	+/-	0.0469	U	-0.0223	+/-	0.037	U	0.00364	+/-	0.0283	U
C-14 (EERF C-01 mod)	4.64	+/-	1.16		7.51	+/-	1.32		6.57	+/-	1.35		5.91	+/-	1.15		10.3	+/-	1.44		15.7	+/-	1.38		4.01	+/-	0.95	
Cl-36 (GL-Rad-A033)	-0.0217	+/-	0.0399	U	0.0585	+/-	0.0623	U	0.0421	+/-	0.0466	U	-0.0148	+/-	0.0515	U	0.0598	+/-	0.0435	U	-0.0276	+/-	0.0375	U	0.0116	+/-	0.0654	U
Ni-63 (RESL Ni-1 mod)	0.236	+/-	1.88	U	0.116	+/-	1.42	U	-0.399	+/-	1.7	U	-0.218	+/-	1.86	U	0.391	+/-	1.47	U	0.22	+/-	1.53	U	0.768	+/-	2.04	U
Sr-90 (905.0 mod)	0.0175	+/-	0.101	U	-0.0216	+/-	0.0877	U	-0.11	+/-	0.112	U	0.00377	+/-	0.0825	U	0.0483	+/-	0.115	U	0.0508	+/-	0.107	U	0.0497	+/-	0.107	U
H-3 (906.0 mod)	0.103	+/-	0.536	U	-0.305	+/-	0.491	U	-0.196	+/-	0.425	U	-0.0541	+/-	0.409	U	0.115	+/-	0.44	U	-0.0303	+/-	0.505	U	0.324	+/-	0.55	U

Note: Sub-floor samples are shaded.

Table 25. Pit 14 Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																										
	BLT-P14-SO-04b				BLT-P14-SO-05a				BLT-P14-SO-05b				BLT-P14-SO-05c				BLT-P14-SO-05d				BLT-P14-SO-05e				BLT-P14-SO-05f			
	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Resul		Uncertainty	Qual
Gamma Scan (901.1																												
Actinium-228	0.399	+/-	0.137		0	+/-	0.255	UUI	0.259	+/-	0.148		0.44	+/-	0.152		0.248	+/-	0.134		0	+/-	0.127	UI	0.66	+/-	0.153	
Americium-241	0.0193	+/-	0.112	U	-0.00875	+/-	0.109	U	0.0117	+/-	0.0993	U	-0.00796	+/-	0.195	U	-0.062	+/-	0.135	U	-0.0395	+/-	0.151	U	-0	+/-	0.123	U
Antimony-124	-0.0305	+/-	0.0488	U	0.0211	+/-	0.0703	U	0.00353	+/-	0.039	U	-0.00511	+/-	0.0533	U	-0.00248	+/-	0.0436	U	0.086	+/-	0.0439	U	0.03	+/-	0.0407	U
Antimony-125	0.00326	+/-	0.0469	U	0.0463	+/-	0.078	U	-0.0167	+/-	0.0372	U	0.0147	+/-	0.0528	U	0.0105	+/-	0.0492	U	0.0325	+/-	0.0436	U	0.04	+/-	0.0524	U
Barium-133	0.00127	+/-	0.0258	U	0.00617	+/-	0.041	U	-0.0416	+/-	0.0209	U	0.00907	+/-	0.0264	U	-0.00596	+/-	0.0243	U	-0.0186	+/-	0.0226	U	0.03	+/-	0.0242	U
Barium-140	-0.0169	+/-	0.147	U	-0.0583	+/-	0.236	U	0.00598	+/-	0.111	U	0.00878	+/-	0.175	U	0.0317	+/-	0.135	U	-0.0273	+/-	0.148	U	0.02	+/-	0.214	U
Beryllium-7	-0.101	+/-	0.171	U	0.07	+/-	0.282	U	0.0132	+/-	0.16	U	-0.121	+/-	0.19	U	-0.0573	+/-	0.158	U	0.0669	+/-	0.166	U	-0.1	+/-	0.178	U
Bismuth-212	0.401	+/-	0.295		0.314	+/-	0.263	U	0.2	+/-	0.134	U	0.463	+/-	0.238		0.296	+/-	0.218		0.188	+/-	0.204	U	0.56	+/-	0.294	
Bismuth-214	0.407	+/-	0.089		0.252	+/-	0.141		0.211	+/-	0.0732		0.252	+/-	0.0885		0.346	+/-	0.0908		0.235	+/-	0.0844		0.53	+/-	0.088	
Cerium-139	0.0196	+/-	0.0232	U	0.0162	+/-	0.0235	U	0.00693	+/-	0.0134	U	0.0179	+/-	0.0243	U	-0.00519	+/-	0.0147	U	-0.00232	+/-	0.0152	U	-0	+/-	0.0199	U
Cerium-141	0.0188	+/-	0.0678	U	0.00286	+/-	0.0464	U	-0.00122	+/-	0.0318	U	0.00329	+/-	0.0405	U	0.00694	+/-	0.0316	U	0.0204	+/-	0.0305	U	0.06	+/-	0.0615	U
Cerium-144	-0.0548	+/-	0.101	U	-0.00067	+/-	0.148	U	0.0279	+/-	0.0894	U	-0.054	+/-	0.114	U	-0.0131	+/-	0.0999	U	0.00743	+/-	0.101	U	0.07	+/-	0.128	U
Cesium-134	0.0485	+/-	0.0399	U	0.00732	+/-	0.0423	U	0.032	+/-	0.0241	U	0.00807	+/-	0.0212	U	0.0287	+/-	0.0211	U	0.0273	+/-	0.022	U	0.04	+/-	0.0323	U
Cesium-136	-0.0127	+/-	0.0577	U	0.0045	+/-	0.0948	U	0.0493	+/-	0.0595	U	0.0474	+/-	0.0655	U	-0.00691	+/-	0.0563	U	0.0261	+/-	0.0464	U	0.03	+/-	0.0618	U
Cesium-137	-0.00272	+/-	0.022	U	0.0178	+/-	0.0331	U	0.00453	+/-	0.0154	U	0.023	+/-	0.0341	U	0.00753	+/-	0.0198	U	0	+/-	0.0353	UI	0	+/-	0.0227	U
Chromium-51	0.00921	+/-	0.211	U	-0.0615	+/-	0.309	U	0.0773	+/-	0.165	U	-0.00119	+/-	0.244	U	-0.0247	+/-	0.2	U	0.0277	+/-	0.217	U	0.02	+/-	0.251	U
Cobalt-56	-0.0128	+/-	0.0206	U	-0.00423	+/-	0.0361	U	-0.00431	+/-	0.0157	U	0.0123	+/-	0.0233	U	0.0109	+/-	0.0212	U	-0.0168	+/-	0.0197	U	0.01	+/-	0.0209	U
Cobalt-57	0.00438	+/-	0.0132	U	0.00772	+/-	0.0168	U	-0.00259	+/-	0.0125	U	-0.00094	+/-	0.0148	U	-0.00284	+/-	0.0125	U	0.00892	+/-	0.012	U	-0	+/-	0.015	U
Cobalt-58	0.0163	+/-	0.0245	U	0.0311	+/-	0.0354	U	-0.00975	+/-	0.0155	U	0.00468	+/-	0.0258	U	0.0119	+/-	0.0195	U	-0.00188	+/-	0.0188	U	-0	+/-	0.0214	U
Cobalt-60	0.0191	+/-	0.022	U	0.00486	+/-	0.0333	U	0.00895	+/-	0.0158	U	0.00885	+/-	0.0224	U	0.00486	+/-	0.0181	U	0.0104	+/-	0.0202	U	-0	+/-	0.0183	U
Europium-152	0.00606	+/-	0.0567	U	-0.0343	+/-	0.0805	U	0.0153	+/-	0.0385	U	0.0278	+/-	0.0584	U	-0.00018	+/-	0.0495	U	0.0361	+/-	0.0402	U	-0	+/-	0.0531	U
Europium-154	-0.00201	+/-	0.0574	U	0.0016	+/-	0.0967	U	-0.0174	+/-	0.0383	U	0.0576	+/-	0.129	U	0.0433	+/-	0.0484	U	-0.0494	+/-	0.045	U	0.03	+/-	0.0634	U
Europium-155	0.0381	+/-	0.0536	U	0.00846	+/-	0.0692	U	0.0597	+/-	0.0453	U	0.0376	+/-	0.0592	U	0.0859	+/-	0.0678	U	-0.00359	+/-	0.0503	U	0.08	+/-	0.0646	U
Iridium-192	0.00577	+/-	0.0188	U	0.00969	+/-	0.0287	U	0.0138	+/-	0.0147	U	-0.00422	+/-	0.0211	U	0.0011	+/-	0.0174	U	0.0164	+/-	0.0266	U	0.01	+/-	0.0205	U
Iron-59	-0.0189	+/-	0.0539	U	0.0157	+/-	0.0679	U	-0.00959	+/-	0.0364	U	-0.0368	+/-	0.0454	U	0.00386	+/-	0.0427	U	-0.0252	+/-	0.0464	U	-0	+/-	0.0408	U
Lead-210	-0.766	+/-	3.5	U	6.1	+/-	8.41	U	-1.48	+/-	3.24	U	4.35	+/-	7.43	U	2.49	+/-	6.41	U	4.82	+/-	6.1	U	1.7	+/-	5.14	U
Lead-212	0.39	+/-	0.087		0.349	+/-	0.0866		0.334	+/-	0.0519		0.486	+/-	0.0861		0.295	+/-	0.0577		0.319	+/-	0.0587		0.66	+/-	0.0705	
Lead-214	0.393	+/-	0.103		0.235	+/-	0.0999		0.293	+/-	0.068		0.335	+/-	0.0886		0.37	+/-	0.0918		0.2	+/-	0.0714		0.5	+/-	0.0964	
Manganese-54	-0.00115	+/-	0.0218	U	0.00424	+/-	0.0352	U	0.000839	+/-	0.0153	U	0.0215	+/-	0.0242	U	0.0161	+/-	0.0159	U	-0.0149	+/-	0.0181	U	0.02	+/-	0.0301	U
Mercury-203	0.0301	+/-	0.0258	U	0.00118	+/-	0.0308	U	-0.00617	+/-	0.0192	U	0.0246	+/-	0.0391	U	-0.00274	+/-	0.0201	U	0.00527	+/-	0.0222	U	0	+/-	0.0407	UI
Neodymium-147	0.0447	+/-	0.318	U	0.24	+/-	0.499	U	-0.0288	+/-	0.247	U	0.0823	+/-	0.411	U	0.126	+/-	0.295	U	0.112	+/-	0.358	U	0.13	+/-	0.421	U
Neptunium-239	-0.0427	+/-	0.0956	U	-0.00138	+/-	0.125	U	0.0444	+/-	0.0815	U	0.0236	+/-	0.101	U	-0.0305	+/-	0.0888	U	-0.0898	+/-	0.0835	U	0.05	+/-	0.112	U
Niobium-94	0.00975	+/-	0.016	U	0.0507	+/-	0.0455	U	-0.0125	+/-	0.0152	U	0.0243	+/-	0.021	U	0.00214	+/-	0.0168	U	-0.00714	+/-	0.0156	U	-0	+/-	0.0237	U
Niobium-95	0.003	+/-	0.0309	U	0.0373	+/-	0.0425	U	0.0234	+/-	0.0185	U	0.0204	+/-	0.0631	U	0.0138	+/-	0.0385	U	-0.0007	+/-	0.0258	U	0.01	+/-	0.0258	U
Potassium-40	1.87	+/-	0.544		1.39	+/-	0.683		1.43	+/-	0.387		1.45	+/-	0.586		0.676	+/-	0.287		1.1	+/-	0.344		2.58	+/-	0.568	
Promethium-144	-0.00569	+/-	0.0199	U	0.0168	+/-	0.0315	U	-0.0049	+/-	0.0167	U	0.0236	+/-	0.0157	U	-0.00179	+/-	0.0165	U	0.0204	+/-	0.0139	U	0.03	+/-	0.0354	U
Promethium-146	0.00238	+/-	0.0206	U	0.0215	+/-	0.038	U	-0.00954	+/-	0.0173	U	0.0226	+/-	0.0262	U	-0.0102	+/-	0.0204	U	0.00365	+/-	0.0224	U	0.01	+/-	0.0229	U
Radium-226		+/-			0.118	+/-	0.0692			+/-			0.252	+/-	0.0885		0.346	+/-	0.0908		0.235	+/-	0.0844		0.53	+/-	0.088	
Radium-228	0.399	+/-	0.137		0	+/-	0.255	UUI	0.259	+/-	0.148		0.44	+/-	0.152		0.248	+/-	0.134		0	+/-	0.127	UI	0.66	+/-	0.153	
Ruthenium-106	0.0345	+/-	0.167	U	-0.0348	+/-	0.279	U	0.152	+/-	0.158	U	-0.0733	+/-	0.175	U	0.14	+/-	0.165	U	-0.033	+/-	0.155	U	0.08	+/-	0.174	U
Silver-110m	-0.00212	+/-	0.0179	U	0.011	+/-	0.0292	U	-0.00739	+/-	0.015	U	0.0113	+/-	0.0226	U	-0.0103	+/-	0.0171	U	0.000924	+/-	0.0164	U	-0	+/-	0.0216	U
Sodium-22	-0.00039	+/-	0.0206	U	0.000276	+/-	0.0346	U	-0.00617	+/-	0.0137	U	0.0206	+/-	0.046	U	0.0155	+/-	0.0173	U	-0.0179	+/-	0.0161	U	0.01	+/-	0.0227	U
Thallium-208	0.179	+/-	0.0542		0.133	+/-	0.0681		0.107	+/-	0.0293		0.134	+/-	0.0512		0.0725	+/-	0.0382		0.129	+/-	0.0419		0.18	+/-	0.0445	
Thorium-230	0.407	+/-	0.089		0.252	+/-	0.141		0.211	+/-	0.0732		0.252	+/-	0.0885		0.346	+/-	0.0908		0.234	+/-	0.0844		0.53	+/-	0.088	
Thorium-234	0.528	+/-	1.35	U	0.713	+/-	1.44	UUI	0.499	+/-	0.935	U	1.08	+/-	1.82	U	0.654	+/-	1.01	U	0.272	+/-	1.19	U	0.21	+/-	1.34	U
Tin-113	-0.00906	+/-	0.0238	U	0.00407	+/-	0.035	U	-0.00438	+/-	0.0185	U	-0.0141	+/-	0.025	U	0.00645	+/-	0.0197	U	-0.00287	+/-	0.0199	U	0.01	+/-	0.024	U
Uranium-235	0.164	+/-	0.159	U	0.143	+/-	0.152	U	0.0829	+/-	0.112	U	0.0785	+/-	0.133	U	0.11	+/-	0.105	U	0.0301	+/-	0.0982	U	0.21	+/-	0.212	U

Note: Sub-floor samples are shaded.

Table 25. Pit 14 Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																										
	BLT-P14-SO-04b				BLT-P14-SO-05a				BLT-P14-SO-05b				BLT-P14-SO-05c				BLT-P14-SO-05d				BLT-P14-SO-05e				BLT-P14-SO-05f			
	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual
Gamma Scan (901.1																												
Uranium-238	0.528	+/-	1.35	U	0.713	+/-	1.44	UUI	0.499	+/-	0.935	U	1.08	+/-	1.82	U	0.654	+/-	1.01	U	0.272	+/-	1.19	U	0.21	+/-	1.34	U
Yttrium-88	0.0267	+/-	0.0266	U	0.0314	+/-	0.0328	U	-0.00442	+/-	0.0134	U	-0.00662	+/-	0.0208	U	0.0141	+/-	0.0219	U	0.0123	+/-	0.0206	U	0	+/-	0.0242	U
Zinc-65	0.00852	+/-	0.0401	U	0.0109	+/-	0.087	U	0.0118	+/-	0.0331	U	0.00406	+/-	0.0474	U	0.04	+/-	0.0418	U	-0.00794	+/-	0.0444	U	0.01	+/-	0.0524	U
Zirconium-95	0.0406	+/-	0.0399	U	-0.00278	+/-	0.0635	U	0.0251	+/-	0.0279	U	0.0133	+/-	0.0438	U	-0.0131	+/-	0.033	U	-0.0019	+/-	0.0385	U	0.03	+/-	0.0375	U
C-14 (EERF C-01 mod)	5.43	+/-	1.09		10.2	+/-	1.32		9.33	+/-	1.23		0.722	+/-	0.939	U	-0.0204	+/-	0.854	U	0.0816	+/-	0.891	U	-0.3	+/-	0.781	U
Cl-36 (GL-Rad-A033)	-0.0352	+/-	0.0369	U	0.0302	+/-	0.0668	U	0.00578	+/-	0.0418	U	0.0271	+/-	0.0472	U	0.0258	+/-	0.0523	U	0.0025	+/-	0.0276	U	-0	+/-	0.0278	U
Ni-63 (RESL Ni-1 mod)	0	+/-	1.83	U	0.102	+/-	1.57	U	-0.57	+/-	1.49	U	-0.392	+/-	0.944	U	-0.476	+/-	1.11	U	-0.159	+/-	0.96	U	-1.3	+/-	1.22	U
Sr-90 (905.0 mod)	-0.0153	+/-	0.113	U	-0.0178	+/-	0.0828	U	-0.0581	+/-	0.103	U	0.0396	+/-	0.0784	U	-0.0635	+/-	0.0458	U	0.107	+/-	0.0879	U	0.02	+/-	0.0583	U
H-3 (906.0 mod)	-0.287	+/-	0.421	U	0.644	+/-	0.604	U	-0.234	+/-	0.428	U	0.507	+/-	0.608	U	0.553	+/-	0.598	U	0.347	+/-	0.585	U	-0.1	+/-	0.4	U

Note: Sub-floor samples are shaded.

Table 26. Pit 14 Groundwater - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	Sample Number											
		BLT-P14-SO-061		BLT-P14-SO-06j		BLT-P14-SO-06k-02		BLT-P14-TW-01f		BLT-P14-TW-01u		BLT-P14-TW-02u	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/l)													
1,2,4-Trimethylbenzene	NA	0.25	U	0.25	U	0.63	J	0.40	BJ	0.49	BJ	0.29	BJ
1,4-Dichlorobenzene	0.47	0.25	U	0.25	U	0.25	U	0.25	U	0.264	J	0.25	U
2-Butanone	NA	1.25	U	1.25	U	1.25	U	3.39	J	1.25	U	1.25	U
Acetone	5475	120		1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
Benzene	0.34	0.3	U	0.3	U	**0.87**	J	0.3	U	0.3	U	0.3	U
Carbon disulfide	1042.86	1.78	J	1.64	J	1.25	U	1.25	U	1.25	U	1.25	U
Chloroform	0.15	0.25	U	0.25	U	0.25	U	**0.55**	J	**0.63**	J	**0.59**	J
Chloromethane	189.8	0.5	U	0.5	U	0.5	U	0.541	J	0.785	J	0.669	J
Ethylbenzene	1339.87	0.25	U	0.25	U	0.587	J	0.299	J	0.25	U	0.25	U
m,p-Xylenes	NA	0.25	U	0.25	U	2.18		0.419	J	0.464	J	0.336	J
Naphthalene	6.51	0.25	U	0.355	BJ	0.25	U	0.28	J	0.395	J	0.25	U
n-Butyl alcohol	NA	13	U	13	U	13	U	13	J	18.2	J	13	U
o-Xylene	NA	0.25	U	0.25	U	0.669	J	0.25	U	0.25	U	0.25	U
tert-Butyl methyl ether	NA	1.46		0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Toluene	2271.11	1.3		0.25	U	2.81		0.73	J	0.45	J	0.42	J
Xylenes (total)	212.6	0.25	U	0.25	U	2.84		0.42	J	0.46	J	0.34	J
RCRA SVOC (ug/l)													
RCRA Metals (ug/l)													
Aluminum	NA	68	U					69.8	J	28400		3510	
Antimony	14.6	4	U					4	U	6.05	J	4.11	J
Arsenic	0.04	6	U					6	U	**17.8**		6	U
Barium	7300	1	U					58.4		106		66	
Cadmium	18.25	3.53	J					1	U	1	U	1	U
Calcium	NA	108						3880		4280		4240	
Chromium	109.5	1	U					1	U	**147**		42	
Cobalt	NA	1	U					3.62	J	4.99	J	3.82	J
Copper	1460	14.7						3	U	100		15.1	
Iron	10950	18	U					707		**43600**		4890	
Lead	NA	2.5	U					2.5	U	11.3		2.5	U
Magnesium	NA	85	U					3940		3850		4210	
Manganese	730	2	U					44.3		122		55.9	
Nickel	730	1	U					5.44		38.7		16.2	
Potassium	NA	50	U					1650		3860		1550	

Table 26. Pit 14 Groundwater - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	Sample Number											
		BLT-P14-SO-061		BLT-P14-SO-06j		BLT-P14-SO-06k-02		BLT-P14-TW-01f		BLT-P14-TW-01u		BLT-P14-TW-02u	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Selenium	182.5	6	U					6	U	7.43	J	6	U
Sodium	NA	45	U					972000		1190000		12200	
Vanadium	36.5	1	U					1	U	**91.2**		9.35	
Zinc	10950	3.57	J					32		205		69.8	
RCRA Pesticide (ug/l)													
TCL PCB (ug/l)													
Herbicides (ug/l)													

Table 27. Pit 14 Groundwater - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	MCL	Sample Number (All Results in pCi/L)							
		BLT-P14-SO-061		BLT-P14-TW-01f		BLT-P14-TW-01u		BLT-P14-TW-02u	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual
Gamma Scan (901.1mod/HASL 300)									
Bismuth-214	NA	0.767	U	10.7	U	27.9		15.4	
Lead-214	NA	2.93	U	20.5		0	U	16.8	
Thorium-230[1]	15	0.767	U	0	UI	**27.9**		**15.4**	

[1] Existing MCL is 15 pCi/L with the concentration level combined for all alpha emitters, except for radon and uranium

Table 28. Pit 14 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number											
	BLT-P14-SO-061		BLT-P14-SO-06j		BLT-P14-SO-06k-02		BLT-P14-TW-01f		BLT-P14-TW-01u		BLT-P14-TW-02u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/l)												
1,1,1,2-Tetrachloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,1-Trichloroethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,1,2,2-Tetrachloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,2-Trichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1-Dichloroethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,1-Dichloroethylene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,1-Dichloropropene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2,3-Trichlorobenzene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2,3-Trichloropropane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2,4-Trichlorobenzene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2,4-Trimethylbenzene	0.25	U	0.25	U	0.63	J	0.40	BJ	0.49	BJ	0.29	BJ
1,2-Dibromo-3-chloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichloroethylene (total)	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2-Dichloropropane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,3,5-Trimethylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,3-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,3-Dichloropropane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,4-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.264	J	0.25	U
2,2-Dichloropropane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
2-Butanone	1.25	U	1.25	U	1.25	U	3.39	J	1.25	U	1.25	U
2-Chloro-1,3-butadiene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
2-Chloroethylvinyl ether	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
2-Chlorotoluene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
2-Hexanone	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
2-Nitropropane	1	U	1	U	1	U	1	U	1	U	1	U
4-Chlorotoluene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
4-Isopropyltoluene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
4-Methyl-2-pentanone	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
Acetone	120		1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
Acetonitrile	6.25	U	6.25	U	6.25	U	6.25	U	6.25	U	6.25	U
Acrolein	3	U	3	U	3	U	3	U	3	U	3	U
Acrylonitrile	1	U	1	U	1	U	1	U	1	U	1	U

Table 28. Pit 14 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number											
	BLT-P14-SO-061		BLT-P14-SO-06j		BLT-P14-SO-06k-02		BLT-P14-TW-01f		BLT-P14-TW-01u		BLT-P14-TW-02u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Allyl chloride	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U
Benzene	0.3	U	0.3	U	0.868	J	0.3	U	0.3	U	0.3	U
Benzyl chloride	1	U	1	U	1	U	1	U	1	U	1	U
bis(2-Chloroisopropyl)ether	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Bromobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromochloromethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Bromodichloromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromoform	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide	1.78	J	1.64	J	1.25	U	1.25	U	1.25	U	1.25	U
Carbon tetrachloride	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Chlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.25	U	0.25	U	0.25	U	0.554	J	0.627	J	0.588	J
Chloromethane	0.5	U	0.5	U	0.5	U	0.541	J	0.785	J	0.669	J
cis-1,2-Dichloroethylene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
cis-1,3-Dichloropropylene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
cis-1,4-Dichloro-2-butene	1	U	1	U	1	U	1	U	1	U	1	U
Cyclohexane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Cyclohexanone	15	U	15	U	15	U	15	U	15	U	15	U
Dibromochloromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Dibromomethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethyl ether	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Ethyl methacrylate	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	0.25	U	0.25	U	0.587	J	0.299	J	0.25	U	0.25	U
Hexachlorobutadiene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Iodomethane	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
Isobutyl alcohol	12.5	U	12.5	U	12.5	U	12.5	U	12.5	U	12.5	U
Isopropylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
m,p-Xylenes	0.25	U	0.25	U	2.18		0.419	J	0.464	J	0.336	J
Methacrylonitrile	1	U	1	U	1	U	1	U	1	U	1	U
Methyl acetate	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
Methyl methacrylate	1	U	1	U	1	U	1	U	1	U	1	U
Methylcyclohexane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Methylene chloride	2	U	2	U	2	U	2	U	2	U	2	U

Table 28. Pit 14 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number											
	BLT-P14-SO-061		BLT-P14-SO-06j		BLT-P14-SO-06k-02		BLT-P14-TW-01f		BLT-P14-TW-01u		BLT-P14-TW-02u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Naphthalene	0.25	U	0.355	BJ	0.25	U	0.28	J	0.395	J	0.25	U
n-Butyl alcohol	13	U	13	U	13	U	13	J	18.2	J	13	U
n-Butylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
n-Propylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
o-Xylene	0.25	U	0.25	U	0.669	J	0.25	U	0.25	U	0.25	U
Pentachloroethane	1	U	1	U	1	U	1	U	1	U	1	U
Propionitrile	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
sec-Butylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Styrene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
tert-Butyl methyl ether	1.46		0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
tert-Butylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Tetrachloroethylene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Toluene	1.3		0.25	U	2.81		0.727	J	0.447	J	0.415	J
trans-1,2-Dichloroethylene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
trans-1,3-Dichloropropylene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
trans-1,4-Dichloro-2-butene	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethylene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Trichlorofluoromethane	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U
Trichlorotrifluoroethane	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl acetate	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylenes (total)	0.25	U	0.25	U	2.84		0.419	J	0.464	J	0.336	J
RCRA SVOC (ug/l)												
1,1'-Biphenyl	2.68	U					2.91	U	3	U	2.94	U
1,2,4-Trichlorobenzene	1.79	U					1.94	U	2	U	1.96	U
1,2-Dichlorobenzene	1.79	U					1.94	U	2	U	1.96	U
1,3-Dichlorobenzene	1.79	U					1.94	U	2	U	1.96	U
1,4-Dichlorobenzene	1.79	U					1.94	U	2	U	1.96	U
2,4,5-Trichlorophenol	0.893	U					0.971	U	1	U	0.98	U
2,4,6-Trichlorophenol	1.79	U					1.94	U	2	U	1.96	U
2,4-Dichlorophenol	1.79	U					1.94	U	2	U	1.96	U
2,4-Dimethylphenol	1.79	U					1.94	U	2	U	1.96	U
2,4-Dinitrophenol	8.93	U					9.71	U	10	U	9.8	U
2,4-Dinitrotoluene	1.79	U					1.94	U	2	U	1.96	U
2,6-Dinitrotoluene	1.79	U					1.94	U	2	U	1.96	U
2-Chloronaphthalene	0.313	U					0.34	U	0.35	U	0.343	U

Table 28. Pit 14 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number											
	BLT-P14-SO-061		BLT-P14-SO-06j		BLT-P14-SO-06k-02		BLT-P14-TW-01f		BLT-P14-TW-01u		BLT-P14-TW-02u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
2-Chlorophenol	1.79	U					1.94	U	2	U	1.96	U
2-Methyl-4,6-dinitrophenol	2.68	U					2.91	U	3	U	2.94	U
2-Methylnaphthalene	0.268	U					0.291	U	0.3	U	0.294	U
2-Nitrophenol	1.79	U					1.94	U	2	U	1.96	U
3,3'-Dichlorobenzidine	0.893	U					0.971	U	1	U	0.98	U
4-Bromophenylphenylether	1.79	U					1.94	U	2	U	1.96	U
4-Chloro-3-methylphenol	1.79	U					1.94	U	2	U	1.96	U
4-Chloroaniline	1.79	U					1.94	U	2	U	1.96	U
4-Chlorophenylphenylether	1.79	U					1.94	U	2	U	1.96	U
4-Nitrophenol	1.79	U					1.94	U	2	U	1.96	U
Acenaphthene	0.277	U					0.301	U	0.31	U	0.304	U
Acenaphthylene	0.179	U					0.194	U	0.2	U	0.196	U
alpha-Terpineol	2.68	U					2.91	U	3	U	2.94	U
Anthracene	0.179	U					0.194	U	0.2	U	0.196	U
Atrazine	1.79	U					1.94	U	2	U	1.96	U
Benzaldehyde	2.68	U					2.91	U	3	U	2.94	U
Benzo(a)anthracene	0.179	U					0.194	U	0.2	U	0.196	U
Benzo(a)pyrene	0.179	U					0.194	U	0.2	U	0.196	U
Benzo(b)fluoranthene	0.179	U					0.194	U	0.2	U	0.196	U
Benzo(ghi)perylene	0.179	U					0.194	U	0.2	U	0.196	U
Benzo(k)fluoranthene	0.179	U					0.194	U	0.2	U	0.196	U
bis(2-Chloroethoxy)methane	2.68	U					2.91	U	3	U	2.94	U
bis(2-Chloroethyl) ether	1.79	U					1.94	U	2	U	1.96	U
bis(2-Chloroisopropyl)ether	1.79	U					1.94	U	2	U	1.96	U
bis(2-Ethylhexyl)phthalate	1.79	U					1.94	U	2	U	1.96	U
Butylbenzylphthalate	1.79	U					1.94	U	2	U	1.96	U
Carbazole	0.179	U					0.194	U	0.2	U	0.196	U
Chrysene	0.179	U					0.194	U	0.2	U	0.196	U
Dibenzo(a,h)anthracene	0.179	U					0.194	U	0.2	U	0.196	U
Dibenzofuran	1.79	U					1.94	U	2	U	1.96	U
Diethylphthalate	1.79	U					1.94	U	2	U	1.96	U
Dimethylphthalate	1.79	U					1.94	U	2	U	1.96	U
Di-n-butylphthalate	1.79	U					1.94	U	2	U	1.96	U
Di-n-octylphthalate	2.68	U					2.91	U	3	U	2.94	U
Diphenylamine	2.68	U					2.91	U	3	U	2.94	U
Fluoranthene	0.179	U					0.194	U	0.2	U	0.196	U

Table 28. Pit 14 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number											
	BLT-P14-SO-061		BLT-P14-SO-06j		BLT-P14-SO-06k-02		BLT-P14-TW-01f		BLT-P14-TW-01u		BLT-P14-TW-02u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Fluorene	0.179	U					0.194	U	0.2	U	0.196	U
Hexachlorobenzene	1.79	U					1.94	U	2	U	1.96	U
Hexachlorobutadiene	1.79	U					1.94	U	2	U	1.96	U
Hexachlorocyclopentadiene	1.79	U					1.94	U	2	U	1.96	U
Hexachloroethane	1.79	U					1.94	U	2	U	1.96	U
Indeno(1,2,3-cd)pyrene	0.179	U					0.194	U	0.2	U	0.196	U
Isophorone	1.79	U					1.94	U	2	U	1.96	U
m,p-Cresols	2.68	U					2.91	U	3	U	2.94	U
m-Nitroaniline	1.79	U					1.94	U	2	U	1.96	U
Naphthalene	0.268	U					0.291	U	0.3	U	0.294	U
Nitrobenzene	2.68	U					2.91	U	3	U	2.94	U
N-Nitrosodipropylamine	1.79	U					1.94	U	2	U	1.96	U
o-Cresol	1.79	U					1.94	U	2	U	1.96	U
o-Nitroaniline	1.79	U					1.94	U	2	U	1.96	U
Pentachlorophenol	1.79	U					1.94	U	2	U	1.96	U
Phenanthrene	0.179	U					0.194	U	0.2	U	0.196	U
Phenol	0.893	U					0.971	U	1	U	0.98	U
p-Nitroaniline	2.68	U					2.91	U	3	U	2.94	U
Pyrene	0.268	U					0.291	U	0.3	U	0.294	U
RCRA Metals (ug/l)												
Aluminum	68	U					69.8	J	28400		3510	
Antimony	4	U					4	U	6.05	J	4.11	J
Arsenic	6	U					6	U	17.8		6	U
Barium	1	U					58.4		106		66	
Beryllium	1	U					1	U	1	U	1	U
Cadmium	3.53	J					1	U	1	U	1	U
Calcium	108						3880		4280		4240	
Chromium	1	U					1	U	147		42	
Cobalt	1	U					3.62	J	4.99	J	3.82	J
Copper	14.7						3	U	100		15.1	
Iron	18	U					707		43600		4890	
Lead	2.5	U					2.5	U	11.3		2.5	U
Magnesium	85	U					3940		3850		4210	
Manganese	2	U					44.3		122		55.9	
Mercury	0.05	U					0.06	U	0.06	U	0.06	U
Nickel	1	U					5.44		38.7		16.2	

Table 28. Pit 14 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number											
	BLT-P14-SO-061		BLT-P14-SO-06j		BLT-P14-SO-06k-02		BLT-P14-TW-01f		BLT-P14-TW-01u		BLT-P14-TW-02u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Potassium	50	U					1650		3860		1550	
Selenium	6	U					6	U	7.43	J	6	U
Silver	1	U					1	U	1	U	1	U
Sodium	45	U					972000		1190000		12200	
Thallium	5	U					5	U	5	U	5	U
Vanadium	1	U					1	U	91.2		9.35	
Zinc	3.57	J					32		205		69.8	
RCRA Pesticide (ug/l)												
4,4'-DDD	0.00521	U					0.00481	U	0.005	U	0.00476	U
4,4'-DDE	0.00521	U					0.00481	U	0.005	U	0.00476	U
4,4'-DDT	0.0104	U					0.00962	U	0.01	U	0.00952	U
Aldrin	0.00521	U					0.00481	U	0.005	U	0.00476	U
alpha-BHC	0.00521	U					0.00481	U	0.005	U	0.00476	U
beta-BHC	0.0088	U					0.00813	U	0.00845	U	0.00805	U
Chlordane (tech.)	0.0797	U					0.0736	U	0.0765	U	0.0729	U
delta-BHC	0.00521	U					0.00481	U	0.005	U	0.00476	U
Dieldrin	0.00521	U					0.00481	U	0.005	U	0.00476	U
Endosulfan I	0.00521	U					0.00481	U	0.005	U	0.00476	U
Endosulfan II	0.00521	U					0.00481	U	0.005	U	0.00476	U
Endosulfan sulfate	0.00521	U					0.00481	U	0.005	U	0.00476	U
Endrin	0.00521	U					0.00481	U	0.005	U	0.00476	U
Endrin aldehyde	0.00521	U					0.00481	U	0.005	U	0.00476	U
Endrin ketone	0.0131	U					0.0121	U	0.0126	U	0.012	U
gamma-BHC (Lindane)	0.00521	U					0.00481	U	0.005	U	0.00476	U
Heptachlor	0.00682	U					0.0063	U	0.00655	U	0.00624	U
Heptachlor epoxide	0.00521	U					0.00481	U	0.005	U	0.00476	U
Methoxychlor	0.0521	U					0.0481	U	0.05	U	0.0476	U
Toxaphene	0.156	U					0.144	U	0.15	U	0.143	U
TCL PCB (ug/l)												
Aroclor-1016	0.0317	U					0.0323	U	0.0333	U	0.0326	U
Aroclor-1221	0.0317	U					0.0323	U	0.0333	U	0.0326	U
Aroclor-1232	0.0317	U					0.0323	U	0.0333	U	0.0326	U
Aroclor-1242	0.0317	U					0.0323	U	0.0333	U	0.0326	U
Aroclor-1248	0.0317	U					0.0323	U	0.0333	U	0.0326	U
Aroclor-1254	0.0317	U					0.0323	U	0.0333	U	0.0326	U
Aroclor-1260	0.0317	U					0.0323	U	0.0333	U	0.0326	U

Table 28. Pit 14 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number											
	BLT-P14-SO-061		BLT-P14-SO-06j		BLT-P14-SO-06k-02		BLT-P14-TW-01f		BLT-P14-TW-01u		BLT-P14-TW-02u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Herbicides (ug/l)												
2,4,5-T	0.0783	U					0.0806	U	0.0822	U	0.0798	U
2,4,5-TP	0.0783	U					0.0806	U	0.0822	U	0.0798	U
2,4-D	0.0783	U					0.0806	U	0.0822	U	0.0798	U
TOC (mg/l)												
Total Organic Carbon #1	0.33	U					2.13		6.49		3.16	
Total Organic Carbon #2	0.33	U					2.1		6.6		3.21	
Total Organic Carbon #3	0.33	U					2.07		6.61		3.21	
Total Organic Carbon #4	0.33	U					2.1		6.55		3.17	
Total Organic Carbon Average	0.33	U					2.1		6.56		3.19	
Cyanide (ug/l)												
Cyanide, Amenable to CL							1.5	U	1.5	U	1.5	U
Cyanide, Total							1.5	U	1.5	U	1.5	U
pH	5.3	H					5.11	H	5.34	H	5.11	H

Table 29. Pit 14 Groundwater - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All Results in pCi/L)															
	BLT-P14-SO-061				BLT-P14-TW-01f				BLT-P14-TW-01u				BLT-P14-TW-02u			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (901.1mod/HASL 300)																
Actinium-228	0.42	+/-	14.8	U	0	+/-	21.3	UI	1.92	+/-	8.21	U	-0.286	+/-	7.87	U
Americium-241	-5.37	+/-	15.4	U	-1.97	+/-	14.9	U	9.06	+/-	17.1	U	-14.5	+/-	10.9	U
Antimony-124	0.17	+/-	4.47	U	10.8	+/-	7.6	U	-1.33	+/-	4.72	U	3.03	+/-	4.67	U
Antimony-125	-0.389	+/-	4.87	U	11.3	+/-	8.92	U	3.16	+/-	6.03	U	0.715	+/-	5.38	U
Barium-133	0.219	+/-	2.79	U	3.72	+/-	2.84	U	-9.85	+/-	3.36	U	0.288	+/-	3.11	U
Barium-140	-4.51	+/-	17.1	U	1.32	+/-	14.9	U	1.15	+/-	14.2	U	-0.883	+/-	11.5	U
Beryllium-7	17.9	+/-	19.7	U	-3.42	+/-	23	U	4.47	+/-	18.6	U	-2.87	+/-	17.6	U
Bismuth-212	6.44	+/-	16.3	U	1.91	+/-	16.9	U	7.78	+/-	16.6	U	-14.3	+/-	14.7	U
Bismuth-214	0.767	+/-	7.19	U	10.7	+/-	11.2	U	27.9	+/-	7.99		15.4	+/-	8.83	
Cerium-139	-0.783	+/-	2.06	U	1.35	+/-	2.62	U	-1.72	+/-	2.23	U	-0.168	+/-	1.86	U
Cerium-141	3.33	+/-	4.34	U	0.428	+/-	5.25	U	-0.563	+/-	4.62	U	1.16	+/-	4.74	U
Cerium-144	-7.18	+/-	13.7	U	9.06	+/-	18.2	U	-0.638	+/-	15.3	U	-11.6	+/-	13.6	U
Cesium-134	-1.17	+/-	2.23	U	1.95	+/-	2.42	U	0.372	+/-	2.47	U	-0.0724	+/-	2	U
Cesium-136	0.358	+/-	6.42	U	0	+/-	14.6	UI	2.93	+/-	4.64	U	1.23	+/-	4.13	U
Cesium-137	0.079	+/-	1.87	U	4.62	+/-	5	U	1.25	+/-	2.49	U	1.59	+/-	1.85	U
Chromium-51	-8.68	+/-	22.3	U	16.3	+/-	24.6	U	8.02	+/-	21.8	U	6.01	+/-	21.1	U
Cobalt-56	2.16	+/-	2.1	U	-1.09	+/-	2.91	U	0.0508	+/-	1.94	U	2.11	+/-	2.09	U
Cobalt-57	-0.298	+/-	1.78	U	0.144	+/-	2.2	U	0.128	+/-	1.93	U	-0.188	+/-	1.63	U
Cobalt-58	1.58	+/-	1.93	U	0.197	+/-	2.35	U	-1.21	+/-	2.19	U	-1.29	+/-	2	U
Cobalt-60	0.0969	+/-	1.77	U	0.973	+/-	2.47	U	-0.288	+/-	2.46	U	0.0383	+/-	2.05	U
Europium-152	-3.49	+/-	5.76	U	-6.82	+/-	6.95	U	4.12	+/-	6.2	U	0	+/-	5.9	UI
Europium-154	-1.85	+/-	5.1	U	-0.0599	+/-	5.92	U	5.12	+/-	6.09	U	0.146	+/-	4.97	U
Europium-155	0.886	+/-	6.97	U	5.5	+/-	9.71	U	-3.12	+/-	8.46	U	1.32	+/-	6.73	U
Iridium-192	0.106	+/-	2.02	U	-1.17	+/-	2.84	U	0.315	+/-	2.08	U	-1.37	+/-	1.95	U
Iron-59	0	+/-	13.2	UUI	-3.4	+/-	5.44	U	-1.13	+/-	4.87	U	3.91	+/-	4.09	U
Lead-210	522	+/-	350	U	67.9	+/-	457	U	503	+/-	362	U	-73.1	+/-	287	U
Lead-212	0.00198	+/-	5.91	U	1.78	+/-	5.22	U	0	+/-	9.35	UI	0.74	+/-	4.66	U
Lead-214	2.93	+/-	7.76	U	20.5	+/-	9.8		0	+/-	9.14	U	16.8	+/-	9.16	
Manganese-54	-1.81	+/-	2.34	U	-0.259	+/-	2.51	U	0.0535	+/-	1.98	U	-0.177	+/-	1.9	U
Mercury-203	1.61	+/-	3.88	U	1.54	+/-	3.18	U	1.61	+/-	2.87	U	2.21	+/-	2.25	U
Neodymium-147	0.167	+/-	38.4	U	7.62	+/-	32.9	U	-9.77	+/-	27.1	U	-10.1	+/-	25.4	U
Neptunium-239	-6.61	+/-	12.7	U	-4.92	+/-	17.3	U	-16.7	+/-	15	U	-0.619	+/-	11.8	U
Niobium-94	0.21	+/-	1.76	U	0.999	+/-	2.53	U	0.611	+/-	1.89	U	0.881	+/-	1.67	U
Niobium-95	1.31	+/-	2.73	U	0.648	+/-	3.01	U	0.796	+/-	2.7	U	0.782	+/-	2.32	U
Potassium-40	15.8	+/-	22.7	U	-6.3	+/-	27.7	U	0	+/-	30.4	UI	6.29	+/-	24.8	U
Promethium-144	0.163	+/-	1.88	U	-0.668	+/-	2.9	U	-1.17	+/-	1.69	U	0.109	+/-	1.98	U
Promethium-146	-1.38	+/-	2.25	U	0	+/-	7.18	UI	-2.73	+/-	2.53	U	0.044	+/-	2.89	U
Radium-228	0.42	+/-	14.8	U	0	+/-	21.3	UI	1.92	+/-	8.21	U	-0.286	+/-	7.87	U
Ruthenium-106	5.67	+/-	16.7	U	1.73	+/-	19.9	U	-12.1	+/-	17.2	U	-15.3	+/-	17.6	U
Silver-110m	0.399	+/-	1.63	U	1.14	+/-	1.92	U	-0.496	+/-	1.97	U	-0.935	+/-	1.78	U
Sodium-22	-0.668	+/-	1.82	U	-0.0214	+/-	2.12	U	1.82	+/-	2.17	U	0.0577	+/-	1.78	U
Thallium-208	1.56	+/-	2.3	U	0.622	+/-	3.92	U	3.45	+/-	2.4	U	0.0382	+/-	2.37	U
Thorium-230	0.767	+/-	7.19	U	0	+/-	11.2	UI	27.9	+/-	7.99		15.4	+/-	8.83	
Thorium-234	52.9	+/-	141	U	116	+/-	199	U	27.4	+/-	182	U	42.3	+/-	109	U
Tin-113	0.966	+/-	2.48	U	2.15	+/-	4.09	U	2.83	+/-	2.83	U	-1.41	+/-	2.48	U
Uranium-235	9.3	+/-	15.7	U	9.04	+/-	17.9	U	12.9	+/-	16.5	U	4.15	+/-	16.9	U
Uranium-238	52.9	+/-	141	U	116	+/-	199	U	27.4	+/-	182	U	42.3	+/-	109	U
Yttrium-88	-0.202	+/-	2.15	U	0.265	+/-	2.68	U	-0.782	+/-	2.19	U	-0.303	+/-	2.33	U
Zinc-65	-0.269	+/-	3.39	U	0.978	+/-	5.06	U	-2.51	+/-	4.9	U	0.362	+/-	4.09	U
Zirconium-95	-0.987	+/-	3.81	U	2.71	+/-	4.46	U	-1.69	+/-	3.88	U	-2.88	+/-	3.3	U
C-14 (EERF C-01 mod)	10.7	+/-	10.5	U	10.5	+/-	17.8	U	-2.09	+/-	17.4	U	-0.231	+/-	17.4	U
Cl-36 (GL-Rad-A033)	-0.913	+/-	5.64	U	-0.123	+/-	5.26	U	3.79	+/-	7.39	U	2.03	+/-	6.27	U
Ni-63 (RESL Ni-1 mod)	-12.5	+/-	17	U	4.36	+/-	17.7	U	11.2	+/-	17.2	U	5.59	+/-	16.8	U
Sr-90 (905.0 mod)	0.0552	+/-	0.468	U	-0.178	+/-	0.486	U	-0.12	+/-	0.411	U	-0.331	+/-	0.355	U
H-3 (906.0 mod)	140	+/-	251	U	270	+/-	239	U	258	+/-	237	U	204	+/-	236	U

Table 30. Pit 14 Waste Solid - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	TCLP	UTS	Sample Number											
			BLT-P14-WS-01		BLT-P14-WS-02		BLT-P14-WS-03		BLT-P14-WS-04		BLT-P14-WS-05		BLT-P14-WS-06	
			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
TCLP VOC (mg/l)														
TCLP SVOC (mg/l)														
TCLP Metals (mg/l)														
Barium	100	1.2	0.2		0.207		0.215		0.185		0.158		0.224	
Mercury	0.2	0.15	0.0005	U	0.0005	U	0.0005	U	0.00396		0.0005	U	0.0005	U
RCRA PCB (ug/kg)														
TCLP Pesticides (mg/l)														

Parameter	TCLP		BLT-P14-WL-01											
			Result	Qual										
TCLP VOC (ug/l)														
Acetone	NA	280	1.31	J										
NA = Not Available; bolded/italicized results exceed the Universal Treatment Standard														

Table 31. Pit 14 Waste Solid - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)												
	NRC Screening Value[1]	BLT-P14-WS-01		BLT-P14-WS-02		BLT-P14-WS-03		BLT-P14-WS-04		BLT-P14-WS-05		BLT-P14-WS-06	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Gamma Scan (901.1mod/HASL 300)													
Actinium-228	NA	0.59		0.76		0.40		0.90		0.70			
Bismuth-212	NA	0.38		0.12	U	0.00	UI	0.00	UI	0.34			
Bismuth-214	NA	0.48		0.37		0.34		0.65		0.41			
Lead-210	0.9	1.56	U	2.14	U	0.45	U	0.77		1.63	U		
Lead-212	NA	0.62		0.73		0.38		0.73		0.66			
Lead-214	NA	0.67		0.52		0.40		0.69		0.54			
Potassium-40	NA	3.63		3.94		2.56		4.21		3.95			
Radium-226	0.7	0.48		0.37		0.34		0.65		0.41			
Radium-228	NA	0.59		0.76		0.40		0.90		0.70			
Thallium-208	NA	0.17		0.21		0.11		0.29		0.16			
Thorium-230	1.8	0.48		0.37		0.34		0.65		0.41			
Thorium-234	14	0.71	U	0.00	UI	0.67	U	0.91		0.32	U		
Uranium-238	14	0.71	U	0.00	UI	0.67	U	0.91		0.32	U		
C-14 (EERF C-01 mod)	12	**30.30**		**27.60**		**15.00**		**16.10**		9.60		**25.00**	
Sr-90 (905.0 mod)	1.7	0.01	U	-0.05	U	-0.08	U	0.04	U	0.01	U	**1.90**	

1 From NUREG 1757, Appendix B, Table B-2

NA = Not available for this radionuclide

Concentration that exceeds NRC screening value was highlighted.

Table 32. Pit 14 Waste Solid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number											
	BLT-P14-WS-01		BLT-P14-WS-02		BLT-P14-WS-03		BLT-P14-WS-04		BLT-P14-WS-05		BLT-P14-WS-06	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
TCLP VOC (mg/l)												
1,1,1-Trichloroethane	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U
1,1,2,2-Tetrachloroethane	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
1,1,2-Trichloroethane	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
1,1-Dichloroethane	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U
1,1-Dichloroethylene	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U
1,2-Dichloroethane	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
1,2-Dichloropropane	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
1,4-Dichlorobenzene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
2-Butanone	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U
2-Hexanone	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U
4-Methyl-2-pentanone	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U
Acetone	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U
Benzene	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U
Bromodichloromethane	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Bromoform	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Bromomethane	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
Carbon disulfide	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U	0.0125	U
Carbon tetrachloride	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Chlorobenzene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Chloroethane	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
Chloroform	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Chloromethane	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
cis-1,3-Dichloropropylene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Dibromochloromethane	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Ethylbenzene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Methylene chloride	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
Styrene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Tetrachloroethylene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Toluene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
trans-1,3-Dichloropropylene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Trichloroethylene	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U
Vinyl acetate	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U
Vinyl chloride	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
Xylenes (total)	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U

Table 32. Pit 14 Waste Solid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number											
	BLT-P14-WS-01		BLT-P14-WS-02		BLT-P14-WS-03		BLT-P14-WS-04		BLT-P14-WS-05		BLT-P14-WS-06	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
TCLP SVOC (mg/l)												
1,4-Dichlorobenzene	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
2,4,5-Trichlorophenol	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
2,4,6-Trichlorophenol	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
2,4-Dinitrotoluene	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Hexachlorobenzene	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Hexachlorobutadiene	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Hexachloroethane	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
m,p-Cresols	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U
Nitrobenzene	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U
o-Cresol	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Pentachlorophenol	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Pyridine	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
TCLP Metals (mg/l)												
Arsenic	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U
Barium	0.2		0.207		0.215		0.185		0.158		0.224	
Cadmium	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Chromium	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Lead	0.025	U	0.025	U	0.025	U	0.025	U	0.025	U	0.025	U
Mercury	0.0005	U	0.0005	U	0.0005	U	0.00396		0.0005	U	0.0005	U
Selenium	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U
Silver	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
RCRA PCB (ug/kg)												
Chlordane (tech.)	0.000765	U	0.000765	U	0.000765	U	0.000765	U	0.000765	U	0.000765	U
Endrin	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
gamma-BHC (Lindane)	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
Heptachlor	0.000066	U	0.000066	U	0.000066	U	0.000066	U	0.000066	U	0.000066	U
Heptachlor epoxide	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
Methoxychlor	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Toxaphene	0.0015	U	0.0015	U	0.0015	U	0.0015	U	0.0015	U	0.0015	U
TCLP Pesticides (mg/l)												
Aroclor-1016	1.2	U	1.18	U	1.19	U	1.18	U	1.2	U	1.11	U
Aroclor-1221	1.2	U	1.18	U	1.19	U	1.18	U	1.2	U	1.11	U
Aroclor-1232	1.2	U	1.18	U	1.19	U	1.18	U	1.2	U	1.11	U
Aroclor-1242	1.2	U	1.18	U	1.19	U	1.18	U	1.2	U	1.11	U

Table 32. Pit 14 Waste Solid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number											
	BLT-P14-WS-01		BLT-P14-WS-02		BLT-P14-WS-03		BLT-P14-WS-04		BLT-P14-WS-05		BLT-P14-WS-06	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Aroclor-1248	1.2	U	1.18	U	1.19	U	1.18	U	1.2	U	1.11	U
Aroclor-1254	1.2	U	1.18	U	1.19	U	1.18	U	1.2	U	1.11	U
Aroclor-1260	1.2	U	1.18	U	1.19	U	1.18	U	1.2	U	1.11	U
pH/Corrosivity	5	H	5.1	H	5.01	H	5.09	H	5.11	H	6.48	H
Paint Filter	PASS		PASS		PASS		PASS		PASS			
Reactive Sulfide (mg/kg)	74.6	J	73.8	J	117	J	56.4	J	91.8	J		
Reactive Cyanide (ug/kg)	250000	<1	250000	<1	250000	<1						

Table 33. Pit 14 Waste Solid - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																	
	BLT-P14-WS-01			BLT-P14-WS-02			BLT-P14-WS-03			BLT-P14-WS-04			BLT-P14-WS-05			BLT-P14-WS-06		
	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual
Gamma Scan (901.1mod/HASL 300)																		
Actinium-228	0.59	0.15		0.76	0.16		0.40	0.11		0.90	0.21		0.70	0.13				
Americium-241	-0.02	0.11	U	-0.06	0.11	U	-0.05	0.11	U	0.01	0.04	U	0.02	0.06	U			
Antimony-124	0.03	0.11	U	0.03	0.12	U	0.04	0.09	U	0.07	0.26	U	0.08	0.10	U			
Antimony-125	0.04	0.05	U	0.00	0.05	U	0.00	0.04	U	-0.01	0.08	U	-0.02	0.04	U			
Barium-133	0.00	0.02	U	0.00	0.02	U	0.01	0.02	U	-0.01	0.04	U	0.01	0.02	U			
Barium-140	0.00	17.00	UI	-6.64	16.60	U	-3.78	12.70	U	0.00	26.00	UI	0.00	13.00	UI			
Beryllium-7	-0.36	0.57	U	-0.45	0.56	U	0.22	0.41	U	-0.52	0.74	U	-0.06	0.40	U			
Bismuth-212	0.38	0.31		0.12	0.34	U	0.00	0.22	UI	0.00	0.45	UI	0.34	0.28				
Bismuth-214	0.48	0.08		0.37	0.09		0.34	0.08		0.65	0.12		0.41	0.07				
Cerium-139	0.00	0.02	U	-0.01	0.02	U	0.00	0.02	U	-0.02	0.03	U	-0.01	0.02	U			
Cerium-141	-0.14	0.24	U	0.12	0.22	U	0.12	0.18	U	0.15	0.26	U	0.18	0.17	U			
Cerium-144	-0.10	0.14	U	0.05	0.12	U	-0.10	0.11	U	-0.10	0.18	U	-0.04	0.11	U			
Cesium-134	0.03	0.02	U	0.02	0.04	U	0.01	0.02	U	0.00	0.05	UI	0.00	0.04	UI			
Cesium-136	3.08	5.46	U	4.82	6.05	U	-0.59	4.51	U	2.93	10.70	U	-1.88	4.91	U			
Cesium-137	0.01	0.02	U	-0.01	0.02	U	0.00	0.02	U	-0.01	0.03	U	0.01	0.01	U			
Chromium-51	-0.44	1.82	U	1.55	1.70	U	-0.24	1.43	U	1.16	2.53	U	0.84	1.35	U			
Cobalt-56	0.03	0.05	U	0.02	0.05	U	0.02	0.04	U	-0.04	0.07	U	0.03	0.04	U			
Cobalt-57	0.02	0.02	U	0.00	0.01	U	0.01	0.01	U	0.01	0.02	U	-0.01	0.01	U			
Cobalt-58	-0.03	0.04	U	-0.03	0.04	U	-0.02	0.04	U	0.02	0.07	U	-0.03	0.03	U			
Cobalt-60	0.01	0.02	U	0.01	0.02	U	0.00	0.02	U	0.00	0.03	U	-0.01	0.02	U			
Europium-152	0.01	0.05	U	-0.01	0.05	U	0.00	0.04	U	0.00	0.08	U	-0.01	0.04	U			
Europium-154	-0.04	0.06	U	-0.06	0.06	U	-0.02	0.05	U	0.06	0.10	U	0.00	0.04	U			
Europium-155	0.06	0.08	U	0.01	0.05	U	-0.05	0.05	U	0.03	0.10	U	0.06	0.04	U			
Iridium-192	0.01	0.04	U	-0.03	0.04	U	0.00	0.03	U	0.00	0.05	U	-0.01	0.03	U			
Iron-59	0.01	0.17	U	-0.07	0.17	U	0.05	0.13	U	0.00	0.29	UI	0.02	0.14	U			
Lead-210	1.56	2.21	U	2.14	3.52	U	0.45	3.85	U	0.77	0.44		1.63	1.55	U			
Lead-212	0.62	0.06		0.73	0.06		0.38	0.06		0.73	0.10		0.66	0.05				
Lead-214	0.67	0.09		0.52	0.09		0.40	0.06		0.69	0.13		0.54	0.06				
Manganese-54	0.01	0.02	U	0.01	0.02	U	0.00	0.02	U	-0.01	0.03	U	0.00	0.02	U			
Mercury-203	0.01	0.08	U	0.03	0.07	U	0.03	0.06	U	0.01	0.19	U	0.06	0.06	U			
Neodymium-147	0.00	80.60	UI	-45.40	74.50	U	-29.00	63.20	U	-66.10	120.00	U	0.00	61.40	UI			
Neptunium-239	0.01	0.09	U	-0.04	0.09	U	0.03	0.08	U	-0.02	0.11	U	-0.05	0.08	U			
Niobium-94	-0.03	0.02	U	-0.01	0.02	U	0.01	0.02	U	0.00	0.03	U	0.00	0.01	U			
Niobium-95	0.10	0.17	U	0.07	0.16	U	0.04	0.12	U	0.01	0.22	U	0.01	0.11	U			
Potassium-40	3.63	0.68		3.94	0.66		2.56	0.48		4.21	0.78		3.95	0.48				
Promethium-144	0.00	0.03	U	0.01	0.02	U	0.00	0.02	U	0.02	0.03	U	0.02	0.02	U			
Promethium-146	-0.02	0.02	U	0.01	0.02	U	0.00	0.02	U	0.00	0.04	U	-0.01	0.02	U			
Radium-226	0.48	0.08		0.37	0.09		0.34	0.08		0.65	0.12		0.41	0.07				
Radium-228	0.59	0.15		0.76	0.16		0.40	0.11		0.90	0.21		0.70	0.13				
Ruthenium-106	0.26	0.18	U	-0.14	0.20	U	0.02	0.16	U	0.22	0.30	U	0.08	0.15	U			
Silver-110m	-0.02	0.03	U	0.01	0.02	U	0.00	0.02	U	0.00	0.03	U	0.00	0.02	U			

Table 33. Pit 14 Waste Solid - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																	
	BLT-P14-WS-01			BLT-P14-WS-02			BLT-P14-WS-03			BLT-P14-WS-04			BLT-P14-WS-05			BLT-P14-WS-06		
	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual
Sodium-22	-0.02	0.02	U	-0.02	0.02	U	-0.01	0.02	U	0.02	0.04	U	0.00	0.02	U			
Thallium-208	0.17	0.05		0.21	0.05		0.11	0.04		0.29	0.07		0.16	0.04				
Thorium-230	0.48	0.08		0.37	0.09		0.34	0.08		0.65	0.12		0.41	0.07				
Thorium-234	0.71	1.24	U	0.00	0.86	UI	0.67	1.01	U	0.91	0.58		0.32	0.82	U			
Tin-113	-0.01	0.04	U	0.06	0.05	U	0.00	0.04	U	0.01	0.05	U	0.00	0.03	U			
Uranium-235	0.09	0.10	U	0.08	0.17	U	0.08	0.09	U	0.12	0.13	U	0.05	0.13	U			
Uranium-238	0.71	1.24	U	0.00	0.86	UI	0.67	1.01	U	0.91	0.58		0.32	0.82	U			
Yttrium-88	0.03	0.03	U	-0.02	0.04	U	0.02	0.03	U	0.02	0.07	U	0.01	0.03	U			
Zinc-65	0.01	0.06	U	-0.01	0.06	U	-0.03	0.05	U	0.01	0.09	U	0.00	0.05	U			
Zirconium-95	0.08	0.19	U	0.06	0.10	U	0.07	0.08	U	0.05	0.16	U	0.05	0.07	U			
C-14 (EERF C-01 mod)	30.30	2.08		27.60	1.87		15.00	1.54		16.10	1.83		9.60	1.45		25.00	2.12	
Cl-36 (GL-Rad-A033)	0.01	0.04	U	0.02	0.05	U	0.00	0.03	U	0.03	0.04	U	0.02	0.07	U	0.05	0.05	U
Ni-63 (RESL Ni-1 mod)	2.35	1.94	U	-0.69	1.89	U	-0.34	1.78	U	-0.09	1.99	U	-0.04	1.91	U	-0.28	1.88	U
Sr-90 (905.0 mod)	0.01	0.10	U	-0.05	0.09	U	-0.08	0.08	U	0.04	0.14	U	0.01	0.11	U	1.90	0.29	
H-3 (906.0 mod)	-0.19	0.53	U	-0.29	0.53	U	-0.12	0.53	U	0.34	0.56	U	-0.09	0.53	U	0.54	0.58	U

Table 34. Pit 14 Waste Liquid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number	
	BLT-P14-WL-01	
	Result	Qual
TCLP VOC (ug/l)		
1,1,1-Trichloroethane	0.3	U
1,1,2,2-Tetrachloroethane	0.25	U
1,1,2-Trichloroethane	0.25	U
1,1-Dichloroethane	0.3	U
1,1-Dichloroethylene	0.3	U
1,2-Dichloroethane	0.25	U
1,2-Dichloropropane	0.25	U
1,4-Dichlorobenzene	0.25	U
2-Butanone	1.25	U
2-Hexanone	1.25	U
4-Methyl-2-pentanone	1.25	U
Acetone	1.31	J
Benzene	0.3	U
Bromodichloromethane	0.25	U
Bromoform	0.25	U
Bromomethane	0.5	U
Carbon disulfide	1.25	U
Carbon tetrachloride	0.25	U
Chlorobenzene	0.25	U
Chloroethane	0.5	U
Chloroform	0.25	U
Chloromethane	0.5	U
cis-1,3-Dichloropropylene	0.25	U
Dibromochloromethane	0.25	U
Ethylbenzene	0.25	U
Methylene chloride	2	U
Styrene	0.25	U
Tetrachloroethylene	0.25	U
Toluene	0.25	U
trans-1,3-Dichloropropylene	0.25	U
Trichloroethylene	0.25	U
Vinyl acetate	1.5	U
Vinyl chloride	0.5	U
Xylenes (total)	0.25	U
1,1,1,2-Tetrachloroethane	0.25	U
1,1-Dichloropropene	0.25	U
1,2,3-Trichlorobenzene	0.3	U
1,2,3-Trichloropropane	0.3	U
1,2,4-Trichlorobenzene	0.3	U
1,2,4-Trimethylbenzene	0.25	U
1,2-Dibromo-3-chloropropane	0.5	U
1,2-Dibromoethane	0.25	U
1,2-Dichlorobenzene	0.25	U
1,2-Dichloroethylene (total)	0.3	U
1,3,5-Trimethylbenzene	0.25	U
1,3-Dichlorobenzene	0.25	U
1,3-Dichloropropane	0.25	U
2,2-Dichloropropane	0.3	U

Table 34. Pit 14 Waste Liquid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number	
	BLT-P14-WL-01	
	Result	Qual
2-Chloro-1,3-butadiene	0.3	U
2-Chloroethylvinyl ether	1.5	U
2-Chlorotoluene	0.25	U
2-Nitropropane	1	U
4-Chlorotoluene	0.25	U
4-Isopropyltoluene	0.25	U
Acetonitrile	6.25	U
Acrolein	3	U
Acrylonitrile	1	U
Allyl chloride	3.7	U
Benzyl chloride	1	U
bis(2-Chloroisopropyl)ether	1.5	U
Bromobenzene	0.25	U
Bromochloromethane	0.3	U
cis-1,2-Dichloroethylene	0.3	U
cis-1,4-Dichloro-2-butene	1	U
Cyclohexane	0.3	U
Cyclohexanone	15	U
Dibromomethane	0.3	U
Dichlorodifluoromethane	0.5	U
Ethyl ether	0.3	U
Ethyl methacrylate	1	U
Hexachlorobutadiene	0.25	U
Iodomethane	1.25	U
Isobutyl alcohol	12.5	U
Isopropylbenzene	0.25	U
m,p-Xylenes	0.25	U
Methacrylonitrile	1	U
Methyl acetate	1.25	U
Methyl methacrylate	1	U
Methylcyclohexane	0.25	U
Naphthalene	0.25	U
n-Butyl alcohol	13	U
n-Butylbenzene	0.25	U
n-Propylbenzene	0.25	U
o-Xylene	0.25	U
Pentachloroethane	1	U
Propionitrile	1.5	U
sec-Butylbenzene	0.25	U
tert-Butyl methyl ether	0.25	U
tert-Butylbenzene	0.25	U
trans-1,2-Dichloroethylene	0.3	U
trans-1,4-Dichloro-2-butene	1	U
Trichlorofluoromethane	0.31	U
Trichlorotrifluoroethane	1	U

Table 35. Pit 26 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	BLT-P26-SO-01a		BLT-P26-SO-01b		BLT-P26-SO-02a		BLT-P26-SO-02b	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)									
1,2,4-Trimethylbenzene	NA	0.18	U	0.193	U	0.194	U	23.6	
1,3,5-Trimethylbenzene	NA	0.303	J	0.193	U	0.194	U	23.6	
2-Butanone	NA	1.53	U	1.64	U	1.65	U	200	
4-Methyl-2-pentanone	NA	1.08	J	1.05	U	1.06	U	128	U
Acetone	919800000	17.3		11.3		50.1		664	
Acetonitrile	NA	8.19	U	8.79	U	8.84	U	1070	
Benzene	52029.09091	0.297	U	0.318	U	0.32	U	89.3	
Carbon disulfide	102200000	1.12	U	1.21	U	1.21	U	147	U
Carbon tetrachloride	22012.30769	0.306	J	0.193	U	0.194	U	23.6	
Chloroform	10220000	57.1		8.09		34.7		762	
Ethyl ether	204400000	4.03		0.807	J	4.23		37.4	
Ethylbenzene	102200000	0.18	U	0.193	U	0.194	U	23.6	
Isopropylbenzene	NA	0.18	U	0.193	U	0.194	U	23.6	U
m,p-Xylenes	NA	0.431	J	0.349	J	0.39	J	268	
Naphthalene	20440000	1.18		0.193	U	0.194	U	40.7	
n-Propylbenzene	NA	0.18	U	0.193	U	0.194	U	23.6	U
o-Xylene	NA	1.98		0.651	J	0.199	J	58.3	
Styrene	204400000	0.319	J	0.257	J	0.279	J	23.6	U
eeds NRC screening value	5300	0.18	U	0.193	U	0.194	U	23.6	U
Toluene	81760000	0.279	J	0.28	U	0.304	J	232	
Xylenes (total)	204400000	2.41		1		0.589	J	325	
RCRA SVOC (ug/kg)									
bis(2-Ethylhexyl)phthalate	204400	69.8	U	71.3	U	69.5	U	70.2	U
Naphthalene	20440000	10.5	U	10.7	U	10.4	U	10.5	U
RCRA Metals (mg/kg)									
Aluminum	NA	9880		13800		13400		13500	
Antimony	408.8	0.516	J	0.515	J	0.575	J	0.732	J
Arsenic	1.907733333	**2.08**		**2.59**		**2.82**		**3.14**	
Barium	204400	18.8		24.7		26		27.1	
Beryllium	2044	0.164	J	0.19	J	0.21	J	0.209	J
Cadmium	511	0.16	J	0.217	J	0.218	J	0.225	J
Calcium	NA	80.3		98.3		97.4		96.4	

Note: sub-floor samples are shaded.

Table 35. Pit 26 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	BLT-P26-SO-01a		BLT-P26-SO-01b		BLT-P26-SO-02a		BLT-P26-SO-02b	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual
Chromium	3066	11.2		15.1		15.3		15.7	
Cobalt	NA	1.14		1.48		1.63		1.71	
Copper	40880	5.27		7.3		6.49		7.03	
Iron	306600	6490		8730		8930		9410	
Lead	NA	4.55		5.48		5.54		6.46	
Magnesium	NA	369		529		584		606	
Manganese	20440	19.9		25.8		29.8		34.9	
Mercury	NA	33.4		62.2		40		32.5	
Nickel	20440	3.83		5.54		5.64		5.72	
Potassium	NA	364		491		528		519	
Selenium	5110	0.665	U	0.661	U	0.677	U	0.688	U
Sodium	NA	34.6		40.7		35.5		34.4	
Vanadium	1022	18.5		25.1		25.1		25.4	
Zinc	306600	8.13		11.5		12.1		13.1	
RCRA Pesticide (ug/kg)									
beta-BHC	NA	0.189	U	0.193	U	0.197	U	0.2	U
TCLP PCB (ug/kg)									
Parameter		BLT-P26-SO-05b		BLT-P26-SO-05c		BLT-P26-SO-05d		BLT-P26-SO-05e	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual
Aroclor-1242	1430.8	1.18	U	1.16	U	1.19	U	1.16	U
Aroclor-1254	1430.8	1.18	U	1.16	U	1.19	U	1.16	U
Aroclor-1260	1430.8	1.18	U	1.16	U	1.19	U	1.16	U

Note: sub-floor samples are shaded.

Table 35. Pit 26 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	BLT-P26-SO-03a		BLT-P26-SO-03b		BLT-P26-SO-04a		BLT-P26-SO-04b		BLT-P26-SO-05a	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)											
1,2,4-Trimethylbenzene	NA	0.181	U	0.191	U	18.6	U	20.6		31.9	
1,3,5-Trimethylbenzene	NA	0.181	U	0.191	U	18.6		20.6		24	
2-Butanone	NA	1.54	U	1.62	U	158	U	175	U	155	U
4-Methyl-2-pentanone	NA	0.985	U	1.04	U	102	U	112	U	99.2	U
Acetone	919800000	41.2		16.8		262		305		516	
Acetonitrile	NA	8.23	U	8.7	U	849	U	936		829	U
Benzene	52029.09091	0.298	U	0.315	U	30.7	U	35.8	J	30	
Carbon disulfide	102200000	1.13	U	1.19	U	116	U	128	U	114	U
Carbon tetrachloride	22012.30769	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U
Chloroform	10220000	33.2		5.98		61.4		90.6		65.2	
Ethyl ether	204400000	0.226	U	0.239	U	23.3		69.8		36.7	
Ethylbenzene	102200000	0.181	U	0.191	U	609		415		263	
Isopropylbenzene	NA	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U
m,p-Xylenes	NA	1.01	J	0.448	J	2200		3890		6200	
Naphthalene	20440000	0.181	U	0.191	U	18.6		20.6		145	
n-Propylbenzene	NA	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U
o-Xylene	NA	0.181	U	0.191	U	1540		1780		3030	
Styrene	204400000	0.202	J	0.191	U	18.6	U	20.6	U	18.2	U
eeds NRC screening value	5300	0.239	J	0.191	U	18.6	U	20.6	U	18.2	U
Toluene	81760000	0.262	U	0.277	U	77.6		161		55.6	
Xylenes (total)	204400000	1.01		0.448	J	3740		5670		9230	
RCRA SVOC (ug/kg)											
bis(2-Ethylhexyl)phthalate	204400	168	J	73.9	U	70.2	U	69.3	U	69.2	U
Naphthalene	20440000	10.4	U	11.1	U	10.5	U	10.4	U	10.4	U
RCRA Metals (mg/kg)											
Aluminum	NA	13500		8490		13500		15900		10200	
Antimony	408.8	0.765	J	0.407	U	29.1		15.5		110	
Arsenic	1.907733333	**9.05**		1.43	J	**3.24**		**3.75**		**2.73**	
Barium	204400	30.3		21		29.2		31.8		22.7	
Beryllium	2044	0.318	J	0.183	J	0.272	J	0.277	J	0.214	J
Cadmium	511	0.322	J	0.112	J	0.224	J	0.24	J	0.17	J
Calcium	NA	57.2		37.6		74.7		75.4		63.2	

Note: sub-floor samples are shaded.

Table 35. Pit 26 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	BLT-P26-SO-03a		BLT-P26-SO-03b		BLT-P26-SO-04a		BLT-P26-SO-04b		BLT-P26-SO-05a	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Chromium	3066	67.9		9.63		15.3		17.8		11.3	
Cobalt	NA	1.85		1.08		2.25		2.21		1.74	
Copper	40880	26.3		6.49		7.11		8.28		5.43	
Iron	306600	13500		4480		9850		10800		7450	
Lead	NA	9.59		5.35		6.91		7.37		6.12	
Magnesium	NA	633		350		670		700		464	
Manganese	20440	27.1		14.5		32.1		30.2		27.6	
Mercury	NA	80.8		709		7870		14600		29200	
Nickel	20440	6.01		3.97		6.24		6.85		4.65	
Potassium	NA	526		371		584		635		420	
Selenium	5110	0.628	U	0.611	U	0.637	U	0.678	U	0.619	U
Sodium	NA	18.3		12.9	J	21		23.5		14.9	J
Vanadium	1022	40.5		15.3		25.3		29.2		18.9	
Zinc	306600	25.6		16.5		13.9		15		10.7	
RCRA Pesticide (ug/kg)											
beta-BHC	NA	0.178	U	0.178	U	6.09		3.96		11.4	
TCLP PCB (ug/kg)											
Parameter		BLT-P26-SO-05f		BLT-P26-SO-06a		BLT-P26-SO-06b		BLT-P26-SO-07a		BLT-P26-SO-07b	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Aroclor-1242	1430.8	1.17	U	1.16	U	1.23	U	1.17	U	1.15	U
Aroclor-1254	1430.8	1.17	U	1.16	U	1.23	U	1.17	U	1.15	U
Aroclor-1260	1430.8	1.17	U	1.16	U	1.23	U	1.17	U	1.15	U
Herbicides (u											

Note: sub-floor samples are shaded.

Table 35. Pit 26 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	Sample Number									
		BLT-P26-SO-05b		BLT-P26-SO-05c		BLT-P26-SO-05d		BLT-P26-SO-05e		BLT-P26-SO-05f	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)											
1,2,4-Trimethylbenzene	NA	76		0.233	U	0.243	U	0.208	U	0.188	U
1,3,5-Trimethylbenzene	NA	64.7		0.233	U	0.243	U	0.208	U	0.188	U
2-Butanone	NA	141	U	1.98	U	3.14	J	1.77	U	1.6	U
4-Methyl-2-pentanone	NA	90.5	U	1.27	U	1.33	U	1.14	U	1.03	U
Acetone	919800000	227		3	U	19.4		2.69	U	2.43	U
Acetonitrile	NA	756		10.6	U	11.1	U	9.49	U	8.57	U
Benzene	52029.09091	27.4		0.384	U	0.401	U	0.344	U	0.31	U
Carbon disulfide	102200000	104	U	1.45	U	1.52	U	1.3	U	1.18	U
Carbon tetrachloride	22012.30769	16.6	U	0.233	U	0.243	U	0.208	U	0.188	U
Chloroform	10220000	37.7		0.233	U	0.253	J	3.2		0.188	U
Ethyl ether	204400000	20.8		0.291	U	0.304	U	0.261	U	0.235	U
Ethylbenzene	102200000	1360		0.233	U	0.243	U	0.208	U	0.188	U
Isopropylbenzene	NA	67.3		0.233	U	0.243	U	0.208	U	0.188	U
m,p-Xylenes	NA	4120		0.291	U	0.304	U	0.437	J	0.235	U
Naphthalene	20440000	16.6		0.251	J	0.243	U	0.237	J	0.188	U
n-Propylbenzene	NA	76.6		0.233	U	0.243	U	0.208	U	0.188	U
o-Xylene	NA	3070		0.233	U	0.243	U	0.208	U	0.188	U
Styrene	204400000	16.6	U	0.233	U	0.243	U	0.208	U	0.188	U
eeds NRC screening value	5300	16.6	U	0.233	U	0.243	U	0.208	U	0.188	U
Toluene	81760000	548	U	0.338	U	0.353	U	1	J	0.273	U
Xylenes (total)	204400000	7190		0.233	U	0.243	U	0.437	J	0.188	U
RCRA SVOC (ug/kg)											
bis(2-Ethylhexyl)phthalate	204400	71.6	U	72.9	U	71.8	U	207		330	
Naphthalene	20440000	10.7	U	10.9	U	10.8	U	10.7	U	17.7	J
RCRA Metals (mg/kg)											
Aluminum	NA	11200		6510		2150		812		1550	
Antimony	408.8	20.9		0.511	J	0.63	J	0.4	U	0.407	U
Arsenic	1.907733333	2.38		2.15		0.869	J	0.806	J	1.06	J
Barium	204400	24.4		13.4		5.47		3.51		4.39	
Beryllium	2044	0.239	J	0.107	J	0.102	U	0.1	U	0.102	U
Cadmium	511	0.212	J	0.101	U	0.102	U	0.1	U	0.102	U
Calcium	NA	67		51.1		19.7		13.8		17.3	

Note: sub-floor samples are shaded.

Table 35. Pit 26 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Sample Number											
Parameter	**RBC**	**BLT-P26-SO-05b**		**BLT-P26-SO-05c**		**BLT-P26-SO-05d**		**BLT-P26-SO-05e**		**BLT-P26-SO-05f**	
		Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Chromium	3066	12.6		29.6		6.27		8.6		17.5	
Cobalt	NA	1.9		0.842		0.204	U	0.2	U	0.203	U
Copper	40880	6.31		7.86		4.04		4.07		7.95	
Iron	306600	7990		9830		3270		3190		5280	
Lead	NA	10.5		3.2		1.5		0.81	J	1.4	
Magnesium	NA	534		247		77.8		28.3	J	51.9	
Manganese	20440	29.1		23.2		5.54		3.02		7.94	
Mercury	NA	41700		15.3		2.68	J	2.91	J	2.4	U
Nickel	20440	5.11		6.07		1.36		1.29		2.87	
Potassium	NA	468		263		125		79.7		108	
Selenium	5110	0.614	U	0.785	J	0.611	U	0.6	U	0.988	J
Sodium	NA	16.9		11.3	J	4.62	J	4.5	U	4.8	J
Vanadium	1022	20.9		13.6		7.02		7.92		12.1	
Zinc	306600	11.7		5.88		2.09		1.24		3.42	
RCRA Pesticide (ug/kg)											
beta-BHC	NA	9.94		0.175	U	0.178	U	0.174	U	0.176	U
TCLP PCB (ug/kg)											
Parameter		BLT-P26-SO-08a		BLT-P26-SO-08b		BLT-P34C-SO-01a		BLT-P34C-SO-01b		BLT-P34C-SO-02a	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Aroclor-1242	1430.8	4.9		1.19	U	1.21	U	1.2	U	1.19	Uh
Aroclor-1254	1430.8	2.2	J	1.19	U	1.21	U	1.2	U	1.19	Uh
Aroclor-1260	1430.8	2.04	J	1.19	U	1.21	U	1.2	U	1.19	Uh
		g/kg)									

Note: sub-floor samples are shaded.

Table 35. Pit 26 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	BLT-P26-SO-06a		BLT-P26-SO-06b		BLT-P26-SO-07a		BLT-P26-SO-07b		BLT-P26-SO-08a	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)											
1,2,4-Trimethylbenzene	NA	0.698	J	0.269	J	0.319	U	0.273	U	0.208	U
1,3,5-Trimethylbenzene	NA	0.371	J	0.202	U	0.319	U	0.273	U	0.208	U
2-Butanone	NA	2.53	U	1.71	U	2.71	U	2.32	U	1.76	U
4-Methyl-2-pentanone	NA	1.62	U	1.1	U	1.74	U	1.49	U	1.13	U
Acetone	919800000	46.8		20.8		8.16		6.62	J	7.66	
Acetonitrile	NA	13.6	U	9.19	U	14.5	U	12.5	U	9.45	U
Benzene	52029.09091	0.492	U	0.333	U	0.526	U	0.451	U	0.342	U
Carbon disulfide	102200000	1.86	U	1.26	U	1.99	U	1.71	U	1.3	U
Carbon tetrachloride	22012.30769	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U
Chloroform	10220000	0.643	J	0.711	J	0.35	J	0.273	U	0.653	J
Ethyl ether	204400000	0.393	J	2.14		0.399	U	0.342	U	0.311	J
Ethylbenzene	102200000	1.1	J	0.441	J	0.319	U	0.273	U	0.208	U
Isopropylbenzene	NA	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U
m,p-Xylenes	NA	9.99		5.03		0.786	J	0.591	J	0.634	J
Naphthalene	20440000	3.89		0.202	U	0.319	U	0.273	U	0.208	U
n-Propylbenzene	NA	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U
o-Xylene	NA	4.79		2		0.319	U	0.273	U	0.208	U
Styrene	204400000	0.403	J	0.308	J	0.438	J	0.334	J	0.219	J
eeds NRC screening value	5300	0.298	U	1.5		0.319	U	0.273	U	0.208	U
Toluene	81760000	22.5		37		0.463	U	0.396	U	0.301	U
Xylenes (total)	204400000	14.8		7.03		0.786	J	0.591	J	0.634	J
RCRA SVOC (ug/kg)											
bis(2-Ethylhexyl)phthalate	204400	140	J	145	J	1270		2330		275	
Naphthalene	20440000	11	U	11.1	U	11	U	11.1	U	10.9	U
RCRA Metals (mg/kg)											
Aluminum	NA	11200		15500		11400		11100		10600	
Antimony	408.8	0.507	J	0.722	J	0.407	U	0.405	J	0.459	J
Arsenic	1.907733333	**2.17**		**3.58**		**2**		**2.07**		**1.94**	
Barium	204400	23.7		47.9		23.3		23.4		22.7	
Beryllium	2044	0.227	J	0.442	J	0.175	J	0.165	J	0.17	J
Cadmium	511	0.174	J	0.31	J	0.18	J	0.384	J	0.255	J
Calcium	NA	81.5		120		90.8		90.9		86.8	

Note: sub-floor samples are shaded.

Table 35. Pit 26 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	BLT-P26-SO-06a		BLT-P26-SO-06b		BLT-P26-SO-07a		BLT-P26-SO-07b		BLT-P26-SO-08a	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Chromium	3066	12.4		19.1		12.6		12.2		11.7	
Cobalt	NA	1.92		3.44		1.29		1.28		1.32	
Copper	40880	5.74		7.89		5.94		4.96		5.33	
Iron	306600	8120		11800		7460		4880		6370	
Lead	NA	5.61		14.5		5.1		5.23		5.27	
Magnesium	NA	507		1110		440		446		427	
Manganese	20440	34.9		50.8		24.1		25.6		26.8	
Mercury	NA	1370		208		32.2		33.1		33.8	
Nickel	20440	4.96		8.8		4.5		4.24		4.24	
Potassium	NA	444		733		451		472		431	
Selenium	5110	0.609	U	0.637	U	0.611	U	0.602	U	0.607	U
Sodium	NA	15.7		25.5		14.8	J	14	J	13.1	J
Vanadium	1022	20.7		31.1		21.1		22.3		20.2	
Zinc	306600	11.1		24.8		9.71		9.88		9.6	
RCRA Pesticide (ug/kg)											
beta-BHC	NA	0.605	J	0.185	U	0.175	U	0.173	U	0.173	U
TCLP PCB (ug/kg)											
Parameter		BLT-P34C-SO-02b		BLT-P34C-SO-03a		BLT-P34C-SO-03b		BLT-P34C-SO-04a		BLT-P34C-SO-04b	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Aroclor-1242	1430.8	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U
Aroclor-1254	1430.8	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U
Aroclor-1260	1430.8	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U

Note: sub-floor samples are shaded.

Table 35. Pit 26 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	BLT-P26-SO-08b		BLT-P26-SO-09a		BLT-P26-SO-09b	
		Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)							
1,2,4-Trimethylbenzene	NA	0.25	U	0.25	U	0.25	U
1,3,5-Trimethylbenzene	NA	0.25	U	0.25	U	0.25	U
2-Butanone	NA	2.12	U	1.25	U	1.25	U
4-Methyl-2-pentanone	NA	1.36	U	1.25	U	1.25	U
Acetone	919800000	9.53		4.87	J	6.8	
Acetonitrile	NA	11.4	U	6.25	U	6.25	U
Benzene	52029.09091	0.412	U	0.3	U	0.3	U
Carbon disulfide	102200000	1.56	U	1.25	U	1.25	U
Carbon tetrachloride	22012.30769	0.25	U	0.25	U	0.25	U
Chloroform	10220000	0.484	J	0.25	U	0.25	U
Ethyl ether	204400000	0.312	U	0.3	U	0.3	U
Ethylbenzene	102200000	0.25	U	0.25	U	0.25	U
Isopropylbenzene	NA	0.25	U	0.25	U	0.25	U
m,p-Xylenes	NA	6.49		0.463	BJ	0.446	BJ
Naphthalene	20440000	0.25	U	0.25	U	0.25	U
n-Propylbenzene	NA	0.25	U	0.25	U	0.25	U
o-Xylene	NA	0.25	U	0.25	U	0.25	U
Styrene	204400000	0.271	J	0.25	U	0.25	U
eeds NRC screening value	5300	0.25	U	0.25	U	0.25	U
Toluene	81760000	0.362	U	0.25	U	0.25	U
Xylenes (total)	204400000	6.49		0.463	BJ	0.446	BJ
RCRA SVOC (ug/kg)							
bis(2-Ethylhexyl)phthalate	204400	266					
Naphthalene	20440000	11	U				
RCRA Metals (mg/kg)							
Aluminum	NA	14700					
Antimony	408.8	0.429	U				
Arsenic	1.907733333	**2.91**					
Barium	204400	26.4					
Beryllium	2044	0.194	J				
Cadmium	511	0.286	J				
Calcium	NA	116					

Note: sub-floor samples are shaded.

Table 35. Pit 26 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	BLT-P26-SO-08b		BLT-P26-SO-09a		BLT-P26-SO-09b	
		Result	Qual	Result	Qual	Result	Qual
Chromium	3066	16.2					
Cobalt	NA	1.45					
Copper	40880	7.39					
Iron	306600	8470					
Lead	NA	6.25					
Magnesium	NA	536					
Manganese	20440	23.6					
Mercury	NA	35.2					
Nickel	20440	5.48					
Potassium	NA	525					
Selenium	5110	0.643	U				
Sodium	NA	16.9					
Vanadium	1022	27.9					
Zinc	306600	11.4					
RCRA Pesticide (ug/kg)							
beta-BHC	NA	0.179	U				
TCLP PCB (ug/kg)							
Parameter		BLT-P34C-SO-05a					
		Result	Qual				
Aroclor-1242	1430.8	1.21	U				
Aroclor-1254	1430.8	1.21	U				
Aroclor-1260	1430.8	1.21	U				

Note: sub-floor samples are shaded.

Table 36. Pit 26 Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number (All results in pCi/g)							
Parameter	**NRC Screening Values[1]**	**DCGL**	**BLT-P26-SO-01a**		**BLT-P26-SO-01b**		**BLT-P26-SO-02a**		**BLT-P26-SO-02b**	
			Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
			Gamma Scan (901.1mod/HASL 300)							
Actinium-228	NA		0.81		1.06		0.67		0.83	
Bismuth-212	NA		0.46		0.57		0.59		0.34	
Bismuth-214	NA		0.38		0.61		0.58		0.54	
Cesium-137	11.0	16.8	0.00	U	0.00	U	0.02	U	0.02	U
Lead-210	0.9	1.62	1.29	U	3.20	U	0.14	U	-3.40	U
Lead-212	NA		0.72		0.83		0.92		0.78	
Lead-214	NA		0.48		0.67		0.65		0.66	
Potassium-40	NA		3.55		3.60		4.09		3.63	
Radium-228	NA		0.81		1.06		0.67		0.83	
Thallium-208	NA		0.26		0.27		0.35		0.25	
Thorium-230	1.8		0.38		0.61		0.58		0.54	
Thorium-234	14.0		1.10		1.62	U	0.86	U	1.70	U
Uranium-238	14.0		1.10		1.62	U	0.86	U	1.70	U
C-14 (EERF C-01 mod)	12	162	9.04		9.63		**15.40**		11.40	
Ni-63 (RESL Ni-1 mod)	NA	20600	0.87	U	1.12	U	3.28	U	1.23	U
H-3 (906.0 mod)	110	264	2.70		4.96		4.08		4.52	

[1] From NUREG 1757, Appendix B, Table B-2

NA = Not available for this radionuclide

Result that exceeds NRC screening value is highlighted.

Table 36. Pit 26 Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number (All results in pCi/g)							
Parameter	**NRC Screening Values[1]**	**DCGL**	**BLT-P26-SO-03a**		**BLT-P26-SO-03b**		**BLT-P26-SO-04a**		**BLT-P26-SO-04b**	
			Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
			Gamma Scan (901.1mod/HASL 300)							
Actinium-228	NA		0.60		0.62		0.77		0.91	
Bismuth-212	NA		0.14	U	0.40		0.39	U	0.55	
Bismuth-214	NA		0.44		0.40		0.00	UI	0.45	
Cesium-137	11.0	16.8	0.00	U	0.03		0.02	U	0.05	
Lead-210	0.9	1.62	1.32	U	1.83	U	**2.19**		**6.45**	
Lead-212	NA		0.78		0.64		0.81		0.86	
Lead-214	NA		0.49		0.46		0.54		0.65	
Potassium-40	NA		3.61		2.65		4.74		4.14	
Radium-228	NA		0.60		0.62		0.77		0.91	
Thallium-208	NA		0.24		0.22		0.31		0.25	
Thorium-230	1.8		0.44		0.40		0.73		0.45	
Thorium-234	14.0		0.67	U	1.10		0.87		0.56	U
Uranium-238	14.0		0.67	U	1.10		0.87		0.56	U
C-14 (EERF C-01 mod)	12	162	**210.00**		10.60		0.42	U	2.37	
Ni-63 (RESL Ni-1 mod)	NA	20600	13.50		18.90		5.76		5.62	
H-3 (906.0 mod)	110	264	1.62		1.82		1.59		1.20	

[1] From NUREG 1757, Appendix B, Table B-2

NA = Not available for this radionuclide

Result that exceeds NRC screening value is highlighted.

Table 36. Pit 26 Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number (All results in pCi/g)							
Parameter	**NRC Screening Values[1]**	**DCGL**	**BLT-P26-SO-05a**		**BLT-P26-SO-05b**		**BLT-P26-SO-06a**		**BLT-P26-SO-06b**	
			Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
			Gamma Scan (901.1mod/HASL 300)							
Actinium-228	NA		0.77		0.81		1.01		1.02	
Bismuth-212	NA		0.42		0.51		0.54		0.69	
Bismuth-214	NA		0.48		0.44		0.65		0.82	
Cesium-137	11.0	16.8	0.01	U	0.01	U	0.01	U	0.09	
Lead-210	0.9	1.62	5.05	U	0.63	U	0.10	U	0.69	
Lead-212	NA		0.72		0.79		0.85		1.02	
Lead-214	NA		0.60		0.62		0.63		0.90	
Potassium-40	NA		3.22		3.58		5.16		7.95	
Radium-228	NA		0.77		0.81		1.01		1.02	
Thallium-208	NA		0.27		0.23		0.31		0.33	
Thorium-230	1.8		0.48		0.44		0.65		0.82	
Thorium-234	14.0		0.95	U	1.66		1.64	U	0.73	U
Uranium-238	14.0		0.95	U	1.66		1.64	U	0.73	U
C-14 (EERF C-01 mod)	12	162	1.63		1.05	U	1.24	U	-0.15	U
Ni-63 (RESL Ni-1 mod)	NA	20600	-2.17	U	-0.93	U	-2.48	U	-0.17	U
H-3 (906.0 mod)	110	264	1.78		1.34		0.73	U	3.31	

[1] From NUREG 1757, Appendix B, Table B-2

NA = Not available for this radionuclide

Result that exceeds NRC screening value is highlighted.

Table 36. Pit 26 Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number (All results in pCi/g)							
Parameter	**NRC Screening Values[1]**	**DCGL**	**BLT-P26-SO-07a**		**BLT-P26-SO-07b**		**BLT-P26-SO-08a**		**BLT-P26-SO-08b**	
			Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
			Gamma Scan (901.1mod/HASL 300)							
Actinium-228	NA		0.67		0.71		0.77		0.78	
Bismuth-212	NA		0.59		0.72		0.55		0.54	
Bismuth-214	NA		0.51		0.56		0.57		0.47	
Cesium-137	11.0	16.8	-0.01	U	0.02	U	0.01	U	0.00	U
Lead-210	0.9	1.62	0.72	U	0.63	U	-1.43	U	-0.66	U
Lead-212	NA		0.68		0.62		0.63		0.70	
Lead-214	NA		0.68		0.54		0.70		0.52	
Potassium-40	NA		2.24		2.76		2.92		2.79	
Radium-228	NA		0.67		0.71		0.77		0.78	
Thallium-208	NA		0.23		0.21		0.24		0.25	
Thorium-230	1.8		0.51		0.56		0.57		0.47	
Thorium-234	14.0		0.20	U	0.54	U	1.29	U	0.47	U
Uranium-238	14.0		0.20	U	0.54	U	1.29	U	0.47	U
C-14 (EERF C-01 mod)	12	162	-0.40	U	0.27	U	-0.28	U	-0.09	U
Ni-63 (RESL Ni-1 mod)	NA	20600	-0.30	U	-0.06	U	-0.81	U	-1.51	U
H-3 (906.0 mod)	110	264	1.00		1.00		0.63	U	-0.39	U

[1] From NUREG 1757, Appendix B, Table B-2

NA = Not available for this radionuclide

Result that exceeds NRC screening value is highlighted.

Table 37. Pit 26 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																					
Parameter	**BLT-P26-SO-01a**		**BLT-P26-SO-01b**		**BLT-P26-SO-02a**		**BLT-P26-SO-02b**		**BLT-P26-SO-03a**		**BLT-P26-SO-03b**		**BLT-P26-SO-04a**		**BLT-P26-SO-04b**		**BLT-P26-SO-05a**		**BLT-P26-SO-05b**		**BLT-P26-SO-05c**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA VOC (ug/kg)																						
1,1,1,2-Tetrachloroethane	0.18	U	0.193	U	0.194	U	23.6	U	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
1,1,1-Trichloroethane	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
1,1,2,2-Tetrachloroethane	0.225	U	0.241	U	0.243	U	29.5	U	0.226	U	0.239	U	23.3	U	25.7	U	22.7	U	20.8	U	0.291	U
1,1,2-Trichloroethane	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
1,1-Dichloroethane	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
1,1-Dichloroethylene	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
1,1-Dichloropropene	0.225	U	0.241	U	0.243	U	29.5	U	0.226	U	0.239	U	23.3	U	25.7	U	22.7	U	20.8	U	0.291	U
1,2,3-Trichlorobenzene	0.225	U	0.241	U	0.243	U	29.5	U	0.226	U	0.239	U	23.3	U	25.7	U	22.7	U	20.8	U	0.291	U
1,2,3-Trichloropropane	0.449	U	0.482	U	0.485	U	58.9	U	0.452	U	0.477	U	46.6	U	51.4	U	45.5	U	41.5	U	0.582	U
1,2,4-Trichlorobenzene	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
1,2,4-Trimethylbenzene	0.18	U	0.193	U	0.194	U	23.6		0.181	U	0.191	U	18.6	U	20.6		31.9		76		0.233	U
1,2-Dibromo-3-chloropropane	0.449	U	0.482	U	0.485	U	58.9	U	0.452	U	0.477	U	46.6	U	51.4	U	45.5	U	41.5	U	0.582	U
1,2-Dibromoethane	0.18	U	0.193	U	0.194	U	23.6	U	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
1,2-Dichlorobenzene	0.18	U	0.193	U	0.194	U	23.6	U	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
1,2-Dichloroethane	0.225	U	0.241	U	0.243	U	29.5	U	0.226	U	0.239	U	23.3	U	25.7	U	22.7	U	20.8	U	0.291	U
1,2-Dichloroethylene (total)	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
1,2-Dichloropropane	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
1,3,5-Trimethylbenzene	0.303	J	0.193	U	0.194	U	23.6		0.181	U	0.191	U	18.6		20.6		24		64.7		0.233	U
exceeds NRC screening value is h	0.18	U	0.193	U	0.194	U	23.6	U	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
1,3-Dichloropropane	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
1,4-Dichlorobenzene	0.18	U	0.193	U	0.194	U	23.6	U	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
2,2-Dichloropropane	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
2-Butanone	1.53	U	1.64	U	1.65	U	200		1.54	U	1.62	U	158	U	175	U	155	U	141	U	1.98	U
2-Chloro-1,3-butadiene	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
2-Chloroethylvinyl ether	1.12	U	1.21	U	1.21	U	147	U	1.13	U	1.19	U	116	U	128	U	114	U	104	U	1.45	U
2-Chlorotoluene	0.18	U	0.193	U	0.194	U	23.6	U	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
2-Hexanone	1.37	U	1.47	U	1.48	U	179	U	1.37	U	1.45	U	142	U	156	U	138	U	126	U	1.77	U
2-Nitropropane	0.809	U	0.868	U	0.874	U	106	U	0.813	U	0.859	U	83.8	U	92.5	U	81.9	U	74.7	U	1.05	U
4-Chlorotoluene	0.216	U	0.231	U	0.233	U	28.3	U	0.217	U	0.229	U	22.4	U	24.7	U	21.8	U	19.9	U	0.279	U
4-Isopropyltoluene	0.225	U	0.241	U	0.243	U	29.5	U	0.226	U	0.239	U	23.3	U	25.7	U	22.7	U	20.8	U	0.291	U
4-Methyl-2-pentanone	1.08	J	1.05	U	1.06	U	128	U	0.985	U	1.04	U	102	U	112	U	99.2	U	90.5	U	1.27	U
Acetone	17.3		11.3		50.1		664		41.2		16.8		262		305		516		227		3	U
Acetonitrile	8.19	U	8.79	U	8.84	U	1070		8.23	U	8.7	U	849	U	936		829	U	756		10.6	U
Acrolein	2.7	U	2.89	U	2.91	U	354	U	2.71	U	2.86	U	279	U	308	U	273	U	249	U	3.49	U
Acrylonitrile	0.899	U	0.964	U	0.971	U	118	U	0.904	U	0.955	U	93.2	U	103	U	91	U	83	U	1.16	U
Allyl chloride	1.8	U	1.93	U	1.94	U	236	U	1.81	U	1.91	U	186	U	206	U	182	U	166	U	2.33	U
Benzene	0.297	U	0.318	U	0.32	U	89.3		0.298	U	0.315	U	30.7	U	35.8	J	30		27.4		0.384	U
Benzyl chloride	0.539	U	0.579	U	0.582	U	70.7	U	0.542	U	0.573	U	55.9	U	61.7	U	54.6	U	49.8	U	0.698	U
bis(2-Chloroisopropyl)ether	1.35	U	1.45	U	1.46	U	177	U	1.36	U	1.43	U	140	U	154	U	136	U	125	U	1.75	U
Bromobenzene	0.18	U	0.193	U	0.194	U	23.6	U	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
Bromochloromethane	0.449	U	0.482	U	0.485	U	58.9	U	0.452	U	0.477	U	46.6	U	51.4	U	45.5	U	41.5	U	0.582	U
Bromodichloromethane	0.18	U	0.193	U	0.194	U	23.6	U	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
Bromoform	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
Bromomethane	0.449	U	0.482	U	0.485	U	58.9	U	0.452	U	0.477	U	46.6	U	51.4	U	45.5	U	41.5	U	0.582	U
Carbon disulfide	1.12	U	1.21	U	1.21	U	147	U	1.13	U	1.19	U	116	U	128	U	114	U	104	U	1.45	U
Carbon tetrachloride	0.306	J	0.193	U	0.194	U	23.6		0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
Chlorobenzene	0.18	U	0.193	U	0.194	U	23.6	U	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
Chloroethane	0.449	U	0.482	U	0.485	U	58.9	U	0.452	U	0.477	U	46.6	U	51.4	U	45.5	U	41.5	U	0.582	U
Chloroform	57.1		8.09		34.7		762		33.2		5.98		61.4		90.6		65.2		37.7		0.233	U
Chloromethane	0.449	U	0.482	U	0.485	U	58.9	U	0.452	U	0.477	U	46.6	U	51.4	U	45.5	U	41.5	U	0.582	U

Note: sub-floor samples are shaded.

Table 37. Pit 26 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																					
Parameter	**BLT-P26-SO-01a**		**BLT-P26-SO-01b**		**BLT-P26-SO-02a**		**BLT-P26-SO-02b**		**BLT-P26-SO-03a**		**BLT-P26-SO-03b**		**BLT-P26-SO-04a**		**BLT-P26-SO-04b**		**BLT-P26-SO-05a**		**BLT-P26-SO-05b**		**BLT-P26-SO-05c**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
cis-1,2-Dichloroethylene	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
cis-1,3-Dichloropropylene	0.18	U	0.193	U	0.194	U	23.6	U	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
cis-1,4-Dichloro-2-butene	0.449	U	0.482	U	0.485	U	58.9	U	0.452	U	0.477	U	46.6	U	51.4	U	45.5	U	41.5	U	0.582	U
Cyclohexane	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
Cyclohexanone	13.5	U	14.5	U	14.6	U	1770	U	13.6	U	14.3	U	1400	U	1540	U	1360	U	1250	U	17.5	U
Dibromochloromethane	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
Dibromomethane	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
Dichlorodifluoromethane	0.449	U	0.482	U	0.485	U	58.9	U	0.452	U	0.477	U	46.6	U	51.4	U	45.5	U	41.5	U	0.582	U
Ethyl ether	4.03		0.807	J	4.23		37.4		0.226	U	0.239	U	23.3		69.8		36.7		20.8		0.291	U
Ethyl methacrylate	0.449	U	0.482	U	0.485	U	58.9	U	0.452	U	0.477	U	46.6	U	51.4	U	45.5	U	41.5	U	0.582	U
Ethylbenzene	0.18	U	0.193	U	0.194	U	23.6		0.181	U	0.191	U	609		415		263		1360		0.233	U
Hexachlorobutadiene	0.449	U	0.482	U	0.485	U	58.9	U	0.452	U	0.477	U	46.6	U	51.4	U	45.5	U	41.5	U	0.582	U
Iodomethane	1.5	U	1.61	U	1.62	U	197	U	1.51	U	1.59	U	156	U	172	U	152	U	139	U	1.94	U
Isobutyl alcohol	8.99	U	9.64	U	9.71	U	1180	U	9.04	U	9.55	U	932	U	1030	U	910	U	830	U	11.6	U
Isopropylbenzene	0.18	U	0.193	U	0.194	U	23.6	U	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	67.3		0.233	U
m,p-Xylenes	0.431	J	0.349	J	0.39	J	268		1.01	J	0.448	J	2200		3890		6200		4120		0.291	U
Methacrylonitrile	0.629	U	0.675	U	0.679	U	82.5	U	0.633	U	0.668	U	65.2	U	71.9	U	63.7	U	58.1	U	0.815	U
Methyl acetate	1.5	U	1.61	U	1.62	U	197	U	1.51	U	1.59	U	156	U	172	U	152	U	139	U	1.94	U
Methyl methacrylate	0.899	U	0.964	U	0.971	U	118	U	0.904	U	0.955	U	93.2	U	103	U	91	U	83	U	1.16	U
Methylcyclohexane	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
Methylene chloride	1.8	U	1.93	U	1.94	U	236	U	1.81	U	1.91	U	186	U	206	U	182	U	166	U	2.33	U
Naphthalene	1.18		0.193	U	0.194	U	40.7		0.181	U	0.191	U	18.6		20.6		145		16.6		0.251	J
n-Butyl alcohol	24.3	U	26	U	26.2	U	3180	U	24.4	U	25.8	U	2520	U	2770	U	2460	U	2240	U	31.4	U
n-Butylbenzene	0.18	U	0.193	U	0.194	U	23.6	U	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
n-Propylbenzene	0.18	U	0.193	U	0.194	U	23.6	U	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	76.6		0.233	U
o-Xylene	1.98		0.651	J	0.199	J	58.3		0.181	U	0.191	U	1540		1780		3030		3070		0.233	U
Pentachloroethane	1.35	U	1.45	U	1.46	U	177	U	1.36	U	1.43	U	140	U	154	U	136	U	125	U	1.75	U
Propionitrile	0.899	U	0.964	U	0.971	U	118	U	0.904	U	0.955	U	93.2	U	103	U	91	U	83	U	1.16	U
sec-Butylbenzene	0.18	U	0.193	U	0.194	U	23.6	U	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
Styrene	0.319	J	0.257	J	0.279	J	23.6	U	0.202	J	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
tert-Butyl methyl ether	0.18	U	0.193	U	0.194	U	23.6	U	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
tert-Butylbenzene	0.18	U	0.193	U	0.194	U	23.6	U	0.181	U	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
Tetrachloroethylene	0.18	U	0.193	U	0.194	U	23.6	U	0.239	J	0.191	U	18.6	U	20.6	U	18.2	U	16.6	U	0.233	U
Toluene	0.279	J	0.28	U	0.304	J	232		0.262	U	0.277	U	77.6		161		55.6		548	U	0.338	U
trans-1,2-Dichloroethylene	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
trans-1,3-Dichloropropylene	0.27	U	0.289	U	0.291	U	35.4	U	0.271	U	0.286	U	27.9	U	30.8	U	27.3	U	24.9	U	0.349	U
trans-1,4-Dichloro-2-butene	0.449	U	0.482	U	0.485	U	58.9	U	0.452	U	0.477	U	46.6	U	51.4	U	45.5	U	41.5	U	0.582	U
Trichloroethylene	0.225	U	0.241	U	0.243	U	29.5	U	0.226	U	0.239	U	23.3	U	25.7	U	22.7	U	20.8	U	0.291	U
Trichlorofluoromethane	0.449	U	0.482	U	0.485	U	58.9	U	0.452	U	0.477	U	46.6	U	51.4	U	45.5	U	41.5	U	0.582	U
Trichlorotrifluoroethane	0.899	U	0.964	U	0.971	U	118	U	0.904	U	0.955	U	93.2	U	103	U	91	U	83	U	1.16	U
Vinyl acetate	1.12	U	1.21	U	1.21	U	147	U	1.13	U	1.19	U	116	U	128	U	114	U	104	U	1.45	U
Vinyl chloride	0.449	U	0.482	U	0.485	U	58.9	U	0.452	U	0.477	U	46.6	U	51.4	U	45.5	U	41.5	U	0.582	U
Xylenes (total)	2.41		1		0.589	J	325		1.01		0.448	J	3740		5670		9230		7190		0.233	U

Note: sub-floor samples are shaded.

Table 37. Pit 26 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																					
Parameter	**BLT-P26-SO-01a**		**BLT-P26-SO-01b**		**BLT-P26-SO-02a**		**BLT-P26-SO-02b**		**BLT-P26-SO-03a**		**BLT-P26-SO-03b**		**BLT-P26-SO-04a**		**BLT-P26-SO-04b**		**BLT-P26-SO-05a**		**BLT-P26-SO-05b**		**BLT-P26-SO-05c**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA SVOC (ug/kg)																						
1,1'-Biphenyl	105	U	107	U	104	U	105	U	104	U	111	U	105	U	104	U	104	U	107	U	109	U
1,2,4-Trichlorobenzene	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
1,2-Dichlorobenzene	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
1,3-Dichlorobenzene	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
1,4-Dichlorobenzene	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
2,4,5-Trichlorophenol	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
2,4,6-Trichlorophenol	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
2,4-Dichlorophenol	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
2,4-Dimethylphenol	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
2,4-Dinitrophenol	133	U	136	U	132	U	133	U	132	U	140	U	133	U	132	U	131	U	136	U	139	U
2,4-Dinitrotoluene	34.9	U	35.7	U	34.7	U	35.1	U	34.8	U	37	U	35.1	U	34.6	U	34.6	U	35.8	U	36.4	U
2,6-Dinitrotoluene	34.9	U	35.7	U	34.7	U	35.1	U	34.8	U	37	U	35.1	U	34.6	U	34.6	U	35.8	U	36.4	U
2-Chloronaphthalene	12.2	U	12.5	U	12.2	U	12.3	U	12.2	U	12.9	U	12.3	U	12.1	U	12.1	U	12.5	U	12.8	U
2-Chlorophenol	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
2-Methyl-4,6-dinitrophenol	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
2-Methylnaphthalene	6.98	U	7.13	U	6.95	U	7.02	U	6.96	U	7.39	U	7.02	U	6.93	U	6.92	U	7.16	U	7.29	U
2-Nitrophenol	34.9	U	35.7	U	34.7	U	35.1	U	34.8	U	37	U	35.1	U	34.6	U	34.6	U	35.8	U	36.4	U
3,3'-Dichlorobenzidine	105	U	107	U	104	U	105	U	104	U	111	U	105	U	104	U	104	U	107	U	109	U
4-Bromophenylphenylether	34.9	U	35.7	U	34.7	U	35.1	U	34.8	U	37	U	35.1	U	34.6	U	34.6	U	35.8	U	36.4	U
4-Chloro-3-methylphenol	34.9	U	35.7	U	34.7	U	35.1	U	34.8	U	37	U	35.1	U	34.6	U	34.6	U	35.8	U	36.4	U
4-Chloroaniline	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
4-Chlorophenylphenylether	34.9	U	35.7	U	34.7	U	35.1	U	34.8	U	37	U	35.1	U	34.6	U	34.6	U	35.8	U	36.4	U
4-Nitrophenol	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Acenaphthene	11.7	U	11.9	U	11.6	U	11.7	U	11.6	U	12.3	U	11.7	U	11.6	U	11.6	U	12	U	12.2	U
Acenaphthylene	10.5	U	10.7	U	10.4	U	10.5	U	10.4	U	11.1	U	10.5	U	10.4	U	10.4	U	10.7	U	10.9	U
alpha-Terpineol	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Anthracene	6.98	U	7.13	U	6.95	U	7.02	U	6.96	U	7.39	U	7.02	U	6.93	U	6.92	U	7.16	U	7.29	U
Atrazine	105	U	107	U	104	U	105	U	104	U	111	U	105	U	104	U	104	U	107	U	109	U
Benzaldehyde	105	U	107	U	104	U	105	U	104	U	111	U	105	U	104	U	104	U	107	U	109	U
Benzo(a)anthracene	10.5	U	10.7	U	10.4	U	10.5	U	10.4	U	11.1	U	10.5	U	10.4	U	10.4	U	10.7	U	10.9	U
Benzo(a)pyrene	10.5	U	10.7	U	10.4	U	10.5	U	10.4	U	11.1	U	10.5	U	10.4	U	10.4	U	10.7	U	10.9	U
Benzo(b)fluoranthene	10.5	U	10.7	U	10.4	U	10.5	U	10.4	U	11.1	U	10.5	U	10.4	U	10.4	U	10.7	U	10.9	U
Benzo(ghi)perylene	10.5	U	10.7	U	10.4	U	10.5	U	10.4	U	11.1	U	10.5	U	10.4	U	10.4	U	10.7	U	10.9	U
Benzo(k)fluoranthene	10.5	U	10.7	U	10.4	U	10.5	U	10.4	U	11.1	U	10.5	U	10.4	U	10.4	U	10.7	U	10.9	U
bis(2-Chloroethoxy)methane	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
bis(2-Chloroethyl) ether	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
bis(2-Chloroisopropyl)ether	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
bis(2-Ethylhexyl)phthalate	69.8	U	71.3	U	69.5	U	70.2	U	168	J	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Butylbenzylphthalate	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Carbazole	10.5	U	10.7	U	10.4	U	10.5	U	10.4	U	11.1	U	10.5	U	10.4	U	10.4	U	10.7	U	10.9	U
Chrysene	10.5	U	10.7	U	10.4	U	10.5	U	10.4	U	11.1	U	10.5	U	10.4	U	10.4	U	10.7	U	10.9	U
Dibenzo(a,h)anthracene	10.5	U	10.7	U	10.4	U	10.5	U	10.4	U	11.1	U	10.5	U	10.4	U	10.4	U	10.7	U	10.9	U
Dibenzofuran	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Diethylphthalate	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Dimethylphthalate	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Di-n-butylphthalate	34.9	U	35.7	U	34.7	U	35.1	U	34.8	U	37	U	35.1	U	34.6	U	34.6	U	35.8	U	36.4	U
Di-n-octylphthalate	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Diphenylamine	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Fluoranthene	10.5	U	10.7	U	10.4	U	10.5	U	10.4	U	11.1	U	10.5	U	10.4	U	10.4	U	10.7	U	10.9	U
Fluorene	10.5	U	10.7	U	10.4	U	10.5	U	10.4	U	11.1	U	10.5	U	10.4	U	10.4	U	10.7	U	10.9	U

Note: sub-floor samples are shaded.

Table 37. Pit 26 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																					
Parameter	**BLT-P26-SO-01a**		**BLT-P26-SO-01b**		**BLT-P26-SO-02a**		**BLT-P26-SO-02b**		**BLT-P26-SO-03a**		**BLT-P26-SO-03b**		**BLT-P26-SO-04a**		**BLT-P26-SO-04b**		**BLT-P26-SO-05a**		**BLT-P26-SO-05b**		**BLT-P26-SO-05c**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Hexachlorobenzene	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Hexachlorobutadiene	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Hexachlorocyclopentadiene	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Hexachloroethane	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Indeno(1,2,3-cd)pyrene	10.5	U	10.7	U	10.4	U	10.5	U	10.4	U	11.1	U	10.5	U	10.4	U	10.4	U	10.7	U	10.9	U
Isophorone	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
m,p-Cresols	140	U	143	U	139	U	140	U	139	U	148	U	140	U	139	U	138	U	143	U	146	U
m-Nitroaniline	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Naphthalene	10.5	U	10.7	U	10.4	U	10.5	U	10.4	U	11.1	U	10.5	U	10.4	U	10.4	U	10.7	U	10.9	U
Nitrobenzene	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
N-Nitrosodipropylamine	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
o-Cresol	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
o-Nitroaniline	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Pentachlorophenol	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Phenanthrene	10.5	U	10.7	U	10.4	U	10.5	U	10.4	U	11.1	U	10.5	U	10.4	U	10.4	U	10.7	U	10.9	U
Phenol	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
p-Nitroaniline	69.8	U	71.3	U	69.5	U	70.2	U	69.6	U	73.9	U	70.2	U	69.3	U	69.2	U	71.6	U	72.9	U
Pyrene	11	U	11.2	U	10.9	U	11	U	10.9	U	11.6	U	11	U	10.9	U	10.9	U	11.2	U	11.4	U
RCRA Metals (mg/kg)																						
Aluminum	9880		13800		13400		13500		13500		8490		13500		15900		10200		11200		6510	
Antimony	0.516	J	0.515	J	0.575	J	0.732	J	0.765	J	0.407	U	29.1		15.5		110		20.9		0.511	J
Arsenic	2.08		2.59		2.82		3.14		9.05		1.43	J	3.24		3.75		2.73		2.38		2.15	
Barium	18.8		24.7		26		27.1		30.3		21		29.2		31.8		22.7		24.4		13.4	
Beryllium	0.164	J	0.19	J	0.21	J	0.209	J	0.318	J	0.183	J	0.272	J	0.277	J	0.214	J	0.239	J	0.107	J
Cadmium	0.16	J	0.217	J	0.218	J	0.225	J	0.322	J	0.112	J	0.224	J	0.24	J	0.17	J	0.212	J	0.101	U
Calcium	80.3		98.3		97.4		96.4		57.2		37.6		74.7		75.4		63.2		67		51.1	
Chromium	11.2		15.1		15.3		15.7		67.9		9.63		15.3		17.8		11.3		12.6		29.6	
Cobalt	1.14		1.48		1.63		1.71		1.85		1.08		2.25		2.21		1.74		1.9		0.842	
Copper	5.27		7.3		6.49		7.03		26.3		6.49		7.11		8.28		5.43		6.31		7.86	
Iron	6490		8730		8930		9410		13500		4480		9850		10800		7450		7990		9830	
Lead	4.55		5.48		5.54		6.46		9.59		5.35		6.91		7.37		6.12		10.5		3.2	
Magnesium	369		529		584		606		633		350		670		700		464		534		247	
Manganese	19.9		25.8		29.8		34.9		27.1		14.5		32.1		30.2		27.6		29.1		23.2	
Mercury	33.4		62.2		40		32.5		80.8		709		7870		14600		29200		41700		15.3	
Nickel	3.83		5.54		5.64		5.72		6.01		3.97		6.24		6.85		4.65		5.11		6.07	
Potassium	364		491		528		519		526		371		584		635		420		468		263	
Selenium	0.665	U	0.661	U	0.677	U	0.688	U	0.628	U	0.611	U	0.637	U	0.678	U	0.619	U	0.614	U	0.785	J
Silver	0.111	U	0.11	U	0.113	U	0.115	U	0.105	U	0.102	U	0.106	U	0.113	U	0.103	U	0.102	U	0.101	U
Sodium	34.6		40.7		35.5		34.4		18.3		12.9	J	21		23.5		14.9	J	16.9		11.3	J
Thallium	0.554	U	0.551	U	0.564	U	0.573	U	0.524	U	0.509	U	0.531	U	0.565	U	0.516	U	0.512	U	0.504	U
Vanadium	18.5		25.1		25.1		25.4		40.5		15.3		25.3		29.2		18.9		20.9		13.6	
Zinc	8.13		11.5		12.1		13.1		25.6		16.5		13.9		15		10.7		11.7		5.88	

Note: sub-floor samples are shaded.

Table 37. Pit 26 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																					
Parameter	**BLT-P26-SO-01a**		**BLT-P26-SO-01b**		**BLT-P26-SO-02a**		**BLT-P26-SO-02b**		**BLT-P26-SO-03a**		**BLT-P26-SO-03b**		**BLT-P26-SO-04a**		**BLT-P26-SO-04b**		**BLT-P26-SO-05a**		**BLT-P26-SO-05b**		**BLT-P26-SO-05c**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA Pesticide (ug/kg)																						
4,4'-DDD	0.377	U	0.386	U	0.395	U	0.401	U	0.355	U	0.356	U	0.36	U	0.377	U	0.352	U	0.354	U	0.349	U
4,4'-DDE	0.377	U	0.386	U	0.395	U	0.401	U	0.355	U	0.356	U	0.36	U	0.377	U	0.352	U	0.354	U	0.349	U
4,4'-DDT	0.377	U	0.386	U	0.395	U	0.401	U	0.355	U	0.356	U	0.36	U	0.377	U	0.352	U	0.354	U	0.349	U
Aldrin	0.189	U	0.193	U	0.197	U	0.2	U	0.178	U	0.178	U	0.18	U	0.188	U	0.176	U	0.177	U	0.175	U
alpha-BHC	0.189	U	0.193	U	0.197	U	0.2	U	0.178	U	0.178	U	0.18	U	0.188	U	0.176	U	0.177	U	0.175	U
beta-BHC	0.189	U	0.193	U	0.197	U	0.2	U	0.178	U	0.178	U	6.09		3.96		11.4		9.94		0.175	U
Chlordane (tech.)	1.89	U	1.93	U	1.97	U	2	U	1.78	U	1.78	U	1.8	U	1.88	U	1.76	U	1.77	U	1.75	U
delta-BHC	0.189	U	0.193	U	0.197	U	0.2	U	0.178	U	0.178	U	0.18	U	0.188	U	0.176	U	0.177	U	0.175	U
Dieldrin	0.377	U	0.386	U	0.395	U	0.401	U	0.355	U	0.356	U	0.36	U	0.377	U	0.352	U	0.354	U	0.349	U
Endosulfan I	0.189	U	0.193	U	0.197	U	0.2	U	0.178	U	0.178	U	0.18	U	0.188	U	0.176	U	0.177	U	0.175	U
Endosulfan II	0.377	U	0.386	U	0.395	U	0.401	U	0.355	U	0.356	U	0.36	U	0.377	U	0.352	U	0.354	U	0.349	U
Endosulfan sulfate	0.377	U	0.386	U	0.395	U	0.401	U	0.355	U	0.356	U	0.36	U	0.377	U	0.352	U	0.354	U	0.349	U
Endrin	0.377	U	0.386	U	0.395	U	0.401	U	0.355	U	0.356	U	0.36	U	0.377	U	0.352	U	0.354	U	0.349	U
Endrin aldehyde	0.377	U	0.386	U	0.395	U	0.401	U	0.355	U	0.356	U	0.36	U	0.377	U	0.352	U	0.354	U	0.349	U
Endrin ketone	0.377	U	0.386	U	0.395	U	0.401	U	0.355	U	0.356	U	0.36	U	0.377	U	0.352	U	0.354	U	0.349	U
gamma-BHC (Lindane)	0.189	U	0.193	U	0.197	U	0.2	U	0.178	U	0.178	U	0.18	U	0.188	U	0.176	U	0.177	U	0.175	U
Heptachlor	0.189	U	0.193	U	0.197	U	0.2	U	0.178	U	0.178	U	0.18	U	0.188	U	0.176	U	0.177	U	0.175	U
Heptachlor epoxide	0.189	U	0.193	U	0.197	U	0.2	U	0.178	U	0.178	U	0.18	U	0.188	U	0.176	U	0.177	U	0.175	U
Methoxychlor	1.89	U	1.93	U	1.97	U	2	U	1.78	U	1.78	U	1.8	U	1.88	U	1.76	U	1.77	U	1.75	U
Toxaphene	6.28	U	6.42	U	6.57	U	6.67	U	5.92	U	5.94	U	6	U	6.27	U	5.86	U	5.9	U	5.81	U
TCLP PCB (ug/kg)																						
	BLT-P26-SO-05b		**BLT-P26-SO-05c**		**BLT-P26-SO-05d**		**BLT-P26-SO-05e**		**BLT-P26-SO-05f**		**BLT-P26-SO-06a**		**BLT-P26-SO-06b**		**BLT-P26-SO-07a**		**BLT-P26-SO-07b**		**BLT-P26-SO-08a**		**BLT-P26-SO-08b**	
Parameter	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Aroclor-1016	1.18	U	1.16	U	1.19	U	1.16	U	1.17	U	1.16	U	1.23	U	1.17	U	1.15	U	1.15	U	1.19	U
Aroclor-1221	1.18	U	1.16	U	1.19	U	1.16	U	1.17	U	1.16	U	1.23	U	1.17	U	1.15	U	1.15	U	1.19	U
Aroclor-1232	1.18	U	1.16	U	1.19	U	1.16	U	1.17	U	1.16	U	1.23	U	1.17	U	1.15	U	1.15	U	1.19	U
Aroclor-1242	1.18	U	1.16	U	1.19	U	1.16	U	1.17	U	1.16	U	1.23	U	1.17	U	1.15	U	4.9		1.19	U
Aroclor-1248	1.18	U	1.16	U	1.19	U	1.16	U	1.17	U	1.16	U	1.23	U	1.17	U	1.15	U	1.15	U	1.19	U
Aroclor-1254	1.18	U	1.16	U	1.19	U	1.16	U	1.17	U	1.16	U	1.23	U	1.17	U	1.15	U	2.2	J	1.19	U
Aroclor-1260	1.18	U	1.16	U	1.19	U	1.16	U	1.17	U	1.16	U	1.23	U	1.17	U	1.15	U	2.04	J	1.19	U
Herbicides (ug/kg)																						
2,4,5-T	1.88	U	1.92	U	1.97	U	2	U	1.77	U	1.78	U	1.79	U	1.88	U	1.75	U	1.76	U	1.74	U
2,4,5-TP	1.88	U	1.92	U	1.97	U	2	U	1.77	U	1.78	U	1.79	U	1.88	U	1.75	U	1.76	U	1.74	U
2,4-D	1.88	U	1.92	U	1.97	U	2	U	1.77	U	1.78	U	1.79	U	1.88	U	1.75	U	1.76	U	1.74	U
TOC (mg/kg)																						
Total Organic Carbon #1	1040		1130		1600		1840		1310		1810		2050		2620		2190		1960		449	
Total Organic Carbon #2	893		1090		1690		1660		1250		1580		2060		2390		2170		1960		447	
Total Organic Carbon #3	984		1170		1760		1550		1480		1710		2270		2560		2110		1960		346	
Total Organic Carbon #4	899		1160		1990		1620		1510		1710		2000		2600		2160		1850		379	
Total Organic Carbon Average	954		1140		1760		1670		1390		1700		2090		2540		2160		1930		405	

Note: sub-floor samples are shaded.

Table 37. Pit 26 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																					
Parameter	**BLT-P26-SO-05d**		**BLT-P26-SO-05e**		**BLT-P26-SO-05f**		**BLT-P26-SO-06a**		**BLT-P26-SO-06b**		**BLT-P26-SO-07a**		**BLT-P26-SO-07b**		**BLT-P26-SO-08a**		**BLT-P26-SO-08b**		**BLT-P26-SO-09a**		**BLT-P26-SO-09b**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA VOC (ug/kg)																						
1,1,1,2-Tetrachloroethane	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
1,1,1-Trichloroethane	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.3	U	0.3	U
1,1,2,2-Tetrachloroethane	0.304	U	0.261	U	0.235	U	0.373	U	0.252	U	0.399	U	0.342	U	0.259	U	0.312	U	0.25	U	0.25	U
1,1,2-Trichloroethane	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.25	U	0.25	U
1,1-Dichloroethane	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.3	U	0.3	U
1,1-Dichloroethylene	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.3	U	0.3	U
1,1-Dichloropropene	0.304	U	0.261	U	0.235	U	0.373	U	0.252	U	0.399	U	0.342	U	0.259	U	0.312	U	0.25	U	0.25	U
1,2,3-Trichlorobenzene	0.304	U	0.261	U	0.235	U	0.373	U	0.252	U	0.399	U	0.342	U	0.259	U	0.312	U	0.3	U	0.3	U
1,2,3-Trichloropropane	0.608	U	0.521	U	0.47	U	0.745	U	0.504	U	0.797	U	0.683	U	0.519	U	0.624	U	0.3	U	0.3	U
1,2,4-Trichlorobenzene	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.3	U	0.3	U
1,2,4-Trimethylbenzene	0.243	U	0.208	U	0.188	U	0.698	J	0.269	J	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
1,2-Dibromo-3-chloropropane	0.608	U	0.521	U	0.47	U	0.745	U	0.504	U	0.797	U	0.683	U	0.519	U	0.624	U	0.5	U	0.5	U
1,2-Dibromoethane	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
1,2-Dichlorobenzene	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
1,2-Dichloroethane	0.304	U	0.261	U	0.235	U	0.373	U	0.252	U	0.399	U	0.342	U	0.259	U	0.312	U	0.25	U	0.25	U
1,2-Dichloroethylene (total)	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.3	U	0.3	U
1,2-Dichloropropane	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.25	U	0.25	U
1,3,5-Trimethylbenzene	0.243	U	0.208	U	0.188	U	0.371	J	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
exceeds NRC screening value is h	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
1,3-Dichloropropane	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.25	U	0.25	U
1,4-Dichlorobenzene	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
2,2-Dichloropropane	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.3	U	0.3	U
2-Butanone	3.14	J	1.77	U	1.6	U	2.53	U	1.71	U	2.71	U	2.32	U	1.76	U	2.12	U	1.25	U	1.25	U
2-Chloro-1,3-butadiene	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.3	U	0.3	U
2-Chloroethylvinyl ether	1.52	U	1.3	U	1.18	U	1.86	U	1.26	U	1.99	U	1.71	U	1.3	U	1.56	U	1.5	U	1.5	U
2-Chlorotoluene	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
2-Hexanone	1.85	U	1.58	U	1.43	U	2.27	U	1.53	U	2.42	U	2.08	U	1.58	U	1.9	U	1.25	U	1.25	U
2-Nitropropane	1.09	U	0.938	U	0.846	U	1.34	U	0.907	U	1.44	U	1.23	U	0.934	U	1.12	U	1	U	1	U
4-Chlorotoluene	0.292	U	0.25	U	0.226	U	0.358	U	0.242	U	0.383	U	0.328	U	0.249	U	0.3	U	0.25	U	0.25	U
4-Isopropyltoluene	0.304	U	0.261	U	0.235	U	0.373	U	0.252	U	0.399	U	0.342	U	0.259	U	0.312	U	0.25	U	0.25	U
4-Methyl-2-pentanone	1.33	U	1.14	U	1.03	U	1.62	U	1.1	U	1.74	U	1.49	U	1.13	U	1.36	U	1.25	U	1.25	U
Acetone	19.4		2.69	U	2.43	U	46.8		20.8		8.16		6.62	J	7.66		9.53		4.87	J	6.8	
Acetonitrile	11.1	U	9.49	U	8.57	U	13.6	U	9.19	U	14.5	U	12.5	U	9.45	U	11.4	U	6.25	U	6.25	U
Acrolein	3.65	U	3.13	U	2.82	U	4.47	U	3.02	U	4.78	U	4.1	U	3.11	U	3.75	U	3	U	3	U
Acrylonitrile	1.22	U	1.04	U	0.94	U	1.49	U	1.01	U	1.59	U	1.37	U	1.04	U	1.25	U	1	U	1	U
Allyl chloride	2.43	U	2.08	U	1.88	U	2.98	U	2.02	U	3.19	U	2.73	U	2.08	U	2.5	U	3.7	U	3.7	U
Benzene	0.401	U	0.344	U	0.31	U	0.492	U	0.333	U	0.526	U	0.451	U	0.342	U	0.412	U	0.3	U	0.3	U
Benzyl chloride	0.729	U	0.625	U	0.564	U	0.894	U	0.605	U	0.957	U	0.82	U	0.623	U	0.749	U	1	U	1	U
bis(2-Chloroisopropyl)ether	1.82	U	1.56	U	1.41	U	2.24	U	1.51	U	2.39	U	2.05	U	1.56	U	1.87	U	1.5	U	1.5	U
Bromobenzene	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
Bromochloromethane	0.608	U	0.521	U	0.47	U	0.745	U	0.504	U	0.797	U	0.683	U	0.519	U	0.624	U	0.3	U	0.3	U
Bromodichloromethane	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
Bromoform	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.25	U	0.25	U
Bromomethane	0.608	U	0.521	U	0.47	U	0.745	U	0.504	U	0.797	U	0.683	U	0.519	U	0.624	U	0.5	U	0.5	U
Carbon disulfide	1.52	U	1.3	U	1.18	U	1.86	U	1.26	U	1.99	U	1.71	U	1.3	U	1.56	U	1.25	U	1.25	U
Carbon tetrachloride	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
Chlorobenzene	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
Chloroethane	0.608	U	0.521	U	0.47	U	0.745	U	0.504	U	0.797	U	0.683	U	0.519	U	0.624	U	0.5	U	0.5	U
Chloroform	0.253	J	3.2		0.188	U	0.643	J	0.711	J	0.35	J	0.273	U	0.653	J	0.484	J	0.25	U	0.25	U
Chloromethane	0.608	U	0.521	U	0.47	U	0.745	U	0.504	U	0.797	U	0.683	U	0.519	U	0.624	U	0.5	U	0.5	U

Note: sub-floor samples are shaded.

Table 37. Pit 26 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																					
Parameter	**BLT-P26-SO-05d**		**BLT-P26-SO-05e**		**BLT-P26-SO-05f**		**BLT-P26-SO-06a**		**BLT-P26-SO-06b**		**BLT-P26-SO-07a**		**BLT-P26-SO-07b**		**BLT-P26-SO-08a**		**BLT-P26-SO-08b**		**BLT-P26-SO-09a**		**BLT-P26-SO-09b**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
cis-1,2-Dichloroethylene	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.3	U	0.3	U
cis-1,3-Dichloropropylene	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
cis-1,4-Dichloro-2-butene	0.608	U	0.521	U	0.47	U	0.745	U	0.504	U	0.797	U	0.683	U	0.519	U	0.624	U	1	U	1	U
Cyclohexane	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.3	U	0.3	U
Cyclohexanone	18.2	U	15.6	U	14.1	U	22.4	U	15.1	U	23.9	U	20.5	U	15.6	U	18.7	U	15	U	15	U
Dibromochloromethane	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.25	U	0.25	U
Dibromomethane	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.3	U	0.3	U
Dichlorodifluoromethane	0.608	U	0.521	U	0.47	U	0.745	U	0.504	U	0.797	U	0.683	U	0.519	U	0.624	U	0.5	U	0.5	U
Ethyl ether	0.304	U	0.261	U	0.235	U	0.393	J	2.14		0.399	U	0.342	U	0.311	J	0.312	U	0.3	U	0.3	U
Ethyl methacrylate	0.608	U	0.521	U	0.47	U	0.745	U	0.504	U	0.797	U	0.683	U	0.519	U	0.624	U	1	U	1	U
Ethylbenzene	0.243	U	0.208	U	0.188	U	1.1	J	0.441	J	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
Hexachlorobutadiene	0.608	U	0.521	U	0.47	U	0.745	U	0.504	U	0.797	U	0.683	U	0.519	U	0.624	U	0.25	U	0.25	U
Iodomethane	2.03	U	1.74	U	1.57	U	2.49	U	1.68	U	2.66	U	2.28	U	1.73	U	2.09	U	1.25	U	1.25	U
Isobutyl alcohol	12.2	U	10.4	U	9.4	U	14.9	U	10.1	U	15.9	U	13.7	U	10.4	U	12.5	U	12.5	U	12.5	U
Isopropylbenzene	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
m,p-Xylenes	0.304	U	0.437	J	0.235	U	9.99		5.03		0.786	J	0.591	J	0.634	J	6.49		0.463	BJ	0.446	BJ
Methacrylonitrile	0.851	U	0.729	U	0.658	U	1.04	U	0.706	U	1.12	U	0.957	U	0.726	U	0.874	U	1	U	1	U
Methyl acetate	2.03	U	1.74	U	1.57	U	2.49	U	1.68	U	2.66	U	2.28	U	1.73	U	2.09	U	1.25	U	1.25	U
Methyl methacrylate	1.22	U	1.04	U	0.94	U	1.49	U	1.01	U	1.59	U	1.37	U	1.04	U	1.25	U	1	U	1	U
Methylcyclohexane	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.25	U	0.25	U
Methylene chloride	2.43	U	2.08	U	1.88	U	2.98	U	2.02	U	3.19	U	2.73	U	2.08	U	2.5	U	2	U	2	U
Naphthalene	0.243	U	0.237	J	0.188	U	3.89		0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
n-Butyl alcohol	32.8	U	28.1	U	25.4	U	40.2	U	27.2	U	43.1	U	36.9	U	28	U	33.7	U	13	U	13	U
n-Butylbenzene	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
n-Propylbenzene	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
o-Xylene	0.243	U	0.208	U	0.188	U	4.79		2		0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
Pentachloroethane	1.82	U	1.56	U	1.41	U	2.24	U	1.51	U	2.39	U	2.05	U	1.56	U	1.87	U	1	U	1	U
Propionitrile	1.22	U	1.04	U	0.94	U	1.49	U	1.01	U	1.59	U	1.37	U	1.04	U	1.25	U	1.5	U	1.5	U
sec-Butylbenzene	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
Styrene	0.243	U	0.208	U	0.188	U	0.403	J	0.308	J	0.438	J	0.334	J	0.219	J	0.271	J	0.25	U	0.25	U
tert-Butyl methyl ether	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
tert-Butylbenzene	0.243	U	0.208	U	0.188	U	0.298	U	0.202	U	0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
Tetrachloroethylene	0.243	U	0.208	U	0.188	U	0.298	U	1.5		0.319	U	0.273	U	0.208	U	0.25	U	0.25	U	0.25	U
Toluene	0.353	U	1	J	0.273	U	22.5		37		0.463	U	0.396	U	0.301	U	0.362	U	0.25	U	0.25	U
trans-1,2-Dichloroethylene	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.3	U	0.3	U
trans-1,3-Dichloropropylene	0.365	U	0.313	U	0.282	U	0.447	U	0.302	U	0.478	U	0.41	U	0.311	U	0.375	U	0.25	U	0.25	U
trans-1,4-Dichloro-2-butene	0.608	U	0.521	U	0.47	U	0.745	U	0.504	U	0.797	U	0.683	U	0.519	U	0.624	U	1	U	1	U
Trichloroethylene	0.304	U	0.261	U	0.235	U	0.373	U	0.252	U	0.399	U	0.342	U	0.259	U	0.312	U	0.25	U	0.25	U
Trichlorofluoromethane	0.608	U	0.521	U	0.47	U	0.745	U	0.504	U	0.797	U	0.683	U	0.519	U	0.624	U	0.31	U	0.31	U
Trichlorotrifluoroethane	1.22	U	1.04	U	0.94	U	1.49	U	1.01	U	1.59	U	1.37	U	1.04	U	1.25	U	1	U	1	U
Vinyl acetate	1.52	U	1.3	U	1.18	U	1.86	U	1.26	U	1.99	U	1.71	U	1.3	U	1.56	U	1.5	U	1.5	U
Vinyl chloride	0.608	U	0.521	U	0.47	U	0.745	U	0.504	U	0.797	U	0.683	U	0.519	U	0.624	U	0.5	U	0.5	U
Xylenes (total)	0.243	U	0.437	J	0.188	U	14.8		7.03		0.786	J	0.591	J	0.634	J	6.49		0.463	BJ	0.446	BJ

Note: sub-floor samples are shaded.

Table 37. Pit 26 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																					
Parameter	**BLT-P26-SO-05d**		**BLT-P26-SO-05e**		**BLT-P26-SO-05f**		**BLT-P26-SO-06a**		**BLT-P26-SO-06b**		**BLT-P26-SO-07a**		**BLT-P26-SO-07b**		**BLT-P26-SO-08a**		**BLT-P26-SO-08b**		**BLT-P26-SO-09a**		**BLT-P26-SO-09b**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA SVOC (ug/kg)																						
1,1'-Biphenyl	108	U	107	U	108	U	110	U	111	U	110	U	111	U	109	U	110	U				
1,2,4-Trichlorobenzene	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
1,2-Dichlorobenzene	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
1,3-Dichlorobenzene	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
1,4-Dichlorobenzene	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
2,4,5-Trichlorophenol	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
2,4,6-Trichlorophenol	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
2,4-Dichlorophenol	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
2,4-Dimethylphenol	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
2,4-Dinitrophenol	136	U	136	U	137	U	139	U	141	U	140	U	140	U	139	U	140	U				
2,4-Dinitrotoluene	35.9	U	35.7	U	36.1	U	36.7	U	37.1	U	36.8	U	36.9	U	36.5	U	36.8	U				
2,6-Dinitrotoluene	35.9	U	35.7	U	36.1	U	36.7	U	37.1	U	36.8	U	36.9	U	36.5	U	36.8	U				
2-Chloronaphthalene	12.6	U	12.5	U	12.6	U	12.8	U	13	U	12.9	U	12.9	U	12.8	U	12.9	U				
2-Chlorophenol	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
2-Methyl-4,6-dinitrophenol	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
2-Methylnaphthalene	7.18	U	7.15	U	7.22	U	7.34	U	7.42	U	7.36	U	7.39	U	7.3	U	7.35	U				
2-Nitrophenol	35.9	U	35.7	U	36.1	U	36.7	U	37.1	U	36.8	U	36.9	U	36.5	U	36.8	U				
3,3'-Dichlorobenzidine	108	U	107	U	108	U	110	U	111	U	110	U	111	U	109	U	110	U				
4-Bromophenylphenylether	35.9	U	35.7	U	36.1	U	36.7	U	37.1	U	36.8	U	36.9	U	36.5	U	36.8	U				
4-Chloro-3-methylphenol	35.9	U	35.7	U	36.1	U	36.7	U	37.1	U	36.8	U	36.9	U	36.5	U	36.8	U				
4-Chloroaniline	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
4-Chlorophenylphenylether	35.9	U	35.7	U	36.1	U	36.7	U	37.1	U	36.8	U	36.9	U	36.5	U	36.8	U				
4-Nitrophenol	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
Acenaphthene	12	U	11.9	U	12.1	U	12.3	U	12.4	U	12.3	U	12.3	U	12.2	U	12.3	U				
Acenaphthylene	10.8	U	10.7	U	10.8	U	11	U	11.1	U	11	U	11.1	U	10.9	U	11	U				
alpha-Terpineol	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
Anthracene	7.18	U	7.15	U	7.22	U	7.34	U	7.42	U	7.36	U	7.39	U	7.3	U	7.35	U				
Atrazine	108	U	107	U	108	U	110	U	111	U	110	U	111	U	109	U	110	U				
Benzaldehyde	108	U	107	U	108	U	110	U	111	U	110	U	111	U	109	U	110	U				
Benzo(a)anthracene	10.8	U	10.7	U	10.8	U	11	U	11.1	U	11	U	11.1	U	10.9	U	11	U				
Benzo(a)pyrene	10.8	U	10.7	U	10.8	U	11	U	11.1	U	11	U	11.1	U	10.9	U	11	U				
Benzo(b)fluoranthene	10.8	U	10.7	U	10.8	U	11	U	11.1	U	11	U	11.1	U	10.9	U	11	U				
Benzo(ghi)perylene	10.8	U	10.7	U	10.8	U	11	U	11.1	U	11	U	11.1	U	10.9	U	11	U				
Benzo(k)fluoranthene	10.8	U	10.7	U	10.8	U	11	U	11.1	U	11	U	11.1	U	10.9	U	11	U				
bis(2-Chloroethoxy)methane	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
bis(2-Chloroethyl) ether	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
bis(2-Chloroisopropyl)ether	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
bis(2-Ethylhexyl)phthalate	71.8	U	207		330		140	J	145	J	1270		2330		275		266					
Butylbenzylphthalate	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
Carbazole	10.8	U	10.7	U	10.8	U	11	U	11.1	U	11	U	11.1	U	10.9	U	11	U				
Chrysene	10.8	U	10.7	U	10.8	U	11	U	11.1	U	11	U	11.1	U	10.9	U	11	U				
Dibenzo(a,h)anthracene	10.8	U	10.7	U	10.8	U	11	U	11.1	U	11	U	11.1	U	10.9	U	11	U				
Dibenzofuran	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
Diethylphthalate	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
Dimethylphthalate	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
Di-n-butylphthalate	35.9	U	35.7	U	36.1	U	36.7	U	37.1	U	36.8	U	36.9	U	36.5	U	36.8	U				
Di-n-octylphthalate	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
Diphenylamine	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
Fluoranthene	10.8	U	10.7	U	10.8	U	11	U	11.1	U	11	U	11.1	U	10.9	U	11	U				
Fluorene	10.8	U	10.7	U	10.8	U	11	U	11.1	U	11	U	11.1	U	10.9	U	11	U				

Note: sub-floor samples are shaded.

Table 37. Pit 26 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																					
Parameter	**BLT-P26-SO-05d**		**BLT-P26-SO-05e**		**BLT-P26-SO-05f**		**BLT-P26-SO-06a**		**BLT-P26-SO-06b**		**BLT-P26-SO-07a**		**BLT-P26-SO-07b**		**BLT-P26-SO-08a**		**BLT-P26-SO-08b**		**BLT-P26-SO-09a**		**BLT-P26-SO-09b**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Hexachlorobenzene	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
Hexachlorobutadiene	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
Hexachlorocyclopentadiene	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
Hexachloroethane	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
Indeno(1,2,3-cd)pyrene	10.8	U	10.7	U	10.8	U	11	U	11.1	U	11	U	11.1	U	10.9	U	11	U				
Isophorone	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
m,p-Cresols	144	U	143	U	144	U	147	U	148	U	147	U	148	U	146	U	147	U				
m-Nitroaniline	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
Naphthalene	10.8	U	10.7	U	17.7	J	11	U	11.1	U	11	U	11.1	U	10.9	U	11	U				
Nitrobenzene	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
N-Nitrosodipropylamine	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
o-Cresol	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
o-Nitroaniline	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
Pentachlorophenol	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
Phenanthrene	10.8	U	10.7	U	10.8	U	11	U	11.1	U	11	U	11.1	U	10.9	U	11	U				
Phenol	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
p-Nitroaniline	71.8	U	71.5	U	72.2	U	73.4	U	74.2	U	73.6	U	73.9	U	73	U	73.5	U				
Pyrene	11.3	U	11.2	U	11.3	U	11.5	U	11.7	U	11.6	U	11.6	U	11.5	U	11.5	U				
RCRA Metals (mg/kg)																						
Aluminum	2150		812		1550		11200		15500		11400		11100		10600		14700					
Antimony	0.63	J	0.4	U	0.407	U	0.507	J	0.722	J	0.407	U	0.405	J	0.459	J	0.429	U				
Arsenic	0.869	J	0.806	J	1.06	J	2.17		3.58		2		2.07		1.94		2.91					
Barium	5.47		3.51		4.39		23.7		47.9		23.3		23.4		22.7		26.4					
Beryllium	0.102	U	0.1	U	0.102	U	0.227	J	0.442	J	0.175	J	0.165	J	0.17	J	0.194	J				
Cadmium	0.102	U	0.1	U	0.102	U	0.174	J	0.31	J	0.18	J	0.384	J	0.255	J	0.286	J				
Calcium	19.7		13.8		17.3		81.5		120		90.8		90.9		86.8		116					
Chromium	6.27		8.6		17.5		12.4		19.1		12.6		12.2		11.7		16.2					
Cobalt	0.204	U	0.2	U	0.203	U	1.92		3.44		1.29		1.28		1.32		1.45					
Copper	4.04		4.07		7.95		5.74		7.89		5.94		4.96		5.33		7.39					
Iron	3270		3190		5280		8120		11800		7460		4880		6370		8470					
Lead	1.5		0.81	J	1.4		5.61		14.5		5.1		5.23		5.27		6.25					
Magnesium	77.8		28.3	J	51.9		507		1110		440		446		427		536					
Manganese	5.54		3.02		7.94		34.9		50.8		24.1		25.6		26.8		23.6					
Mercury	2.68	J	2.91	J	2.4	U	1370		208		32.2		33.1		33.8		35.2					
Nickel	1.36		1.29		2.87		4.96		8.8		4.5		4.24		4.24		5.48					
Potassium	125		79.7		108		444		733		451		472		431		525					
Selenium	0.611	U	0.6	U	0.988	J	0.609	U	0.637	U	0.611	U	0.602	U	0.607	U	0.643	U				
Silver	0.102	U	0.1	U	0.102	U	0.101	U	0.106	U	0.102	U	0.1	U	0.101	U	0.107	U				
Sodium	4.62	J	4.5	U	4.8	J	15.7		25.5		14.8	J	14	J	13.1	J	16.9					
Thallium	0.509	U	0.5	U	0.508	U	0.507	U	0.531	U	0.509	U	0.501	U	0.506	U	0.536	U				
Vanadium	7.02		7.92		12.1		20.7		31.1		21.1		22.3		20.2		27.9					
Zinc	2.09		1.24		3.42		11.1		24.8		9.71		9.88		9.6		11.4					

Note: sub-floor samples are shaded.

Table 37. Pit 26 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																					
Parameter	**BLT-P26-SO-05d**		**BLT-P26-SO-05e**		**BLT-P26-SO-05f**		**BLT-P26-SO-06a**		**BLT-P26-SO-06b**		**BLT-P26-SO-07a**		**BLT-P26-SO-07b**		**BLT-P26-SO-08a**		**BLT-P26-SO-08b**		**BLT-P26-SO-09a**		**BLT-P26-SO-09b**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA Pesticide (ug/kg)																						
4,4'-DDD	0.357	U	0.347	U	0.351	U	0.348	U	0.37	U	0.351	U	0.346	U	0.346	U	0.358	U				
4,4'-DDE	0.357	U	0.347	U	0.351	U	0.348	U	0.37	U	0.351	U	0.346	U	0.346	U	0.358	U				
4,4'-DDT	0.357	U	0.347	U	0.351	U	0.348	U	0.37	U	0.351	U	0.346	U	0.346	U	0.358	U				
Aldrin	0.178	U	0.174	U	0.176	U	0.174	U	0.185	U	0.175	U	0.173	U	0.173	U	0.179	U				
alpha-BHC	0.178	U	0.174	U	0.176	U	0.174	U	0.185	U	0.175	U	0.173	U	0.173	U	0.179	U				
beta-BHC	0.178	U	0.174	U	0.176	U	0.605	J	0.185	U	0.175	U	0.173	U	0.173	U	0.179	U				
Chlordane (tech.)	1.78	U	1.74	U	1.76	U	1.74	U	1.85	U	1.75	U	1.73	U	1.73	U	1.79	U				
delta-BHC	0.178	U	0.174	U	0.176	U	0.174	U	0.185	U	0.175	U	0.173	U	0.173	U	0.179	U				
Dieldrin	0.357	U	0.347	U	0.351	U	0.348	U	0.37	U	0.351	U	0.346	U	0.346	U	0.358	U				
Endosulfan I	0.178	U	0.174	U	0.176	U	0.174	U	0.185	U	0.175	U	0.173	U	0.173	U	0.179	U				
Endosulfan II	0.357	U	0.347	U	0.351	U	0.348	U	0.37	U	0.351	U	0.346	U	0.346	U	0.358	U				
Endosulfan sulfate	0.357	U	0.347	U	0.351	U	0.348	U	0.37	U	0.351	U	0.346	U	0.346	U	0.358	U				
Endrin	0.357	U	0.347	U	0.351	U	0.348	U	0.37	U	0.351	U	0.346	U	0.346	U	0.358	U				
Endrin aldehyde	0.357	U	0.347	U	0.351	U	0.348	U	0.37	U	0.351	U	0.346	U	0.346	U	0.358	U				
Endrin ketone	0.357	U	0.347	U	0.351	U	0.348	U	0.37	U	0.351	U	0.346	U	0.346	U	0.358	U				
gamma-BHC (Lindane)	0.178	U	0.174	U	0.176	U	0.174	U	0.185	U	0.175	U	0.173	U	0.173	U	0.179	U				
Heptachlor	0.178	U	0.174	U	0.176	U	0.174	U	0.185	U	0.175	U	0.173	U	0.173	U	0.179	U				
Heptachlor epoxide	0.178	U	0.174	U	0.176	U	0.174	U	0.185	U	0.175	U	0.173	U	0.173	U	0.179	U				
Methoxychlor	1.78	U	1.74	U	1.76	U	1.74	U	1.85	U	1.75	U	1.73	U	1.73	U	1.79	U				
Toxaphene	5.94	U	5.78	U	5.85	U	5.79	U	6.16	U	5.84	U	5.77	U	5.76	U	5.96	U				
TCLP PCB (ug/kg)																						
	BLT-P34C-SO-01a		**BLT-P34C-SO-01b**		**BLT-P34C-SO-02a**		**BLT-P34C-SO-02b**		**BLT-P34C-SO-03a**		**BLT-P34C-SO-03b**		**BLT-P34C-SO-04a**		**BLT-P34C-SO-04b**		**BLT-P34C-SO-05a**					
Parameter	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**				
Aroclor-1016	1.21	U	1.2	U	1.19	Uh	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U	1.21	U				
Aroclor-1221	1.21	U	1.2	U	1.19	Uh	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U	1.21	U				
Aroclor-1232	1.21	U	1.2	U	1.19	Uh	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U	1.21	U				
Aroclor-1242	1.21	U	1.2	U	1.19	Uh	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U	1.21	U				
Aroclor-1248	1.21	U	1.2	U	1.19	Uh	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U	1.21	U				
Aroclor-1254	1.21	U	1.2	U	1.19	Uh	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U	1.21	U				
Aroclor-1260	1.21	U	1.2	U	1.19	Uh	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U	1.21	U				
Herbicides (ug/kg)																						
2,4,5-T	1.78	U	1.73	U	1.75	U	1.73	U	1.84	U	1.75	U	1.72	U	1.72	U	1.78	U				
2,4,5-TP	1.78	U	1.73	U	1.75	U	1.73	U	1.84	U	1.75	U	1.72	U	1.72	U	1.78	U				
2,4-D	1.78	U	1.73	U	1.75	U	1.73	U	1.84	U	1.75	U	1.72	U	1.72	U	1.78	U				
TOC (mg/kg)																						
Total Organic Carbon #1	173		104		113		1490		2930		559		490		462		726					
Total Organic Carbon #2	191		124		125		1380		2970		614		533		531		782					
Total Organic Carbon #3	184		134		150		1460		3170		581		496		448		971					
Total Organic Carbon #4	176		137		116		1410		3160		561		451		456		744					
Total Organic Carbon Average	181		124		126		1440		3060		579		493		474		806					

Note: sub-floor samples are shaded.

Table 38. Pit 26 Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																															
	BLT-P26-SO-01a				BLT-P26-SO-01b				BLT-P26-SO-02a				BLT-P26-SO-02b				BLT-P26-SO-03a				BLT-P26-SO-03b				BLT-P26-SO-04a				BLT-P26-SO-04b			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (901.1mod/HASL 300)																																
Actinium-228	0.81	+/-	0.16		1.06	+/-	0.17		0.67	+/-	0.30		0.83	+/-	0.21		0.60	+/-	0.16		0.62	+/-	0.15		0.77	+/-	0.25		0.91	+/-	0.21	
Americium-241	-0.01	+/-	0.07	U	0.08	+/-	0.13	U	0.01	+/-	0.05	U	0.08	+/-	0.15	U	-0.05	+/-	0.12	U	-0.04	+/-	0.06	U	0.03	+/-	0.04	U	-0.05	+/-	0.09	U
Antimony-124	-0.01	+/-	0.03	U	0.00	+/-	0.04	U	-0.04	+/-	0.07	U	0.03	+/-	0.03	U	-0.01	+/-	0.04	U	0.00	+/-	0.03	U	0.03	+/-	0.07	U	0.02	+/-	0.05	U
Antimony-125	0.02	+/-	0.04	U	0.03	+/-	0.05	U	0.04	+/-	0.12	U	-0.01	+/-	0.06	U	0.01	+/-	0.05	U	0.00	+/-	0.04	U	0.00	+/-	0.06	U	0.06	+/-	0.06	U
Barium-133	0.00	+/-	0.02	U	-0.09	+/-	0.03	U	-0.03	+/-	0.05	U	0.00	+/-	0.03	U	0.02	+/-	0.02	U	0.00	+/-	0.02	U	0.00	+/-	0.03	U	-0.02	+/-	0.03	U
Barium-140	-0.03	+/-	0.11	U	0.04	+/-	0.13	U	0.00	+/-	0.24	U	0.00	+/-	0.21	UI	-0.02	+/-	0.12	U	-0.01	+/-	0.11	U	0.17	+/-	0.22	U	-0.05	+/-	0.17	U
Beryllium-7	-0.03	+/-	0.16	U	-0.09	+/-	0.16	U	-0.04	+/-	0.34	U	0.02	+/-	0.19	U	-0.02	+/-	0.18	U	0.05	+/-	0.15	U	-0.03	+/-	0.23	U	-0.06	+/-	0.21	U
Bismuth-212	0.46	+/-	0.23		0.57	+/-	0.24		0.59	+/-	0.35		0.34	+/-	0.23		0.14	+/-	0.24	U	0.40	+/-	0.19		0.39	+/-	0.47	U	0.55	+/-	0.31	
Bismuth-214	0.38	+/-	0.08		0.61	+/-	0.08		0.58	+/-	0.12		0.54	+/-	0.11		0.44	+/-	0.09		0.40	+/-	0.08		0.00	+/-	0.13	UI	0.45	+/-	0.13	
Cerium-139	-0.01	+/-	0.01	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.02	U	-0.01	+/-	0.02	U	-0.01	+/-	0.01	U	0.00	+/-	0.02	U	-0.01	+/-	0.02	U
Cerium-141	0.00	+/-	0.03	U	0.04	+/-	0.05	U	-0.02	+/-	0.06	U	0.01	+/-	0.04	U	0.02	+/-	0.03	U	0.03	+/-	0.04	U	0.04	+/-	0.06	U	-0.02	+/-	0.04	U
Cerium-144	-0.05	+/-	0.10	U	0.06	+/-	0.11	U	0.01	+/-	0.16	U	-0.11	+/-	0.12	U	-0.09	+/-	0.11	U	0.03	+/-	0.10	U	0.01	+/-	0.14	U	-0.13	+/-	0.14	U
Cesium-134	0.04	+/-	0.03	U	0.00	+/-	0.02	UI	0.05	+/-	0.04	U	0.05	+/-	0.04	U	0.04	+/-	0.03	U	0.00	+/-	0.03	UI	0.04	+/-	0.04	U	0.00	+/-	0.04	UI
Cesium-136	0.03	+/-	0.04	U	-0.01	+/-	0.05	U	0.03	+/-	0.09	U	-0.05	+/-	0.05	U	-0.03	+/-	0.05	U	0.01	+/-	0.04	U	-0.03	+/-	0.07	U	0.00	+/-	0.07	U
Cesium-137	0.00	+/-	0.02	U	0.00	+/-	0.02	U	0.02	+/-	0.03	U	0.02	+/-	0.04	U	0.00	+/-	0.02	U	0.03	+/-	0.02		0.02	+/-	0.03	U	0.05	+/-	0.03	
Chromium-51	0.04	+/-	0.17	U	-0.06	+/-	0.20	U	-0.20	+/-	0.31	U	0.12	+/-	0.23	U	-0.08	+/-	0.21	U	0.11	+/-	0.16	U	-0.14	+/-	0.23	U	0.04	+/-	0.25	U
Cobalt-56	0.00	+/-	0.02	U	0.00	+/-	0.02	U	0.00	+/-	0.03	U	-0.02	+/-	0.02	U	0.00	+/-	0.02	U	0.00	+/-	0.02	U	-0.03	+/-	0.03	U	-0.01	+/-	0.02	U
Cobalt-57	0.00	+/-	0.01	U	0.01	+/-	0.01	U	-0.02	+/-	0.02	U	0.00	+/-	0.02	U	0.00	+/-	0.01	U	0.00	+/-	0.01	U	0.01	+/-	0.02	U	0.00	+/-	0.02	U
Result that exceeds N	-0.02	+/-	0.02	U	0.01	+/-	0.02	U	0.01	+/-	0.04	U	-0.02	+/-	0.02	U	-0.01	+/-	0.02	U	-0.01	+/-	0.02	U	-0.02	+/-	0.03	U	-0.02	+/-	0.03	U
Cobalt-60	0.01	+/-	0.02	U	-0.02	+/-	0.02	U	0.00	+/-	0.05	UI	0.02	+/-	0.02	U	0.00	+/-	0.02	U	0.00	+/-	0.01	U	0.00	+/-	0.03	U	0.02	+/-	0.03	U
Europium-152	-0.01	+/-	0.04	U	0.04	+/-	0.06	U	-0.02	+/-	0.08	U	-0.03	+/-	0.06	U	0.00	+/-	0.05	U	0.06	+/-	0.04	U	0.05	+/-	0.06	U	0.01	+/-	0.06	U
Europium-154	0.03	+/-	0.04	U	0.00	+/-	0.05	U	-0.04	+/-	0.09	U	0.03	+/-	0.05	U	-0.04	+/-	0.05	U	0.03	+/-	0.04	U	-0.03	+/-	0.08	U	0.00	+/-	0.08	U
Europium-155	-0.01	+/-	0.05	U	0.02	+/-	0.06	U	0.00	+/-	0.07	U	0.03	+/-	0.06	U	0.01	+/-	0.06	U	0.02	+/-	0.07	U	0.06	+/-	0.06	U	0.06	+/-	0.10	U
Iridium-192	0.00	+/-	0.01	U	0.01	+/-	0.02	U	0.01	+/-	0.03	U	-0.02	+/-	0.02	U	-0.01	+/-	0.02	U	-0.02	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.02	U
Iron-59	-0.01	+/-	0.03	U	-0.05	+/-	0.04	U	0.02	+/-	0.08	U	-0.04	+/-	0.05	U	-0.01	+/-	0.04	U	0.02	+/-	0.03	U	0.01	+/-	0.06	U	-0.01	+/-	0.06	U
Lead-210	1.29	+/-	2.15	U	3.20	+/-	4.09	U	0.14	+/-	0.71	U	-3.40	+/-	8.11	U	1.32	+/-	3.98	U	1.83	+/-	1.90	U	2.19	+/-	0.69		6.45	+/-	3.75	
Lead-212	0.72	+/-	0.08		0.83	+/-	0.07		0.92	+/-	0.08		0.78	+/-	0.10		0.78	+/-	0.06		0.64	+/-	0.07		0.81	+/-	0.12		0.86	+/-	0.10	
Lead-214	0.48	+/-	0.09		0.67	+/-	0.08		0.65	+/-	0.12		0.66	+/-	0.11		0.49	+/-	0.08		0.46	+/-	0.08		0.54	+/-	0.12		0.65	+/-	0.12	
Manganese-54	0.01	+/-	0.02	U	-0.01	+/-	0.02	U	-0.02	+/-	0.03	U	0.00	+/-	0.02	U	-0.01	+/-	0.02	U	0.02	+/-	0.02	U	0.01	+/-	0.03	U	0.01	+/-	0.02	U
Mercury-203	0.00	+/-	0.03	UI	0.00	+/-	0.03	UI	-0.02	+/-	0.03	U	0.00	+/-	0.03	U	-0.01	+/-	0.02	U	0.01	+/-	0.02	U	0.03	+/-	0.03	U	0.03	+/-	0.05	U
Neodymium-147	-0.18	+/-	0.24	U	0.09	+/-	0.27	U	-0.02	+/-	0.55	U	-0.06	+/-	0.29	U	-0.14	+/-	0.28	U	0.03	+/-	0.23	U	-0.23	+/-	0.43	U	0.07	+/-	0.38	U
Neptunium-239	-0.02	+/-	0.09	U	-0.04	+/-	0.10	U	-0.06	+/-	0.14	U	-0.07	+/-	0.11	U	0.01	+/-	0.10	U	-0.02	+/-	0.10	U	-0.01	+/-	0.12	U	-0.12	+/-	0.12	U
Niobium-94	0.02	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.03	U	0.02	+/-	0.02	U	0.01	+/-	0.03	U	0.01	+/-	0.02	U	0.02	+/-	0.02	U	0.00	+/-	0.02	U
Niobium-95	0.00	+/-	0.07	UI	0.02	+/-	0.06	U	-0.01	+/-	0.04	U	0.01	+/-	0.03	U	0.01	+/-	0.03	U	-0.02	+/-	0.03	U	-0.01	+/-	0.04	U	0.02	+/-	0.04	U
Potassium-40	3.55	+/-	0.51		3.60	+/-	0.53		4.09	+/-	0.74		3.63	+/-	0.73		3.61	+/-	0.55		2.65	+/-	0.54		4.74	+/-	0.78		4.14	+/-	0.76	
Promethium-144	0.01	+/-	0.02	U	0.01	+/-	0.02	U	0.02	+/-	0.03	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U	0.02	+/-	0.02	U	0.02	+/-	0.03	U	0.00	+/-	0.02	U
Promethium-146	0.00	+/-	0.02	U	0.00	+/-	0.02	U	0.05	+/-	0.04	U	0.00	+/-	0.03	U	0.03	+/-	0.02	U	0.03	+/-	0.02	U	0.01	+/-	0.03	U	0.02	+/-	0.03	U
Radium-228	0.81	+/-	0.16		1.06	+/-	0.17		0.67	+/-	0.30		0.83	+/-	0.21		0.60	+/-	0.16		0.62	+/-	0.15		0.77	+/-	0.25		0.91	+/-	0.21	
Ruthenium-106	0.11	+/-	0.14	U	0.06	+/-	0.16	U	-0.10	+/-	0.27	U	0.00	+/-	0.18	U	0.02	+/-	0.18	U	-0.01	+/-	0.13	U	0.28	+/-	0.33	U	0.00	+/-	0.21	U
Silver-110m	0.00	+/-	0.01	U	0.01	+/-	0.02	U	0.00	+/-	0.03	U	0.01	+/-	0.02	U	0.02	+/-	0.02	U	-0.01	+/-	0.02	U	0.00	+/-	0.03	U	-0.01	+/-	0.02	U
Sodium-22	0.01	+/-	0.01	U	0.00	+/-	0.02	U	-0.02	+/-	0.03	U	0.01	+/-	0.02	U	-0.01	+/-	0.02	U	0.01	+/-	0.02	U	-0.01	+/-	0.03	U	0.00	+/-	0.03	U
Thallium-208	0.26	+/-	0.05		0.27	+/-	0.04		0.35	+/-	0.08		0.25	+/-	0.05		0.24	+/-	0.04		0.22	+/-	0.04		0.31	+/-	0.07		0.25	+/-	0.05	
Thorium-230	0.38	+/-	0.08		0.61	+/-	0.08		0.58	+/-	0.12		0.54	+/-	0.11		0.44	+/-	0.09		0.40	+/-	0.08		0.73	+/-	0.13		0.45	+/-	0.13	
Thorium-234	1.10	+/-	0.97		1.62	+/-	1.67	U	0.86	+/-	0.71	U	1.70	+/-	1.57	U	0.67	+/-	1.54	U	1.10	+/-	0.81		0.87	+/-	0.57		0.56	+/-	1.10	U
Tin-113	-0.01	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.04	U	0.01	+/-	0.03	U	-0.02	+/-	0.02	U	0.00	+/-	0.02	U	0.01	+/-	0.03	U	0.00	+/-	0.03	U
Uranium-235	0.01	+/-	0.11	U	0.14	+/-	0.12	U	0.07	+/-	0.23	U	-0.05	+/-	0.13	U	0.07	+/-	0.12	U	0.13	+/-	0.17	U	0.26	+/-	0.21	U	0.01	+/-	0.14	U

Table 38. Pit 26 Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																															
	BLT-P26-SO-01a				BLT-P26-SO-01b				BLT-P26-SO-02a				BLT-P26-SO-02b				BLT-P26-SO-03a				BLT-P26-SO-03b				BLT-P26-SO-04a				BLT-P26-SO-04b			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Uranium-238	1.10	+/-	0.97		1.62	+/-	1.67	U	0.86	+/-	0.71	U	1.70	+/-	1.57	U	0.67	+/-	1.54	U	1.10	+/-	0.81		0.87	+/-	0.57		0.56	+/-	1.10	U
Yttrium-88	0.02	+/-	0.02	U	0.01	+/-	0.02	U	-0.01	+/-	0.03	U	-0.01	+/-	0.02	U	0.00	+/-	0.02	U	0.00	+/-	0.01	U	-0.01	+/-	0.02	U	0.01	+/-	0.03	U
Zinc-65	0.00	+/-	0.04	U	0.03	+/-	0.04	U	0.00	+/-	0.09	U	-0.08	+/-	0.05	U	0.00	+/-	0.04	U	0.03	+/-	0.03	U	0.01	+/-	0.06	U	-0.01	+/-	0.07	U
Zirconium-95	0.01	+/-	0.03	U	0.02	+/-	0.04	U	0.00	+/-	0.15	UI	0.01	+/-	0.04	U	-0.02	+/-	0.03	U	0.00	+/-	0.03	U	-0.03	+/-	0.05	U	-0.05	+/-	0.05	U
C-14 (EERF C-01 mod)	9.04	+/-	1.00		9.63	+/-	0.97		15.40	+/-	1.03		11.40	+/-	0.97		210.00	+/-	4.32		10.60	+/-	1.01		0.42	+/-	0.77	U	2.37	+/-	0.80	
Cl-36 (GL-Rad-A033)	-0.09	+/-	0.03	U	-0.02	+/-	0.03	U	-0.06	+/-	0.03	U	-0.13	+/-	0.03	U	-0.04	+/-	0.05	U	-0.11	+/-	0.03	U	-0.08	+/-	0.03	U	-0.07	+/-	0.05	U
Ni-63 (RESL Ni-1 mod)	0.87	+/-	1.85	U	1.12	+/-	1.69	U	3.28	+/-	2.34	U	1.23	+/-	1.39	U	13.50	+/-	2.29		18.90	+/-	1.91		5.76	+/-	1.67		5.62	+/-	2.63	
Sr-90 (905.0 mod)	0.09	+/-	0.12	U	0.04	+/-	0.09	U	0.11	+/-	0.13	U	0.06	+/-	0.08	U	0.12	+/-	0.13	U	-0.01	+/-	0.09	U	0.09	+/-	0.12	U	-0.09	+/-	0.09	U
H-3 (906.0 mod)	2.70	+/-	0.68		4.96	+/-	0.70		4.08	+/-	0.66		4.52	+/-	0.79		1.62	+/-	0.63		1.82	+/-	0.58		1.59	+/-	0.60		1.20	+/-	0.59	

Table 38. Pit 26 Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																															
	BLT-P26-SO-05a				BLT-P26-SO-05b				BLT-P26-SO-06a				BLT-P26-SO-06b				BLT-P26-SO-07a				BLT-P26-SO-07b				BLT-P26-SO-08a				BLT-P26-SO-08b			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (901.1																																
Actinium-228	0.77	+/-	0.19		0.81	+/-	0.18		1.01	+/-	0.23		1.02	+/-	0.23		0.67	+/-	0.19		0.71	+/-	0.19		0.77	+/-	0.17		0.78	+/-	0.18	
Americium-241	0.01	+/-	0.12	U	0.03	+/-	0.12	U	0.07	+/-	0.17	U	0.00	+/-	0.05	U	0.00	+/-	0.08	UI	0.01	+/-	0.09	U	-0.05	+/-	0.15	U	-0.14	+/-	0.12	U
Antimony-124	0.03	+/-	0.05	U	-0.01	+/-	0.05	U	-0.01	+/-	0.05	U	-0.11	+/-	0.08	U	0.03	+/-	0.05	U	0.01	+/-	0.04	U	0.00	+/-	0.05	U	0.00	+/-	0.05	U
Antimony-125	0.02	+/-	0.05	U	-0.02	+/-	0.05	U	0.04	+/-	0.06	U	-0.04	+/-	0.08	U	0.04	+/-	0.06	U	-0.03	+/-	0.06	U	-0.02	+/-	0.05	U	-0.01	+/-	0.06	U
Barium-133	0.00	+/-	0.03	U	0.00	+/-	0.03	U	-0.01	+/-	0.03	U	-0.01	+/-	0.04	U	-0.01	+/-	0.03	U	0.00	+/-	0.03	U	-0.01	+/-	0.02	U	0.00	+/-	0.03	U
Barium-140	0.02	+/-	0.15	U	-0.06	+/-	0.16	U	-0.09	+/-	0.20	U	0.00	+/-	0.42	UI	0.00	+/-	0.15	U	-0.02	+/-	0.16	U	0.11	+/-	0.16	U	0.03	+/-	0.16	U
Beryllium-7	0.13	+/-	0.19	U	0.11	+/-	0.19	U	-0.10	+/-	0.20	U	0.26	+/-	0.36	U	-0.10	+/-	0.18	U	0.19	+/-	0.19	U	0.04	+/-	0.19	U	0.17	+/-	0.20	U
Bismuth-212	0.42	+/-	0.38		0.51	+/-	0.27		0.54	+/-	0.43		0.69	+/-	0.45		0.59	+/-	0.24		0.72	+/-	0.26		0.55	+/-	0.31		0.54	+/-	0.32	
Bismuth-214	0.48	+/-	0.12		0.44	+/-	0.10		0.65	+/-	0.11		0.82	+/-	0.13		0.51	+/-	0.09		0.56	+/-	0.10		0.57	+/-	0.11		0.47	+/-	0.10	
Cerium-139	0.02	+/-	0.04	U	0.02	+/-	0.02	U	-0.01	+/-	0.02	U	0.00	+/-	0.02	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U	-0.01	+/-	0.02	U	0.01	+/-	0.02	U
Cerium-141	0.04	+/-	0.07	U	0.06	+/-	0.06	U	0.02	+/-	0.05	U	0.01	+/-	0.05	U	0.00	+/-	0.05	UI	-0.02	+/-	0.04	U	0.03	+/-	0.04	U	0.01	+/-	0.04	U
Cerium-144	0.06	+/-	0.12	U	-0.14	+/-	0.13	U	-0.05	+/-	0.13	U	0.09	+/-	0.14	U	0.07	+/-	0.13	U	0.04	+/-	0.14	U	0.00	+/-	0.11	U	0.17	+/-	0.13	U
Cesium-134	0.03	+/-	0.06	U	0.01	+/-	0.02	U	0.00	+/-	0.05	UI	0.00	+/-	0.07	UI	0.00	+/-	0.03	UI	0.00	+/-	0.03	UI	0.00	+/-	0.04	UI	0.02	+/-	0.03	U
Cesium-136	-0.02	+/-	0.07	U	0.00	+/-	0.06	U	-0.04	+/-	0.06	U	-0.04	+/-	0.11	U	0.06	+/-	0.06	U	0.01	+/-	0.06	U	0.00	+/-	0.05	U	-0.04	+/-	0.06	U
Cesium-137	0.01	+/-	0.02	U	0.01	+/-	0.02	U	0.01	+/-	0.05	U	0.09	+/-	0.05		-0.01	+/-	0.02	U	0.02	+/-	0.03	U	0.01	+/-	0.02	U	0.00	+/-	0.02	U
Chromium-51	-0.20	+/-	0.23	U	0.10	+/-	0.22	U	0.01	+/-	0.26	U	0.04	+/-	0.28	U	-0.04	+/-	0.23	U	0.19	+/-	0.24	U	0.06	+/-	0.20	U	-0.01	+/-	0.23	U
Cobalt-56	0.00	+/-	0.02	U	-0.01	+/-	0.02	U	0.01	+/-	0.03	U	-0.03	+/-	0.03	U	0.00	+/-	0.02	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U	0.02	+/-	0.02	U
Cobalt-57	0.00	+/-	0.01	U	0.01	+/-	0.02	U	-0.01	+/-	0.02	U	-0.01	+/-	0.02	U	0.00	+/-	0.01	U	0.00	+/-	0.02	U	0.00	+/-	0.01	U	0.00	+/-	0.01	U
Result that exceeds N	-0.01	+/-	0.02	U	0.00	+/-	0.02	U	0.00	+/-	0.03	U	0.00	+/-	0.04	U	0.01	+/-	0.02	U	-0.02	+/-	0.02	U	-0.02	+/-	0.02	U	0.01	+/-	0.02	U
Cobalt-60	0.00	+/-	0.02	U	0.01	+/-	0.02	U	0.01	+/-	0.02	U	-0.01	+/-	0.04	U	0.00	+/-	0.02	U	0.02	+/-	0.02	U	-0.02	+/-	0.02	U	-0.01	+/-	0.02	U
Europium-152	0.01	+/-	0.05	U	-0.02	+/-	0.08	U	-0.01	+/-	0.07	U	0.02	+/-	0.08	U	0.01	+/-	0.08	U	0.03	+/-	0.08	U	-0.03	+/-	0.05	U	-0.02	+/-	0.06	U
Europium-154	0.02	+/-	0.06	U	-0.01	+/-	0.07	U	0.00	+/-	0.07	U	0.02	+/-	0.12	U	-0.02	+/-	0.06	U	-0.01	+/-	0.07	U	-0.04	+/-	0.06	U	0.01	+/-	0.06	U
Europium-155	0.01	+/-	0.06	U	0.03	+/-	0.06	U	0.03	+/-	0.08	U	0.06	+/-	0.07	U	-0.02	+/-	0.06	U	0.04	+/-	0.07	U	0.03	+/-	0.06	U	0.10	+/-	0.10	U
Iridium-192	0.03	+/-	0.02	U	0.00	+/-	0.02	U	0.02	+/-	0.02	U	-0.02	+/-	0.03	U	0.00	+/-	0.02	U	-0.01	+/-	0.02	U	-0.02	+/-	0.02	U	-0.01	+/-	0.02	U
Iron-59	0.02	+/-	0.04	U	-0.01	+/-	0.05	U	-0.03	+/-	0.06	U	0.07	+/-	0.11	U	0.00	+/-	0.05	U	0.00	+/-	0.05	U	-0.02	+/-	0.05	U	0.00	+/-	0.05	U
Lead-210	5.05	+/-	5.81	U	0.63	+/-	2.36	U	0.10	+/-	9.29	U	0.69	+/-	0.46		0.72	+/-	1.81	U	0.63	+/-	2.28	U	-1.43	+/-	4.10	U	-0.66	+/-	2.93	U
Lead-212	0.72	+/-	0.09		0.79	+/-	0.09		0.85	+/-	0.13		1.02	+/-	0.09		0.68	+/-	0.08		0.62	+/-	0.09		0.63	+/-	0.09		0.70	+/-	0.09	
Lead-214	0.60	+/-	0.10		0.62	+/-	0.09		0.63	+/-	0.12		0.90	+/-	0.14		0.68	+/-	0.10		0.54	+/-	0.11		0.70	+/-	0.11		0.52	+/-	0.10	
Manganese-54	0.02	+/-	0.02	U	0.02	+/-	0.02	U	0.01	+/-	0.03	U	0.03	+/-	0.04	U	0.01	+/-	0.02	U	-0.01	+/-	0.02	U	0.01	+/-	0.02	U	-0.01	+/-	0.02	U
Mercury-203	0.00	+/-	0.06	UI	0.01	+/-	0.03	U	0.02	+/-	0.05	U	0.05	+/-	0.04	U	0.02	+/-	0.03	U	0.01	+/-	0.04	U	0.00	+/-	0.02	U	0.02	+/-	0.02	U
Neodymium-147	-0.09	+/-	0.34	U	0.04	+/-	0.35	U	-0.05	+/-	0.41	U	-0.14	+/-	0.49	U	-0.03	+/-	0.37	U	0.24	+/-	0.38	U	-0.13	+/-	0.30	U	0.25	+/-	0.36	U
Neptunium-239	0.01	+/-	0.11	U	0.01	+/-	0.12	U	-0.05	+/-	0.13	U	0.01	+/-	0.13	U	0.00	+/-	0.11	UI	-0.03	+/-	0.13	U	0.03	+/-	0.09	U	0.01	+/-	0.11	U
Niobium-94	-0.02	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.02	U	-0.01	+/-	0.03	U	0.00	+/-	0.02	U	-0.01	+/-	0.02	U	0.02	+/-	0.02	U	0.00	+/-	0.02	U
Niobium-95	0.01	+/-	0.03	U	0.01	+/-	0.03	U	0.01	+/-	0.03	U	0.01	+/-	0.06	U	0.02	+/-	0.03	U	0.00	+/-	0.04	UI	0.02	+/-	0.03	U	-0.02	+/-	0.03	U
Potassium-40	3.22	+/-	0.69		3.58	+/-	0.72		5.16	+/-	0.87		7.95	+/-	1.03		2.24	+/-	0.68		2.76	+/-	0.52		2.92	+/-	0.58		2.79	+/-	0.60	
Promethium-144	0.01	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.02	U	-0.01	+/-	0.03	U	-0.01	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U
Promethium-146	-0.01	+/-	0.02	U	0.01	+/-	0.03	U	-0.01	+/-	0.03	U	0.02	+/-	0.04	U	0.00	+/-	0.02	U	0.03	+/-	0.03	U	-0.01	+/-	0.02	U	0.00	+/-	0.03	U
Radium-228	0.77	+/-	0.19		0.81	+/-	0.18		1.01	+/-	0.23		1.02	+/-	0.23		0.67	+/-	0.19		0.71	+/-	0.19		0.77	+/-	0.17		0.78	+/-	0.18	
Ruthenium-106	0.05	+/-	0.19	U	-0.03	+/-	0.18	U	-0.08	+/-	0.22	U	0.24	+/-	0.34	U	-0.05	+/-	0.19	U	-0.07	+/-	0.21	U	0.08	+/-	0.17	U	-0.07	+/-	0.17	U
Silver-110m	-0.01	+/-	0.02	U	-0.01	+/-	0.02	U	-0.04	+/-	0.03	U	0.03	+/-	0.03	U	0.00	+/-	0.02	U	-0.02	+/-	0.03	U	-0.01	+/-	0.02	U	0.00	+/-	0.02	U
Sodium-22	0.01	+/-	0.02	U	0.00	+/-	0.03	U	0.00	+/-	0.03	U	0.01	+/-	0.04	U	-0.01	+/-	0.02	U	0.00	+/-	0.02	U	-0.01	+/-	0.02	U	0.00	+/-	0.02	U
Thallium-208	0.27	+/-	0.05		0.23	+/-	0.05		0.31	+/-	0.06		0.33	+/-	0.07		0.23	+/-	0.05		0.21	+/-	0.04		0.24	+/-	0.05		0.25	+/-	0.05	
Thorium-230	0.48	+/-	0.12		0.44	+/-	0.10		0.65	+/-	0.11		0.82	+/-	0.13		0.51	+/-	0.09		0.56	+/-	0.10		0.57	+/-	0.11		0.47	+/-	0.10	
Thorium-234	0.95	+/-	1.89	U	1.66	+/-	1.24		1.64	+/-	1.84	U	0.73	+/-	0.73	U	0.20	+/-	0.93	U	0.54	+/-	0.82	U	1.29	+/-	1.28	U	0.47	+/-	0.96	U
Tin-113	-0.01	+/-	0.03	U	0.00	+/-	0.03	U	-0.01	+/-	0.03	U	-0.01	+/-	0.04	U	-0.02	+/-	0.03	U	0.02	+/-	0.03	U	-0.01	+/-	0.02	U	0.00	+/-	0.03	U
Uranium-235	0.17	+/-	0.25	U	0.24	+/-	0.21	U	0.16	+/-	0.22	U	0.02	+/-	0.21	U	-0.15	+/-	0.16	U	0.06	+/-	0.14	U	0.02	+/-	0.12	U	0.11	+/-	0.12	U

Table 38. Pit 26 Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																																
	BLT-P26-SO-05a				BLT-P26-SO-05b				BLT-P26-SO-06a				BLT-P26-SO-06b				BLT-P26-SO-07a				BLT-P26-SO-07b				BLT-P26-SO-08a				BLT-P26-SO-08b			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Uranium-238	0.95	+/-	1.89	U	1.66	+/-	1.24		1.64	+/-	1.84	U	0.73	+/-	0.73	U	0.20	+/-	0.93	U	0.54	+/-	0.82	U	1.29	+/-	1.28	U	0.47	+/-	0.96	U
Yttrium-88	0.02	+/-	0.02	U	0.00	+/-	0.02	U	-0.01	+/-	0.03	U	0.00	+/-	0.04	U	-0.01	+/-	0.02	U	0.01	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.03	U
Zinc-65	0.00	+/-	0.05	U	0.03	+/-	0.06	U	-0.08	+/-	0.07	U	0.03	+/-	0.07	U	0.01	+/-	0.05	U	0.01	+/-	0.05	U	-0.09	+/-	0.05	U	0.03	+/-	0.06	U
Zirconium-95	0.03	+/-	0.04	U	0.04	+/-	0.04	U	0.00	+/-	0.04	U	0.01	+/-	0.06	U	-0.02	+/-	0.04	U	-0.03	+/-	0.05	U	-0.01	+/-	0.04	U	-0.01	+/-	0.05	U
C-14 (EERF C-01 mod)	1.63	+/-	0.77		1.05	+/-	0.76	U	1.24	+/-	0.81	U	-0.15	+/-	0.77	U	-0.40	+/-	0.70	U	0.27	+/-	0.76	U	-0.28	+/-	0.71	U	-0.09	+/-	0.64	U
Cl-36 (GL-Rad-A033)	-0.06	+/-	0.04	U	-0.05	+/-	0.05	U	-0.07	+/-	0.03	U	-0.01	+/-	0.06	U	-0.08	+/-	0.04	U	-0.04	+/-	0.05	U	0.02	+/-	0.04	U	-0.08	+/-	0.05	U
Ni-63 (RESL Ni-1 mod)	-2.17	+/-	1.98	U	-0.93	+/-	1.78	U	-2.48	+/-	2.16	U	-0.17	+/-	1.99	U	-0.30	+/-	1.39	U	-0.06	+/-	1.38	U	-0.81	+/-	1.56	U	-1.51	+/-	1.65	U
Sr-90 (905.0 mod)	0.00	+/-	0.10	U	0.28	+/-	0.17	U	0.04	+/-	0.09	U	0.07	+/-	0.14	U	0.13	+/-	0.12	U	0.16	+/-	0.12	U	-0.02	+/-	0.10	U	0.14	+/-	0.11	U
H-3 (906.0 mod)	1.78	+/-	0.62		1.34	+/-	0.61		0.73	+/-	0.59	U	3.31	+/-	0.66		1.00	+/-	0.59		1.00	+/-	0.59		0.63	+/-	0.53	U	-0.39	+/-	0.54	U

Table 39. Pit 26 Groundwater - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	Sample Number					
		BLT-P26-SO-06k		BLT-P26-TW-01f		BLT-P26-TW-01u	
		Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/l)							
1,2,4-Trimethylbenzene	NA	0.392	J	0.355	J	0.25	U
Acetone	5475	1.25	U	1.25	U	1.25	U
Benzene	0.34	**0.478**	J	0.3	U	0.3	U
Chloroform	0.15	0.25	U	**10**		**10.6**	
Ethyl ether	1216.67	1.67		1.74		1.35	
Ethylbenzene	1339.87	0.284	J	0.25	U	0.25	U
m,p-Xylenes	NA	1.1	J	0.432	J	0.635	J
o-Xylene	NA	0.344	J	0.25	U	0.25	U
Toluene	2271.11	1.59		1.33		1.95	
Trichloroethylene	0.026	0.25	U	0.25	U	**0.487**	J
Xylenes (total)	212.6	1.45		0.432	J	0.635	J
RCRA SVOC (ug/l)							
bis(2-Ethylhexyl)phthalate	4.78			2.04	U	2.37	JP
Pyrene	182.5			69		85	
RCRA Metals (ug/l)							
Aluminum	NA			68	U	869	
Barium	7300			38.4		40.7	
Calcium	NA			1230		1320	
Chromium	109.5			1	U	1.64	J
Cobalt	NA			3.79	J	3.89	J
Iron	10950			294		1020	
Magnesium	NA			2540		2590	
Manganese	730			52.5		55.3	
Nickel	730			2.68	J	2.01	J
Potassium	NA			1690		1760	
Sodium	NA			3110		3210	
Vanadium	36.5			1	U	3.25	J
Zinc	10950			5.34	J	6.56	J
RCRA Pesticide (ug/l)							
TCL PCB (ug/l)							
Herbicides (ug/l)							

Table 40. Pit 26 Groundwater - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	MCL	Sample Number (Result unit is pCi/L)					
		BLT-P26-TW-01f			BLT-P26-TW-01u		
		Result	Uncertainty	Qual	Result	Uncertainty	Qual
Carbon-14	2000	46.7	19.8		71.9	18.8	
Tritium	20,000	1030	356		1190	372	

Table 41. Pit 26 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number									
	BLT-P26-SO-06k		BLT-P26-SO-09a		BLT-P26-SO-09b		BLT-P26-TW-01f		BLT-P26-TW-01u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/l)										
1,1,1,2-Tetrachloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,1-Trichloroethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,1,2,2-Tetrachloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1,2-Trichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,1-Dichloroethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,1-Dichloroethylene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,1-Dichloropropene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2,3-Trichlorobenzene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2,3-Trichloropropane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2,4-Trichlorobenzene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2,4-Trimethylbenzene	0.392	J	0.25	U	0.25	U	0.355	J	0.25	U
1,2-Dibromo-3-chloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichloroethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichloroethylene (total)	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
1,2-Dichloropropane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,3,5-Trimethylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,3-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,3-Dichloropropane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
1,4-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
2,2-Dichloropropane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
2-Butanone	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
2-Chloro-1,3-butadiene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
2-Chloroethylvinyl ether	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
2-Chlorotoluene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
2-Hexanone	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
2-Nitropropane	1	U	1	U	1	U	1	U	1	U
4-Chlorotoluene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
4-Isopropyltoluene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
4-Methyl-2-pentanone	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
Acetone	1.25	U	4.87	J	6.8		1.25	U	1.25	U
Acetonitrile	6.25	U	6.25	U	6.25	U	6.25	U	6.25	U
Acrolein	3	U	3	U	3	U	3	U	3	U
Acrylonitrile	1	U	1	U	1	U	1	U	1	U
Allyl chloride	3.7	U	3.7	U	3.7	U	3.7	U	3.7	U
Benzene	0.478	J	0.3	U	0.3	U	0.3	U	0.3	U
Benzyl chloride	1	U	1	U	1	U	1	U	1	U
bis(2-Chloroisopropyl)ether	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Bromobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromochloromethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Bromodichloromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromoform	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
Carbon tetrachloride	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Chlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.25	U	0.25	U	0.25	U	10		10.6	
Chloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethylene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
cis-1,3-Dichloropropylene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U

Table 41. Pit 26 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number									
	BLT-P26-SO-06k		BLT-P26-SO-09a		BLT-P26-SO-09b		BLT-P26-TW-01f		BLT-P26-TW-01u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
cis-1,4-Dichloro-2-butene	1	U	1	U	1	U	1	U	1	U
Cyclohexane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Cyclohexanone	15	U	15	U	15	U	15	U	15	U
Dibromochloromethane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Dibromomethane	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethyl ether	1.67		0.3	U	0.3	U	1.74		1.35	
Ethyl methacrylate	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	0.284	J	0.25	U	0.25	U	0.25	U	0.25	U
Hexachlorobutadiene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Iodomethane	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
Isobutyl alcohol	12.5	U	12.5	U	12.5	U	12.5	U	12.5	U
Isopropylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
m,p-Xylenes	1.1	J	0.463	BJ	0.446	BJ	0.432	J	0.635	J
Methacrylonitrile	1	U	1	U	1	U	1	U	1	U
Methyl acetate	1.25	U	1.25	U	1.25	U	1.25	U	1.25	U
Methyl methacrylate	1	U	1	U	1	U	1	U	1	U
Methylcyclohexane	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Methylene chloride	2	U	2	U	2	U	2	U	2	U
Naphthalene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
n-Butyl alcohol	13	U	13	U	13	U	13	U	13	U
n-Butylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
n-Propylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
o-Xylene	0.344	J	0.25	U	0.25	U	0.25	U	0.25	U
Pentachloroethane	1	U	1	U	1	U	1	U	1	U
Propionitrile	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
sec-Butylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Styrene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
tert-Butyl methyl ether	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
tert-Butylbenzene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Tetrachloroethylene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
Toluene	1.59		0.25	U	0.25	U	1.33		1.95	
trans-1,2-Dichloroethylene	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
trans-1,3-Dichloropropylene	0.25	U	0.25	U	0.25	U	0.25	U	0.25	U
trans-1,4-Dichloro-2-butene	1	U	1	U	1	U	1	U	1	U
Trichloroethylene	0.25	U	0.25	U	0.25	U	0.25	U	0.487	J
Trichlorofluoromethane	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U
Trichlorotrifluoroethane	1	U	1	U	1	U	1	U	1	U
Vinyl acetate	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylenes (total)	1.45		0.463	BJ	0.446	BJ	0.432	J	0.635	J
RCRA SVOC (ug/l)										
1,1'-Biphenyl							3.06	U	2.97	Uh
1,2,4-Trichlorobenzene							2.04	U	1.98	Uh
1,2-Dichlorobenzene							2.04	U	1.98	Uh
1,3-Dichlorobenzene							2.04	U	1.98	Uh
1,4-Dichlorobenzene							2.04	U	1.98	Uh
2,4,5-Trichlorophenol							1.02	U	0.99	Uh
2,4,6-Trichlorophenol							2.04	U	1.98	Uh
2,4-Dichlorophenol							2.04	U	1.98	Uh
2,4-Dimethylphenol							2.04	U	1.98	Uh
2,4-Dinitrophenol							10.2	U	9.9	Uh
2,4-Dinitrotoluene							2.04	U	1.98	Uh

Table 41. Pit 26 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number									
	BLT-P26-SO-06k		BLT-P26-SO-09a		BLT-P26-SO-09b		BLT-P26-TW-01f		BLT-P26-TW-01u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
2,6-Dinitrotoluene							2.04	U	1.98	Uh
2-Chloronaphthalene							0.357	U	0.347	Uh
2-Chlorophenol							2.04	U	1.98	Uh
2-Methyl-4,6-dinitrophenol							3.06	U	2.97	Uh
2-Methylnaphthalene							0.306	U	0.297	Uh
2-Nitrophenol							2.04	U	1.98	Uh
3,3'-Dichlorobenzidine							1.02	U	0.99	Uh
4-Bromophenylphenylether							2.04	U	1.98	Uh
4-Chloro-3-methylphenol							2.04	U	1.98	Uh
4-Chloroaniline							2.04	U	1.98	Uh
4-Chlorophenylphenylether							2.04	U	1.98	Uh
4-Nitrophenol							2.04	U	1.98	Uh
Acenaphthene							0.316	U	0.307	Uh
Acenaphthylene							0.204	U	0.198	Uh
alpha-Terpineol							3.06	U	2.97	Uh
Anthracene							0.204	U	0.198	Uh
Atrazine							2.04	U	1.98	Uh
Benzaldehyde							3.06	U	2.97	Uh
Benzo(a)anthracene							0.204	U	0.198	Uh
Benzo(a)pyrene							0.204	U	0.198	Uh
Benzo(b)fluoranthene							0.204	U	0.198	Uh
Benzo(ghi)perylene							0.204	U	0.198	Uh
Benzo(k)fluoranthene							0.204	U	0.198	Uh
bis(2-Chloroethoxy)methane							3.06	U	2.97	Uh
bis(2-Chloroethyl) ether							2.04	U	1.98	Uh
bis(2-Chloroisopropyl)ether							2.04	U	1.98	Uh
bis(2-Ethylhexyl)phthalate							2.04	U	2.37	Jh
Butylbenzylphthalate							2.04	U	1.98	Uh
Carbazole							0.204	U	0.198	Uh
Chrysene							0.204	U	0.198	Uh
Dibenzo(a,h)anthracene							0.204	U	0.198	Uh
Dibenzofuran							2.04	U	1.98	Uh
Diethylphthalate							2.04	U	1.98	Uh
Dimethylphthalate							2.04	U	1.98	Uh
Di-n-butylphthalate							2.04	U	1.98	Uh
Di-n-octylphthalate							3.06	U	2.97	Uh
Diphenylamine							3.06	U	2.97	Uh
Fluoranthene							0.204	U	0.198	Uh
Fluorene							0.204	U	0.198	Uh
Hexachlorobenzene							2.04	U	1.98	Uh
Hexachlorobutadiene							2.04	U	1.98	Uh
Hexachlorocyclopentadiene							2.04	U	1.98	Uh
Hexachloroethane							2.04	U	1.98	Uh
Indeno(1,2,3-cd)pyrene							0.204	U	0.198	Uh
Isophorone							2.04	U	1.98	Uh
m,p-Cresols							3.06	U	2.97	Uh
m-Nitroaniline							2.04	U	1.98	Uh
Naphthalene							0.306	U	0.297	Uh
Nitrobenzene							3.06	U	2.97	Uh
N-Nitrosodipropylamine							2.04	U	1.98	Uh
o-Cresol							2.04	U	1.98	Uh
o-Nitroaniline							2.04	U	1.98	Uh
Pentachlorophenol							2.04	U	1.98	Uh

Table 41. Pit 26 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number									
	BLT-P26-SO-06k		BLT-P26-SO-09a		BLT-P26-SO-09b		BLT-P26-TW-01f		BLT-P26-TW-01u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Phenanthrene							0.204	U	0.198	Uh
Phenol							1.02	U	0.99	Uh
p-Nitroaniline							3.06	U	2.97	Uh
Pyrene							0.306	U	0.297	Uh
RCRA Metals (ug/l)										
Aluminum							68	U	869	
Antimony							4	U	4	U
Arsenic							6	U	6	U
Barium							38.4		40.7	
Beryllium							1	U	1	U
Cadmium							1	U	1	U
Calcium							1230		1320	
Chromium							1	U	1.64	J
Cobalt							3.79	J	3.89	J
Copper							3	U	3	U
Iron							294		1020	
Lead							2.5	U	2.5	U
Magnesium							2540		2590	
Manganese							52.5		55.3	
Mercury							0.06	U	0.06	U
Nickel							2.68	J	2.01	J
Potassium							1690		1760	
Selenium							6	U	6	U
Silver							1	U	1	U
Sodium							3110		3210	
Thallium							5	U	5	U
Vanadium							1	U	3.25	J
Zinc							5.34	J	6.56	J
RCRA Pesticide (ug/l)										
4,4'-DDD							0.005	U	0.005	Uh
4,4'-DDE							0.005	U	0.005	Uh
4,4'-DDT							0.010	U	0.010	Uh
Aldrin							0.005	U	0.005	Uh
alpha-BHC							0.005	U	0.005	Uh
beta-BHC							0.008	U	0.008	Uh
Chlordane (tech.)							0.074	U	0.074	Uh
delta-BHC							0.005	U	0.005	Uh
Dieldrin							0.005	U	0.005	Uh
Endosulfan I							0.005	U	0.005	Uh
Endosulfan II							0.005	U	0.005	Uh
Endosulfan sulfate							0.005	U	0.005	Uh
Endrin							0.005	U	0.005	Uh
Endrin aldehyde							0.005	U	0.005	Uh
Endrin ketone							0.012	U	0.012	Uh
gamma-BHC (Lindane)							0.005	U	0.005	Uh
Heptachlor							0.006	U	0.006	Uh
Heptachlor epoxide							0.005	U	0.005	Uh
Methoxychlor							0.049	U	0.048	Uh
Toxaphene							0.146	U	0.144	Uh
TCL PCB (ug/l)										
Aroclor-1016							0.03	U	0.0333	U
Aroclor-1221							0.03	U	0.0333	U
Aroclor-1232							0.03	U	0.0333	U

Table 41. Pit 26 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number									
	BLT-P26-SO-06k		BLT-P26-SO-09a		BLT-P26-SO-09b		BLT-P26-TW-01f		BLT-P26-TW-01u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Aroclor-1242							0.03	U	0.0333	U
Aroclor-1248							0.03	U	0.0333	U
Aroclor-1254							0.03	U	0.0333	U
Aroclor-1260							0.03	U	0.0333	U
Herbicides (ug/l)										
2,4,5-T							0.08	U	0.0806	U
2,4,5-TP							0.08	U	0.0806	U
2,4-D							0.08	U	0.0806	U
TOC (mg/l)										
Total Organic Carbon #1							0.74	J	0.748	J
Total Organic Carbon #2							0.75	J	0.826	J
Total Organic Carbon #3							0.73	J	0.768	J
Total Organic Carbon #4							0.74	J	0.747	J
Total Organic Carbon Average							0.74	J	0.772	J
Cyanide (ug/l)										
Cyanide, Amenable to CL							1.5	U	1.5	U
Cyanide, Total							1.5	U	1.5	U
pH							4.97	H	5.53	H

Table 42. Pit 26 Groundwater - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All Result unit is pCi/L)							
	BLT-P26-TW-01f				BLT-P26-TW-01u			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (901.1mod/HASL 300)								
Actinium-228	6.06	+/-	7	U	4.63	+/-	13	U
Americium-241	4.99	+/-	9.91	U	1.45	+/-	3.92	U
Antimony-124	-3.27	+/-	5.07	U	0.996	+/-	6.52	U
Antimony-125	-0.818	+/-	5.05	U	4.45	+/-	5.7	U
Barium-133	-0.223	+/-	2.85	U	-0.963	+/-	2.97	U
Barium-140	5.65	+/-	13.9	U	-1.33	+/-	12.6	U
Beryllium-7	3.54	+/-	18	U	11.7	+/-	19.5	U
Bismuth-212	-16.6	+/-	17.9	U	6.27	+/-	19	U
Bismuth-214	0.969	+/-	5.72	U	9.56	+/-	8.08	U
Cerium-139	0.959	+/-	1.88	U	-1.32	+/-	1.69	U
Cerium-141	-3.05	+/-	5.06	U	-1.76	+/-	3.38	U
Cerium-144	5.27	+/-	14.6	U	11.2	+/-	11.3	U
Cesium-134	0.687	+/-	1.99	U	-1.03	+/-	2.44	U
Cesium-136	-1.1	+/-	5.09	U	2.34	+/-	5.9	U
Cesium-137	-0.352	+/-	1.97	U	3.54	+/-	3.68	U
Chromium-51	-27.5	+/-	20.9	U	-6.76	+/-	21.5	U
Cobalt-56	-0.503	+/-	2.05	U	-1.13	+/-	2.66	U
Cobalt-57	-0.562	+/-	1.73	U	-0.308	+/-	1.6	U
Cobalt-58	-2.03	+/-	2.03	U	1.56	+/-	2.39	U
Cobalt-60	-0.231	+/-	2.18	U	1.38	+/-	2.38	U
Europium-152	-1.11	+/-	5.78	U	3.81	+/-	5.54	U
Europium-154	5.42	+/-	5.15	U	0.17	+/-	6.74	U
Europium-155	2.22	+/-	7.08	U	0.323	+/-	6.16	U
Iridium-192	0.675	+/-	2.09	U	0.146	+/-	2.01	U
Iron-59	0.918	+/-	3.84	U	2.56	+/-	4.87	U
Lead-210	30	+/-	278	U	24.8	+/-	67.3	U
Lead-212	1.77	+/-	5.79	U	1.91	+/-	4.21	U
Lead-214	0	+/-	6.18	UI	0	+/-	8.17	UI
Manganese-54	0.529	+/-	1.95	U	-1.81	+/-	2.34	U
Mercury-203	0	+/-	2.86	UI	0.196	+/-	2.11	U
Neodymium-147	-21.6	+/-	26.1	U	35.3	+/-	28.7	U
Neptunium-239	1.34	+/-	13.1	U	-4.39	+/-	11.2	U
Niobium-94	0.087	+/-	2.1	U	1.34	+/-	1.84	U
Niobium-95	0.306	+/-	2.59	U	1.13	+/-	2.69	U
Potassium-40	-5.34	+/-	28.7	U	55.4	+/-	31.1	U
Promethium-144	-0.286	+/-	1.77	U	-0.302	+/-	2.04	U
Promethium-146	-0.63	+/-	2.41	U	0.592	+/-	2.59	U
Radium-228	6.06	+/-	7	U	4.63	+/-	13	U
Ruthenium-106	-12.7	+/-	22	U	0.058	+/-	20	U
Silver-110m	1.65	+/-	1.84	U	-0.676	+/-	2.27	U
Sodium-22	1.93	+/-	1.84	U	0.046	+/-	2.41	U
Thallium-208	-2.52	+/-	2.99	U	4.3	+/-	3.58	U
Thorium-230	0.969	+/-	5.72	U	0	+/-	8.08	UI
Thorium-234	0	+/-	136	UI	0	+/-	45.2	UI
Tin-113	-1.25	+/-	2.69	U	-0.132	+/-	2.57	U
Uranium-235	-2.91	+/-	17.1	U	9.46	+/-	11.8	U

Table 42. Pit 26 Groundwater - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All Result unit is pCi/L)							
	BLT-P26-TW-01f				BLT-P26-TW-01u			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Uranium-238	0	+/-	136	UI	0	+/-	45.2	UI
Yttrium-88	-1.62	+/-	2.42	U	0.268	+/-	2.73	U
Zinc-65	3.44	+/-	4.67	U	-4.16	+/-	5.15	U
Zirconium-95	2.49	+/-	4.04	U	2.17	+/-	4.56	U
C-14 (EERF C-01 mod)	46.7	+/-	19.8		71.9	+/-	18.8	
Cl-36 (GL-Rad-A033)	-0.513	+/-	6.97	U	9.05	+/-	8.04	U
Ni-63 (RESL Ni-1 mod)	0.276	+/-	17	U	-14.7	+/-	17.6	U
Sr-90 (905.0 mod)	0.329	+/-	0.585	U	-0.246	+/-	0.612	U
H-3 (906.0 mod)	1030	+/-	356		1190	+/-	372	

Table 43. Pit 26 Waste Liquid - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	TCLP	UTS	BLT-P26-WS-01		BLT-P26-WS-02		BLT-P26-WS-03	
			Result	Qual	Result	Qual	Result	Qual
TCLP VOC (mg/l)								
Acetone	NA	0.28	0.625	U	0.0225	J	0.0322	J
Benzene	0.5	0.14	0.216		0.003	U	0.003	U
Carbon disulfide	NA	3.8	0.625	U	0.0138	J	0.0125	U
Carbon tetrachloride	NA	0.057	***0.125***		0.0025	U	0.0025	U
Chloroform	6	0.046	***4.09***		0.0025	U	0.00776	J
Ethylbenzene	NA	0.057	***1.35***		0.0025	U	0.00914	J
Toluene	NA	0.08	***25.7***		0.00795	J	0.0104	
Xylenes (total)	NA	0.32	***9.76***		0.00748	J	0.0969	
TCLP SVOC (mg/l)								
o-Cresol	NA	0.11	0.192		0.01	U	0.01	U
TCLP Metals (mg/l)								
Barium	100	1.2	0.0655		0.173		0.0848	
Lead	5	0.69	0.268		0.025	U	0.153	
Mercury	0.2	0.15	0.00998		0.0006	U	0.0006	U
RCRA PCB (ug/kg)								
TCLP Pesticides (mg/l)								
NA = Not Available								
Parameter	**TCLP**	**UTS**	**Sample Number**					
			BLT-P26-WL-01		**BLT-P26-WL-02**		**BLT-P26-WL-03**	
			Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**
TCLP VOC (mg/l)								
2-Butanone	NA		1.25	U	74.7	J	125	U
Acetone	NA	0.28	1.25	U	***2980***		***813***	
Benzene	0.5	0.14	***1.04***		***770***		***486***	
Carbon disulfide	NA	3.8	1.25	U	***96.1***	J	***125***	U
Chloroform	6	0.046	0.25	U	***3280***		***2040***	
Ethylbenzene	NA	0.057	***0.411***	J	***94.6***		***54.6***	U
Toluene	NA	0.08	***4.4***		***2660***		***5700***	
Xylenes (total)	NA	0.32	***1.92***		***582***		***1220***	
1,2,4-Trimethylbenzene	NA		0.4	J	21.4	BJ	60	U
Ethyl ether	NA	0.12	***0.3***	U	***181***		***274***	
m,p-Xylenes	NA	0.32	***1.46***	J	***455***		***989***	
Naphthalene	NA	0.059	0.25	U	***40.1***	J	***145***	

Table 43. Pit 26 Waste Liquid - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	TCLP	UTS	BLT-P26-WS-01		BLT-P26-WS-02		BLT-P26-WS-03	
			Result	Qual	Result	Qual	Result	Qual
TCLP VOC (mg/l)								
o-Xylene	NA	0.32	***0.455***	J	***127***		***232***	
TCLP SVOC (mg/l)								
m,p-Cresols	NA	0.77			***64.1***		***159***	
o-Cresol	NA	0.11			***161***		***220***	
2,4-Dimethylphenol	NA	0.036			***86.9***		***90.5***	
bis(2-Ethylhexyl)phthalate	NA	0.28			***10***	J	***38.5***	J
Naphthalene	NA	0.059			***17.4***		***66***	
Phenol	NA	0.039			***88.1***		***112***	
TCLP Metals (mg/l)								
Barium	100	1.2			***26***	J	***96.6***	
Chromium	5	2.77			***10***	U	***42.2***	J
Mercury	0.2	0.15			0.06	U	0.0857	J
Aluminum	NA				1260	J	34500	
Calcium	NA				4930		4540	
Iron	NA				13300		36500	
Magnesium	NA				3800		4880	
Manganese	NA				438		458	
Nickel	NA	3.98			***10***	U	***17.3***	J
Potassium	NA				2840		4240	
Sodium	NA				25100		12100	
Vanadium	NA				10	U	57.8	
Zinc	NA				34.2	J	70.4	J
RCRA PCB (ug/kg)								
TCLP Pesticides (mg/l)								
Herbicides (ug/L)								
NA = Not Available; bolded/italicized results exceed the Universal Treatment Standard								

Table 44. Pit 26 Waste Solid and Waste Liquid - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)												
	NRC Screening Value[1]	BLT-P26-WS-01		BLT-P26-WS-02		BLT-P26-WS-03		BLT-P26-WL-01		BLT-P26-WL-02		BLT-P26-WL-03	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Gamma Scan (901.1mod/HASL 300)													
Actinium-228	NA	0.55		0.71		0.94							
Bismuth-212	NA	0.10	U	0.51		0.59							
Bismuth-214	NA	0.74		0.39		0.52							
Lead-212	NA	0.54		0.64		1.02							
Lead-214	NA	0.39		0.49		0.60							
Potassium-40	NA	2.90		0.00	UI	5.09							
Radium-228	NA	0.55		0.71		0.94							
Thallium-208	NA	0.17		0.20		0.26							
Thorium-230	1.8	0.74		0.39		0.52							
C-14 (EERF C-01 mod)	12	**223.00**		0.22	U	11.40				**12100**		**5550**	
Cl-36 (GL-Rad-A033)	0.36									**40.3**		**30**	
Ni-63 (RESL Ni-1 mod)	2100	20.40		3.52		12.90				**536**		**530**	
H-3 (906.0 mod)	110	54.50		7.06		32.20		**55200**		**53800**		**45700**	
[1] From NUREG 1757, Appendix B, Table B-2													
NA = Not available for this radionuclide													
Concentration that exceeds NRC screening value was highlighted.													

Table 45. Pit 26 Waste Solid- Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	UTS	Sample Number					
		BLT-P26-WS-01		BLT-P26-WS-02		BLT-P26-WS-03	
		Result	Qual	Result	Qual	Result	Qual
TCLP VOC (mg/l)							
1,1,1-Trichloroethane	0.054	0.15	U	0.003	U	0.003	U
1,1,2,2-Tetrachloroethane	0.057	0.125	U	0.0025	U	0.0025	U
1,1,2-Trichloroethane	0.054	0.125	U	0.0025	U	0.0025	U
1,1-Dichloroethane	0.059	0.15	U	0.003	U	0.003	U
1,1-Dichloroethylene	0.025	0.15	U	0.003	U	0.003	U
1,2-Dichloroethane	0.21	0.125	U	0.0025	U	0.0025	U
1,2-Dichloropropane	0.85	0.125	U	0.0025	U	0.0025	U
1,4-Dichlorobenzene		0.125	U	0.0025	U	0.0025	U
2-Butanone		0.625	U	0.0125	U	0.0125	U
2-Hexanone		0.625	U	0.0125	U	0.0125	U
4-Methyl-2-pentanone		0.625	U	0.0125	U	0.0125	U
Acetone	0.28	0.625	U	0.0225	J	0.0322	J
Benzene	0.14	***0.216***		0.003	U	0.003	U
Bromodichloromethane	0.35	0.125	U	0.0025	U	0.0025	U
Bromoform		0.125	U	0.0025	U	0.0025	U
Bromomethane		0.25	U	0.005	U	0.005	U
Carbon disulfide	3.8	0.625	U	0.0138	J	0.0125	U
Carbon tetrachloride	0.057	***0.125***		0.0025	U	0.0025	U
Chlorobenzene	0.057	0.125	U	0.0025	U	0.0025	U
Chloroethane	0.27	0.25	U	0.005	U	0.005	U
Chloroform	0.046	***4.09***		0.0025	U	0.00776	J
Chloromethane	0.19	0.25	U	0.005	U	0.005	U
cis-1,3-Dichloropropylene	0.036	0.125	U	0.0025	U	0.0025	U
Dibromochloromethane		0.125	U	0.0025	U	0.0025	U
Ethylbenzene	0.057	***1.35***		0.0025	U	0.00914	J
Methylene chloride	0.089	1	U	0.02	U	0.02	U
Styrene		0.125	U	0.0025	U	0.0025	U
Tetrachloroethylene	0.056	0.125	U	0.0025	U	0.0025	U
Toluene	0.08	***25.7***		0.00795	J	0.0104	
trans-1,3-Dichloropropylene	0.036	0.125	U	0.0025	U	0.0025	U
Trichloroethylene	0.054	0.125	U	0.0025	U	0.0025	U
Vinyl acetate		0.75	U	0.015	U	0.015	U
Vinyl chloride	0.27	0.25	U	0.005	U	0.005	U
Xylenes (total)	0.32	***9.76***		0.00748	J	0.0969	
TCLP SVOC (mg/l)							
1,4-Dichlorobenzene		0.01	U	0.01	U	0.01	U
2,4,5-Trichlorophenol	0.18	0.005	U	0.005	U	0.005	U
2,4,6-Trichlorophenol	0.035	0.01	U	0.01	U	0.01	U
2,4-Dinitrotoluene	0.32	0.01	U	0.01	U	0.01	U
Hexachlorobenzene	0.055	0.01	U	0.01	U	0.01	U
Hexachlorobutadiene	0.055	0.01	U	0.01	U	0.01	U
Hexachloroethane	0.055	0.01	U	0.01	U	0.01	U
m,p-Cresols	0.77	0.015	U	0.015	U	0.015	U
Nitrobenzene	0.068	0.015	U	0.015	U	0.015	U
o-Cresol	0.11	***0.192***		0.01	U	0.01	U
Pentachlorophenol	0.089	0.01	U	0.01	U	0.01	U
Pyridine	0.014	0.005	U	0.005	U	0.005	U

Table 45. Pit 26 Waste Solid- Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	UTS	Sample Number					
		BLT-P26-WS-01		BLT-P26-WS-02		BLT-P26-WS-03	
		Result	Qual	Result	Qual	Result	Qual
TCLP Metals (mg/l)							
Arsenic	1.4	0.06	U	0.06	U	0.06	U
Barium	1.2	0.0655		0.173		0.0848	
Cadmium	0.69	0.01	U	0.01	U	0.01	U
Chromium	2.77	0.01	U	0.01	U	0.01	U
Lead	0.69	0.268		0.025	U	0.153	
Mercury	0.15	0.00998		0.0006	U	0.0006	U
Selenium		0.06	U	0.06	U	0.06	U
Silver	0.43	0.01	U	0.01	U	0.01	U
RCRA PCB (ug/kg)							
Chlordane (tech.)	0.0033	0.000765	U	0.000765	U	0.000765	U
Endrin	0.0028	0.00005	U	0.00005	U	0.00005	U
gamma-BHC (Lindane)	0.0017	0.00005	U	0.00005	U	0.00005	U
Heptachlor	0.0012	0.000066	U	0.000066	U	0.000066	U
Heptachlor epoxide	0.016	0.00005	U	0.00005	U	0.00005	U
Methoxychlor	0.25	0.0005	U	0.0005	U	0.0005	U
Toxaphene	0.0095	0.0015	U	0.0015	U	0.0015	U
TCLP Pesticides (mg/l)							
Aroclor-1016	0.1	2.81	U	1.27	U	1.27	U
Aroclor-1221	0.1	2.81	U	1.27	U	1.27	U
Aroclor-1232	0.1	2.81	U	1.27	U	1.27	U
Aroclor-1242	0.1	2.81	U	1.27	U	1.27	U
Aroclor-1248	0.1	2.81	U	1.27	U	1.27	U
Aroclor-1254	0.1	2.81	U	1.27	U	1.27	U
Aroclor-1260	0.1	2.81	U	1.27	U	1.27	U

Table 46. Pit 26 Waste Solid- Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)											
	BLT-P26-WS-01				BLT-P26-WS-02				BLT-P26-WS-03			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (901.1mod/HASL 300)												
Actinium-228	0.55	+/-	0.28		0.71	+/-	0.16		0.94	+/-	0.18	
Americium-241	-0.02	+/-	0.23	U	0.02	+/-	0.05	U	-0.16	+/-	0.15	U
Antimony-124	-0.01	+/-	0.11	U	0.02	+/-	0.03	U	0.00	+/-	0.05	U
Antimony-125	0.00	+/-	0.09	U	-0.02	+/-	0.03	U	0.01	+/-	0.06	U
Barium-133	-0.01	+/-	0.05	U	0.00	+/-	0.02	U	0.01	+/-	0.03	U
Barium-140	-0.22	+/-	0.34	U	-0.07	+/-	0.13	U	-0.04	+/-	0.23	U
Beryllium-7	0.32	+/-	0.35	U	-0.04	+/-	0.13	U	-0.02	+/-	0.23	U
Bismuth-212	0.10	+/-	0.49	U	0.51	+/-	0.19		0.59	+/-	0.29	
Bismuth-214	0.74	+/-	0.16		0.39	+/-	0.08		0.52	+/-	0.10	
Cerium-139	-0.01	+/-	0.03	U	-0.01	+/-	0.01	U	0.00	+/-	0.02	U
Cerium-141	0.05	+/-	0.06	U	0.01	+/-	0.03	U	0.00	+/-	0.05	U
Cerium-144	0.05	+/-	0.19	U	-0.02	+/-	0.08	U	0.07	+/-	0.15	U
Cesium-134	0.06	+/-	0.07	U	0.00	+/-	0.03	UI	0.00	+/-	0.03	U
Cesium-136	-0.02	+/-	0.15	U	0.08	+/-	0.06	U	0.01	+/-	0.10	U
Cesium-137	0.05	+/-	0.05	U	0.00	+/-	0.01	U	0.04	+/-	0.03	U
Chromium-51	0.15	+/-	0.45	U	0.01	+/-	0.16	U	0.11	+/-	0.30	U
Cobalt-56	0.01	+/-	0.05	U	0.00	+/-	0.02	U	-0.01	+/-	0.03	U
Cobalt-57	0.01	+/-	0.02	U	0.00	+/-	0.01	U	0.01	+/-	0.02	U
Cobalt-58	0.05	+/-	0.06	U	0.00	+/-	0.01	U	-0.01	+/-	0.03	U
Cobalt-60	0.05	+/-	0.07	U	0.00	+/-	0.02	U	0.02	+/-	0.02	U
Europium-152	-0.03	+/-	0.09	U	0.00	+/-	0.04	U	-0.01	+/-	0.07	U
Europium-154	0.04	+/-	0.12	U	-0.02	+/-	0.05	U	0.00	+/-	0.08	U
Europium-155	-0.02	+/-	0.10	U	0.00	+/-	0.04	UI	0.06	+/-	0.08	U
Iridium-192	-0.02	+/-	0.04	U	0.01	+/-	0.01	U	0.01	+/-	0.03	U
Iron-59	0.01	+/-	0.09	U	0.00	+/-	0.03	U	0.00	+/-	0.06	U
Lead-210	7.14	+/-	8.52	U	0.46	+/-	1.81	U	3.93	+/-	7.54	U
Lead-212	0.54	+/-	0.10		0.64	+/-	0.06		1.02	+/-	0.09	
Lead-214	0.39	+/-	0.15		0.49	+/-	0.07		0.60	+/-	0.13	
Manganese-54	-0.01	+/-	0.05	U	0.01	+/-	0.02	U	0.02	+/-	0.04	U
Mercury-203	-0.01	+/-	0.05	U	0.01	+/-	0.02	U	-0.01	+/-	0.03	U
Neodymium-147	-0.54	+/-	0.75	U	-0.21	+/-	0.28	U	-0.26	+/-	0.53	U
Neptunium-239	-0.03	+/-	0.18	U	0.02	+/-	0.07	U	0.11	+/-	0.18	U
Niobium-94	-0.01	+/-	0.04	U	0.01	+/-	0.01	U	-0.01	+/-	0.03	U
Niobium-95	0.04	+/-	0.09	U	0.02	+/-	0.02	U	0.00	+/-	0.04	U
Potassium-40	2.90	+/-	1.19		0.00	+/-	0.54	UI	5.09	+/-	0.75	
Promethium-144	-0.01	+/-	0.04	U	0.00	+/-	0.01	U	-0.01	+/-	0.03	U
Promethium-146	0.01	+/-	0.04	U	0.01	+/-	0.02	U	-0.01	+/-	0.03	U
Radium-228	0.55	+/-	0.28		0.71	+/-	0.16		0.94	+/-	0.18	
Ruthenium-106	0.04	+/-	0.34	U	-0.11	+/-	0.12	U	0.04	+/-	0.22	U
Silver-110m	0.00	+/-	0.04	U	0.00	+/-	0.01	U	-0.02	+/-	0.02	U
Sodium-22	0.01	+/-	0.04	U	-0.01	+/-	0.02	U	0.00	+/-	0.03	U
Thallium-208	0.17	+/-	0.08		0.20	+/-	0.04		0.26	+/-	0.05	
Thorium-230	0.74	+/-	0.16		0.39	+/-	0.08		0.52	+/-	0.10	
Thorium-234	0.64	+/-	2.58	U	0.20	+/-	0.82	U	1.14	+/-	1.61	U
Tin-113	0.00	+/-	0.04	U	0.00	+/-	0.02	U	0.00	+/-	0.03	U
Uranium-235	0.11	+/-	0.20	U	0.06	+/-	0.08	U	0.12	+/-	0.15	U

Table 46. Pit 26 Waste Solid- Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)											
	BLT-P26-WS-01				BLT-P26-WS-02				BLT-P26-WS-03			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Uranium-238	0.64	+/-	2.58	U	0.20	+/-	0.82	U	1.14	+/-	1.61	U
Yttrium-88	-0.03	+/-	0.05	U	0.02	+/-	0.02	U	0.00	+/-	0.02	U
Zinc-65	0.06	+/-	0.10	U	0.03	+/-	0.03	U	0.01	+/-	0.06	U
Zirconium-95	0.05	+/-	0.07	U	0.03	+/-	0.03	U	0.01	+/-	0.05	U
C-14 (EERF C-01 mod)	223.00	+/-	4.48		0.22	+/-	0.55	U	11.40	+/-	0.96	
Cl-36 (GL-Rad-A033)	0.06	+/-	0.08	U	-0.03	+/-	0.04	U	0.02	+/-	0.06	U
Ni-63 (RESL Ni-1 mod)	20.40	+/-	1.44		3.52	+/-	1.20		12.90	+/-	1.69	
Sr-90 (905.0 mod)	-0.05	+/-	0.09	U	0.04	+/-	0.09	U	-0.09	+/-	0.07	U
H-3 (906.0 mod)	54.50	+/-	18.20		7.06	+/-	0.80		32.20	+/-	3.00	

Table 47. Pit 26 Waste Liquid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	UTS	Sample Number					
		BLT-P26-WL-01		BLT-P26-WL-02		BLT-P26-WL-03	
		Result	Qual	Result	Qual	Result	Qual
TCLP VOC (mg/l)							
1,1,1-Trichloroethane	0.054	0.3	U	15	U	30	U
1,1,2,2-Tetrachloroethane	0.057	0.25	U	12.5	U	25	U
1,1,2-Trichloroethane	0.054	0.25	U	12.5	U	25	U
1,1-Dichloroethane	0.059	0.3	U	15	U	30	U
1,1-Dichloroethylene	0.025	0.3	U	15	U	30	U
1,2-Dichloroethane	0.21	0.25	U	12.5	U	25	U
1,2-Dichloropropane	0.85	0.25	U	12.5	U	25	U
1,4-Dichlorobenzene		0.25	U	12.5	U	25	U
2-Butanone		1.25	U	74.7	J	125	U
2-Hexanone		1.25	U	62.5	U	125	U
4-Methyl-2-pentanone		1.25	U	62.5	U	125	U
Acetone	0.28	1.25	U	2980		813	
Benzene	0.14	***1.04***		***770***		***486***	
Bromodichloromethane	0.35	0.25	U	12.5	U	25	U
Bromoform		0.25	U	12.5	U	25	U
Bromomethane		0.5	U	25	U	50	U
Carbon disulfide	3.8	1.25	U	***96.1***	J	125	U
Carbon tetrachloride	0.057	0.25	U	12.5	U	25	U
Chlorobenzene	0.057	0.25	U	12.5	U	25	U
Chloroethane	0.27	0.5	U	25	U	50	U
Chloroform	0.046	0.25	U	***3280***		***2040***	
Chloromethane		0.5	U	25	U	50	U
cis-1,3-Dichloropropylene	0.036	0.25	U	12.5	U	25	U
Dibromochloromethane		0.25	U	12.5	U	25	U
Ethylbenzene	0.057	***0.411***	J	***94.6***		54.6	U
Methylene chloride	0.089	2	U	100	U	200	U
Styrene		0.25	U	12.5	U	25	U
Tetrachloroethylene	0.056	0.25	U	12.5	U	25	U
Toluene	0.08	***4.4***		***2660***		***5700***	
trans-1,3-Dichloropropylene	0.036	0.25	U	12.5	U	25	U
Trichloroethylene	0.054	0.25	U	12.5	U	25	U
Vinyl acetate		1.5	U	75	U	150	U
Vinyl chloride	0.27	0.5	U	25	U	50	U
Xylenes (total)		1.92		582		1220	
1,1,1,2-Tetrachloroethane	0.057	0.25	U	12.5	U	25	U
1,1-Dichloropropene		0.25	U	12.5	U	25	U
1,2,3-Trichlorobenzene		0.3	U	15	U	30	U
1,2,3-Trichloropropane	0.85	0.3	U	15	U	30	U
1,2,4-Trichlorobenzene	0.055	0.3	U	15	U	30	U
1,2,4-Trimethylbenzene		0.4	J	21.4	BJ	60	U
1,2-Dibromo-3-chloropropane	0.11	0.5	U	25	U	50	U
1,2-Dibromoethane		0.25	U	12.5	U	25	U
1,2-Dichlorobenzene		0.25	U	12.5	U	25	U
1,2-Dichloroethylene (total)		0.3	U	15	U	30	U
1,3,5-Trimethylbenzene		0.25	U	12.5	U	25	U
1,3-Dichlorobenzene		0.25	U	12.5	U	25	U
1,3-Dichloropropane		0.25	U	12.5	U	25	U

Table 47. Pit 26 Waste Liquid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	UTS	BLT-P26-WL-01		BLT-P26-WL-02		BLT-P26-WL-03	
		Result	Qual	Result	Qual	Result	Qual
2,2-Dichloropropane		0.3	U	15	U	30	U
2-Chloro-1,3-butadiene	0.057	0.3	U	15	U	30	U
2-Chloroethylvinyl ether		1.5	U	75	U	150	U
2-Chlorotoluene		0.25	U	12.5	U	25	U
2-Nitropropane		1	U	50	U	100	U
4-Chlorotoluene		0.25	U	12.5	U	25	U
4-Isopropyltoluene		0.25	U	12.5	U	25	U
Acetonitrile	5.6	6.25	U	313	U	625	U
Acrolein	0.29	3	U	150	U	300	U
Acrylonitrile	0.24	1	U	50	U	100	U
Allyl chloride		3.7	U	185	U	370	U
Benzyl chloride		1	U	50	U	100	U
bis(2-Chloroisopropyl)ether	0.055	1.5	U	75	U	150	U
Bromobenzene		0.25	U	12.5	U	25	U
Bromochloromethane		0.3	U	15	U	30	U
cis-1,2-Dichloroethylene		0.3	U	15	U	30	U
cis-1,4-Dichloro-2-butene		1	U	50	U	100	U
Cyclohexane		0.3	U	15	U	30	U
Cyclohexanone	0.36	15	U	750	U	1500	U
Dibromomethane	0.11	0.3	U	15	U	30	U
Dichlorodifluoromethane	0.23	0.5	U	25	U	50	U
Ethyl ether	0.12	0.3	U	***181***		***274***	
Ethyl methacrylate	0.14	1	U	50	U	100	U
Hexachlorobutadiene	0.055	0.25	U	12.5	U	25	U
Iodomethane	0.19	1.25	U	62.5	U	125	U
Isobutyl alcohol	5.6	12.5	U	625	U	1250	U
Isopropylbenzene		0.25	U	12.5	U	25	U
m,p-Xylenes	0.32	***1.46***	J	***455***		***989***	
Methacrylonitrile	0.24	1	U	50	U	100	U
Methyl acetate		1.25	U	62.5	U	125	U
Methyl methacrylate	0.14	1	U	50	U	100	U
Methylcyclohexane		0.25	U	12.5	U	25	U
Naphthalene	0.059	0.25	U	***40.1***	J	***145***	
n-Butyl alcohol	5.6	13	U	650	U	1300	U
n-Butylbenzene		0.25	U	12.5	U	25	U
n-Propylbenzene		0.25	U	12.5	U	25	U
o-Xylene	0.32	***0.455***	J	***127***		***232***	
Pentachloroethane	0.055	1	U	50	U	100	U
Propionitrile		1.5	U	75	U	150	U
sec-Butylbenzene		0.25	U	12.5	U	25	U
tert-Butyl methyl ether		0.25	U	12.5	U	25	U
tert-Butylbenzene		0.25	U	12.5	U	25	U
trans-1,2-Dichloroethylene	0.054	0.3	U	15	U	30	U
trans-1,4-Dichloro-2-butene		1	U	50	U	100	U
Trichlorofluoromethane		0.31	U	15.5	U	31	U
Trichlorotrifluoroethane		1	U	50	U	100	U

Table 47. Pit 26 Waste Liquid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	UTS	BLT-P26-WL-01		BLT-P26-WL-02		BLT-P26-WL-03	
		Result	Qual	Result	Qual	Result	Qual
TCLP SVOC (mg/l)							
1,4-Dichlorobenzene				7.69	U	8.16	U
2,4,5-Trichlorophenol	0.18			3.85	U	4.08	U
2,4,6-Trichlorophenol	0.035			7.69	U	8.16	U
2,4-Dinitrotoluene	0.32			7.69	U	8.16	U
Hexachlorobenzene	0.055			7.69	U	8.16	U
Hexachlorobutadiene	0.055			7.69	U	8.16	U
Hexachloroethane	0.055			7.69	U	8.16	U
m,p-Cresols	0.77			***64.1***		***159***	
Nitrobenzene	0.068			11.5	U	12.2	U
o-Cresol	0.11			***161***		***220***	
Pentachlorophenol	0.089			7.69	U	8.16	U
Pyridine	0.014						
1,1'-Biphenyl				11.5	U	12.2	U
1,2,4-Trichlorobenzene	0.055			7.69	U	8.16	U
1,2-Dichlorobenzene				7.69	U	8.16	U
1,3-Dichlorobenzene				7.69	U	8.16	U
2,4-Dichlorophenol	0.044			7.69	U	8.16	U
2,4-Dimethylphenol	0.036			***86.9***		***90.5***	
2,4-Dinitrophenol	0.12			38.5	U	40.8	U
2,6-Dinitrotoluene	0.55			7.69	U	8.16	U
2-Chloronaphthalene	0.055			1.35	U	1.43	U
2-Chlorophenol	0.044			7.69	U	8.16	U
2-Methyl-4,6-dinitrophenol				11.5	U	12.2	U
2-Methylnaphthalene				1.15	U	1.22	U
2-Nitrophenol				7.69	U	8.16	U
3,3'-Dichlorobenzidine				3.85	U	4.08	U
4-Bromophenylphenylether	0.055			7.69	U	8.16	U
4-Chloro-3-methylphenol				7.69	U	8.16	U
4-Chloroaniline				7.69	U	8.16	U
4-Chlorophenylphenylether				7.69	U	8.16	U
4-Nitrophenol				7.69	U	8.16	U
Acenaphthene	0.059			1.19	U	1.27	U
Acenaphthylene	0.059			0.769	U	0.816	U
alpha-Terpineol				11.5	U	12.2	U
Anthracene	0.059			0.769	U	0.816	U
Atrazine				7.69	U	8.16	U
Benzaldehyde				11.5	U	12.2	U
Benzo(a)anthracene				0.769	U	0.816	U
Benzo(a)pyrene	0.061			0.769	U	0.816	U
Benzo(b)fluoranthene	0.11			0.769	U	0.816	U
Benzo(ghi)perylene	0.0055			0.769	U	0.816	U
Benzo(k)fluoranthene	0.11			0.769	U	0.816	U
bis(2-Chloroethoxy)methane	0.036			11.5	U	12.2	U
bis(2-Chloroethyl) ether	0.033			7.69	U	8.16	U
bis(2-Chloroisopropyl)ether	0.055			7.69	U	8.16	U
bis(2-Ethylhexyl)phthalate	0.28			***10***	J	***38.5***	J
Butylbenzylphthalate	0.017			7.69	U	8.16	U
Carbazole				0.769	U	0.816	U

Table 47. Pit 26 Waste Liquid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	UTS	BLT-P26-WL-01		BLT-P26-WL-02		BLT-P26-WL-03	
		Result	Qual	Result	Qual	Result	Qual
Chrysene	0.059			0.769	U	0.816	U
Dibenzo(a,h)anthracene	0.055			0.769	U	0.816	U
Dibenzofuran				7.69	U	8.16	U
Diethylphthalate	0.2			7.69	U	8.16	U
Dimethylphthalate	0.047			7.69	U	8.16	U
Di-n-butylphthalate	0.057			7.69	U	8.16	U
Di-n-octylphthalate	0.017			11.5	U	12.2	U
Diphenylamine	0.92			11.5	U	12.2	U
Fluoranthene				0.769	U	0.816	U
Fluorene	0.059			0.769	U	0.816	U
Hexachlorocyclopentadiene	0.057			7.69	U	8.16	U
Indeno(1,2,3-cd)pyrene	0.055			0.769	U	0.816	U
Isophorone				7.69	U	8.16	U
m-Nitroaniline				7.69	U	8.16	U
Naphthalene	0.059			17.4		66	
N-Nitrosodipropylamine				7.69	U	8.16	U
o-Nitroaniline	0.27			7.69	U	8.16	U
Phenanthrene	0.059			0.769	U	0.816	U
Phenol	0.039			88.1		112	
p-Nitroaniline	0.028			11.5	U	12.2	U
Pyrene	0.067			1.15	U	1.22	U
TCLP Metals (mg/l)							
Arsenic	1.4			60	U	60	U
Barium	1.2			26	J	96.6	
Cadmium	0.69			10	U	10	U
Chromium	2.77			***10***	U	***42.2***	J
Lead	0.69			25	U	25	U
Mercury	0.15			0.06	U	0.086	J
Selenium				60	U	60	U
Silver	0.43			10	U	10	U
Aluminum				1260	J	34500	
Antimony	1.9			40	U	40	U
Beryllium	0.82			10	U	10	U
Calcium				4930		4540	
Cobalt				10	U	10	U
Copper				30	U	30	U
Iron				13300		36500	
Magnesium				3800		4880	
Manganese				438		458	
Nickel	3.98			10	U	***17.3***	J
Potassium				2840		4240	
Sodium				25100		12100	
Thallium	1.4			50	U	50	U
Vanadium				10	U	57.8	
Zinc				34.2	J	70.4	J

Table 47. Pit 26 Waste Liquid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	UTS	BLT-P26-WL-01		BLT-P26-WL-02		BLT-P26-WL-03	
		Result	Qual	Result	Qual	Result	Qual
RCRA PCB (ug/kg)							
Chlordane (tech.)	260			0.074	U	0.074	U
Endrin	130			0.005	U	0.005	U
gamma-BHC (Lindane)	1.7			0.005	U	0.005	U
Heptachlor	66			0.006	U	0.006	U
Heptachlor epoxide	66			0.005	U	0.005	U
Methoxychlor	180			0.048	U	0.049	U
Toxaphene	2600			0.144	U	0.146	U
4,4'-DDD				0.005	U	0.005	U
4,4'-DDE				0.005	U	0.005	U
4,4'-DDT				0.010	U	0.010	U
Aldrin	66			0.005	U	0.005	U
alpha-BHC	66			0.005	U	0.005	U
beta-BHC	66			0.008	U	0.008	U
delta-BHC	66			0.005	U	0.005	U
Dieldrin	130			0.005	U	0.005	U
Endosulfan I	66			0.005	U	0.005	U
Endosulfan II	130			0.005	U	0.005	U
Endosulfan sulfate	130			0.005	U	0.005	U
Endrin aldehyde	130			0.005	U	0.005	U
Endrin ketone				0.012	U	0.012	U
TCLP Pesticides (mg/l)							
Aroclor-1016	0.1			0.03	U	0.03	U
Aroclor-1221	0.1			0.03	U	0.03	U
Aroclor-1232	0.1			0.03	U	0.03	U
Aroclor-1242	0.1			0.03	U	0.03	U
Aroclor-1248	0.1			0.03	U	0.03	U
Aroclor-1254	0.1			0.03	U	0.03	U
Aroclor-1260	0.1			0.03	U	0.03	U
Herbicides (ug/L)							
2,4,5-T				0.08	U	0.08	U
2,4,5-TP				0.08	U	0.08	U
2,4-D	0.72			0.08	U	0.08	U
Note: Bolded results exceed the Universal Treatment Standard							

Table 48. Pit 26 Waste Liquid - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)										
	BLT-P26-WL-01			BLT-P26-WL-02				BLT-P26-WL-03			
	Result	Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual
Gamma Scan (901.1mod/HASL 300)											
Actinium-228				8.48	+/-	7.8	U	3.6	+/-	8.16	U
Americium-241				-0.721	+/-	10.4	U	-10.8	+/-	15.8	U
Antimony-124				8.64	+/-	4.24	U	-3.62	+/-	5.34	U
Antimony-125				-0.421	+/-	4.88	U	-0.3	+/-	5.96	U
Barium-133				0.481	+/-	2.56	U	-2.92	+/-	2.46	U
Barium-140				3.19	+/-	17.1	U	0	+/-	41	UI
Beryllium-7				6.14	+/-	18.1	U	9.76	+/-	19	U
Bismuth-212				2.36	+/-	14	U	12.7	+/-	24.1	U
Bismuth-214				3.31	+/-	5.94	U	7.8	+/-	3.92	U
Cerium-139				0.034	+/-	1.84	U	0.058	+/-	2.08	U
Cerium-141				3.98	+/-	4.36	U	-0.528	+/-	4.87	U
Cerium-144				-5.54	+/-	12.8	U	-4.13	+/-	14	U
Cesium-134				0.964	+/-	1.84	U	-1.56	+/-	1.88	U
Cesium-136				-5.56	+/-	6.09	U	0.282	+/-	6.89	U
Cesium-137				0.89	+/-	1.95	U	2.25	+/-	1.98	U
Chromium-51				32.6	+/-	23.8	U	21.9	+/-	28.8	U
Cobalt-56				-0.87	+/-	1.87	U	1.98	+/-	1.96	U
Cobalt-57				1.39	+/-	1.62	U	0.921	+/-	1.75	U
Cobalt-58				0.4	+/-	2.06	U	1.01	+/-	2.35	U
Cobalt-60				0.42	+/-	1.94	U	0.95	+/-	2.11	U
Europium-152				-3.38	+/-	5.75	U	1.5	+/-	5.58	U
Europium-154				2.87	+/-	4.74	U	-5.7	+/-	5.3	U
Europium-155				-0.68	+/-	6.72	U	-0.774	+/-	8.06	U
Iridium-192				-1.31	+/-	2.11	U	2.88	+/-	3.02	U
Iron-59				-2.99	+/-	4.22	U	-1.51	+/-	3.96	U
Lead-210				89.7	+/-	354	U	592	+/-	355	U
Lead-212				0	+/-	3.74	UI	0	+/-	7.83	UI
Lead-214				7.93	+/-	8.17	U	7.3	+/-	4.21	U
Manganese-54				-0.52	+/-	1.79	U	0.236	+/-	1.8	U
Mercury-203				0	+/-	5.04	UI	0.296	+/-	2.69	U
Neodymium-147				7.23	+/-	39.5	U	9.17	+/-	50.8	U
Neptunium-239				2.57	+/-	11.2	U	3.67	+/-	13.4	U
Niobium-94				2.04	+/-	1.97	U	0.061	+/-	1.78	U
Niobium-95				0.15	+/-	2.36	U	-1.64	+/-	2.85	U
Potassium-40				34.5	+/-	22.9	U	39	+/-	20.9	U
Promethium-144				0.776	+/-	1.6	U	0.711	+/-	2.1	U
Promethium-146				0.047	+/-	2.13	U	0.35	+/-	2.57	U
Radium-228				8.48	+/-	7.8	U	3.6	+/-	8.16	U
Ruthenium-106				4.14	+/-	16.7	U	0.883	+/-	16.5	U
Silver-110m				-0.118	+/-	1.74	U	-2.16	+/-	1.8	U
Sodium-22				1.05	+/-	1.7	U	-2.04	+/-	1.9	U
Thallium-208				2.07	+/-	2.02	U	1.11	+/-	3.87	U
Thorium-230				3.31	+/-	5.94	U	7.8	+/-	3.92	U
Thorium-234				70.5	+/-	85.9	U	35.8	+/-	144	U
Tin-113				0.645	+/-	2.56	U	-0.523	+/-	2.48	U
Uranium-235				10.4	+/-	14.3	U	0.672	+/-	14.5	U

Table 48. Pit 26 Waste Liquid - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)										
	BLT-P26-WL-01			BLT-P26-WL-02				BLT-P26-WL-03			
	Result	Uncertainty	Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Uranium-238				70.5	+/-	85.9	U	35.8	+/-	144	U
Yttrium-88				0.288	+/-	2.2	U	0.229	+/-	2.43	U
Zinc-65				1.22	+/-	4.33	U	0.348	+/-	4.92	U
Zirconium-95				1.76	+/-	3.69	U	-1.15	+/-	3.54	U
C-14 (EERF C-01 mod)				12100	+/-	241		5550	+/-	113	
Cl-36 (GL-Rad-A033)				40.3	+/-	11.9		30	+/-	10	
Ni-63 (RESL Ni-1 mod)				536	+/-	19.3		530	+/-	19.5	
Sr-90 (905.0 mod)				0.423	+/-	0.446	U	0.472	+/-	0.51	U
H-3 (906.0 mod)	55200	1110		53800	+/-	1370		45700	+/-	1520	

Table 49. Pit 34 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

		Sample Number															
	RBC	BLT-P34-SO-01a		BLT-P34-SO-01b		BLT-P34-SO-02a		BLT-P34-SO-02b		BLT-P34-SO-03a		BLT-P34-SO-03b		BLT-P34-SO-04a		BLT-P34-SO-04b	
Parameter		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)																	
1,1-Dichloroethylene	NA	0.304	U	0.323	U	0.332	U	0.315	U	0.916	J	1.13	J	300	U	29.3	U
1,2,4-Trimethylbenzene	NA	5.93		1.78		2.33		6.92		2.73		7.87		34600		5860	
1,3,5-Trimethylbenzene	NA	1.27		0.23	J	0.42	J	1.3		0.262	U	1.81		9690		889	
1,4-Dichlorobenzene	119233	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U	19.6	U
2-Butanone	NA	1.72	U	1.83	U	1.88	U	1.78	U	2.22	U	1.97	U	1700	U	166	
4-Methyl-2-pentanone	NA	1.1	U	1.17	U	1.21	U	1.14	U	1.43	U	1.27	U	1090	U	107	U
Acetone	919800000	195		192		134		144		265		274		2580		276	
Acetonitrile	NA	85.7		37.6		10.1	U	9.56	U	11.9	U	10.6	U	9130		891	
Benzene	52029.09	0.488	J	0.355	U	0.365	U	0.346	U	0.432	U	0.383	U	331	U	32.3	U
Carbon disulfide	102200000	1.27	U	1.35	U	1.38	U	1.31	U	1.63	U	1.45	U	1250	U	122	U
Carbon tetrachloride	22012.31	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U	19.6	U
Chloroform	10220000	2.37		1.44		0.628	J	1.37		0.441	J	0.464	J	200		19.7	J
Ethyl ether	204400000	2.18		0.269	U	0.277	U	0.262	U	0.327	U	0.29	U	250	U	24.5	U
Ethylbenzene	102200000	2.84		0.66	J	0.221	U	0.349	J	0.262	U	0.232	U	1100	J	464	
Isopropylbenzene	NA	0.331	J	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	818	U	184	
m,p-Xylenes	NA	6		2.03	J	0.541	J	1.9	J	0.389	J	0.399	J	7580		2440	
Methyl acetate	1022000000	7.82	J	1.8	U	1.85	U	1.75	U	2.18	U	1.94	U	1670	U	163	U
Naphthalene	20440000	0.202	U	0.215	U	0.221	U	1.64		0.262	U	1.69		200		298	
n-Propylbenzene	NA	0.484	J	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	1810		458	
o-Xylene	NA	5.35		1.4		0.692	J	2.07		0.262	U	0.493	J	2540		913	
Toluene	81760000	17.8		4.79		0.629	J	2.9		0.512	J	0.507	J	1360		716	
Trichloroethylene	7150.00	0.253	U	0.269	U	0.277	U	0.262	U	0.327	U	0.29	U	250	U	24.5	U
Xylenes (total)	204400000	11.3		3.43		1.23		3.97		0.389	J	0.892	J	9340		3350	
RCRA SVOC (ug/kg)																	
2-Methylnaphthalene	4088000	7.29	U	7.32	U	7.38	U	7.41	U	7.5	U	7.43	U	7.35	U	7.43	U
bis(2-Ethylhexyl)phthalate	204400	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U	74.3	U
Butylbenzylphthalate	204400000	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U	74.3	U
Di-n-butylphthalate	NA	36.4	U	36.6	U	36.9	U	37.1	U	37.5	U	37.2	U	36.7	U	37.2	U
Di-n-octylphthalate	NA	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U	74.3	U
Naphthalene	20440000	10.9	U	11	U	11.1	U	11.1	U	11.2	U	15.1	J	22.6	J	37.1	J

Note: Sub-floor samples are shaded.

Table 49. Pit 34 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

		Sample Number															
	RBC	BLT-P34-SO-01a		BLT-P34-SO-01b		BLT-P34-SO-02a		BLT-P34-SO-02b		BLT-P34-SO-03a		BLT-P34-SO-03b		BLT-P34-SO-04a		BLT-P34-SO-04b	
Parameter		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA Metals (mg/kg)																	
Aluminum	NA	7270		9420		15700		17000		16000		17800		12100		14400	
Antimony	408.8	0.425	U	0.437	U	0.438	U	0.693	J	0.644	J	0.446	U	0.435	U	0.443	U
Arsenic	1.91	**3.33**		**4.7**		**5.71**		**6.58**		**6.11**		**6.78**		**6.51**		**6.07**	
Barium	204400	14.6		17.2		31.9		25.8		26.3		29.7		24.2		25.4	
Beryllium	2044	0.129	J	0.162	J	0.233	J	0.22	J	0.22	J	0.249	J	0.183	J	0.217	J
Cadmium	511	0.106	U	0.109	U	0.11	U	0.11	U	0.11	U	0.112	U	0.109	U	0.111	U
Calcium	NA	20.6		33		128		102		96.3		106		87.8		98.1	
Chromium	3066	11.5		16.6		23.5		26.8		23.5		27.9		19.4		21.6	
Cobalt	NA	0.541		0.811		1.31		1.3		1.19		1.38		0.96		1.2	
Copper	40880	7.24		8.69		10.9		13.9		12.6		13.3		9.08		9.8	
Iron	306600	7150		9430		13500		15300		14100		15100		11300		13200	
Lead	NA	3.95		4.91		6.33		6.64		5.81		6.63		6.75		6.69	
Magnesium	NA	225		301		509		491		485		535		393		473	
Manganese	20440	9.04		15.2		16.1		15.7		16.8		17.6		18.3		20.5	
Mercury	NA	9.68	J	12.1		23.9		19.5		24.9		36		22.8		23.8	
Nickel	20440	2.67		3.51		5.59		5.48		5.34		6		4.34		5.16	
Potassium	NA	330		398		604		589		588		668		514		548	
Sodium	NA	11.5	J	12.2	J	17		17.1		18.4		25.4		18.3		18.6	
Vanadium	1022	19.6		26		41.7		47.9		41.2		48.2		34		40.1	
Zinc	306600	5.2		6.79		22.4		19.9		16.6		18.1		10.9		16.4	
RCRA Pesticide (ug/kg)																	
4,4'-DDD	NA	0.364	U	0.366	U	0.369	U	0.371	U	0.613	J	0.372	U	0.367	U	0.372	U
4,4'-DDT	NA	0.364	U	0.366	U	0.369	U	0.371	U	0.375	U	0.372	U	0.367	U	0.372	U
TCLP PCB (ug/kg)																	
Herbicides (ug/kg)																	

Note: Sub-floor samples are shaded.

Table 49. Pit 34 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

		Sample Number											
	RBC	BLT-P34-SO-05c		BLT-P34-SO-05d		BLT-P34-SO-05e		BLT-P34-SO-05f		BLT-P34-SO-05g		BLT-P34-SO-06g	
Parameter		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)													
1,1-Dichloroethylene	NA	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
1,2,4-Trimethylbenzene	NA	159000		681		8.59	B	7.11	B	27.1		134	U
1,3,5-Trimethylbenzene	NA	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	
1,4-Dichlorobenzene	119233	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
2-Butanone	NA	3220	U	174	U	3.57	J	3.54	J	3.4	J	199	U
4-Methyl-2-pentanone	NA	2070	U	112	U	4.85	J	2.7	J	9.47		127	U
Acetone	919800000	4890	U	265	U	43.8		30.8		44.2		302	
Acetonitrile	NA	17300	U	935	U	54.4		9.84	U	68.4		1070	U
Benzene	52029.09	625	U	33.9	U	0.336	U	0.356	U	0.374	U	38.6	U
Carbon disulfide	102200000	3130	J	164	J	1.27	U	1.35	U	1.42	U	146	U
Carbon tetrachloride	22012.31	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
Chloroform	10220000	379	U	20.8	J	0.355	J	0.216	U	0.227	U	23.4	
Ethyl ether	204400000	474	U	25.7	U	0.254	U	0.27	U	0.284	U	29.2	U
Ethylbenzene	102200000	2340		20.9	J	0.477	J	0.345	J	0.699	J	23.4	
Isopropylbenzene	NA	583	J	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
m,p-Xylenes	NA	23700		147	J	3.17	B	1.97	BJ	7.15		41.8	
Methyl acetate	1022000000	3170	U	171	U	10.7		4.45	J	7.69	J	195	U
Naphthalene	20440000	379	U	20.5	U	7.31		4.04		7.07		23.4	
n-Propylbenzene	NA	1090	J	20.5	U	0.203	U	0.216	U	0.227	U	23.4	
o-Xylene	NA	4080		33.4	J	0.728	J	0.451	J	1.95		23.4	
Toluene	81760000	8320		55.8	J	10.5		3.56		12.9		83.8	
Trichloroethylene	7150.00	474	U	25.7	U	0.254	U	0.27	U	0.284	U	51.6	U
Xylenes (total)	204400000	27800		181		3.9	B	2.42	B	9.11		57.3	
RCRA SVOC (ug/kg)													
2-Methylnaphthalene	4088000	2560		7.53	U	7.59	U	7.34	U	7.71	U	7.49	U
bis(2-Ethylhexyl)phthalate	204400	2020		113	J	75.9	U	186		77.1	U	74.9	U
Butylbenzylphthalate	204400000	189	J	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Di-n-butylphthalate	NA	179	J	37.6	U	38	U	36.7	U	38.6	U	37.4	U
Di-n-octylphthalate	NA	109	J	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Naphthalene	20440000	161		11.3	U	11.4	U	11	U	11.6	U	11.2	U

Note: Sub-floor samples are shaded.

Table 49. Pit 34 Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

		Sample Number											
	RBC	BLT-P34-SO-05c		BLT-P34-SO-05d		BLT-P34-SO-05e		BLT-P34-SO-05f		BLT-P34-SO-05g		BLT-P34-SO-06g	
Parameter		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA Metals (mg/kg)													
Aluminum	NA	8110		10100		2910				3510		18000	
Antimony	408.8	0.434	U	0.712	J	0.441	U			1.3		0.468	J
Arsenic	1.91	**4.13**		**4.93**		1.28	J			**59.6**		**6.87**	
Barium	204400	32.4		17.3		10.5				9.98		28.8	
Beryllium	2044	0.117	J	0.131	J	0.11	U			0.112	U	0.238	J
Cadmium	511	0.109	U	0.108	U	0.11	U			0.19	J	0.112	U
Calcium	NA	155		165		24				21.8		86.6	
Chromium	3066	18.9		24.5		6.94				61.1		26.7	
Cobalt	NA	0.651		0.737		0.221	U			0.223	U	1.36	
Copper	40880	11.5		14.5		2.67				10.4		13.9	
Iron	306600	9140		11500		1750				18100		15300	
Lead	NA	5		5.41		4.45				9.22		7.02	
Magnesium	NA	247		288		68.8				115		529	
Manganese	20440	13.3		16.4		2.9				6.73		17.1	
Mercury	NA	20.8		30.3		10.2	J	13.7		12.8		19.5	
Nickel	20440	4.66		4.44		0.909				0.863		6.13	
Potassium	NA	319		351		334				327		623	
Sodium	NA	26.5		10.4	J	12.1	J			13	J	22	
Vanadium	1022	25.4		31.7		15.3				90.3		47.2	
Zinc	306600	56.5		72.7		1.61				2.72		22.7	
RCRA Pesticide (ug/kg)													
4,4'-DDD	NA	0.379	U	1.7		0.38	U	0.367	U	0.386	U	1.13	J
4,4'-DDT	NA	0.379	U	1.15	JP	0.38	U	0.367	U	0.386	U	0.374	U
TCLP PCB (ug/kg)													
Herbicides (ug/kg)													

Note: Sub-floor samples are shaded.

Table 50. Pit 34 Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number (All results in pCi/g)													
Parameter	**NRC Screening Values[1]**	**DCGL**	**BLT-P34-SO-01a**		**BLT-P34-SO-01b**		**BLT-P34-SO-02a**		**BLT-P34-SO-02b**		**BLT-P34-SO-03a**		**BLT-P34-SO-03b**		**BLT-P34-SO-04a**	
			Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Gamma Scan (901.1mod/HASL 300)																
Actinium-228	NA		0.74		0.66		1.21		1.22		1.03		1.46		0.89	
Bismuth-212	NA		0.74		0.57		0.67		1.04		0.71		0.73		0.53	
Bismuth-214	NA		0.74		0.37		0.72		0.72		0.60		0.72		0.51	
Lead-210	0.90	1.62	0.74	U	0.00	UI	0.04	U	0.79		**1.00**		1.43	U	**4.69**	
Lead-212	NA		0.74		0.62		1.15		1.36		1.19		1.25		0.97	
Lead-214	NA		0.74		0.46		0.68		0.75		0.76		0.75		0.68	
Potassium-40	NA		0.74		2.99		4.77		4.40		4.16		4.94		4.22	
Radium-226	0.70	1.34	**0.74**													
Radium-228	NA		0.74		0.66		1.21		1.22		1.03		1.46		0.89	
Thallium-208	NA		0.74		0.24		0.36		0.43		0.40		0.35		0.30	
Thorium-230	1.8		0.74		0.37		0.72		0.72		0.60		0.72		0.51	
Thorium-234	14.0		0.74		1.45		1.42		1.74		1.24		1.43		1.23	U
Uranium-238	14.0		0.74		1.45		1.42		1.74		1.24		1.43		1.23	U
C-14 (EERF C-01 mod)	12.0	162	0.74	U	-0.23	U	0.10	U	0.02	U	1.61		1.24		7.31	
H-3 (906.0 mod)	110.0	264	0.74		5.29		0.45	U	1.89		5.21		4.91		6.32	

1 From NUREG 1757, Appendix B, Table B-2
NA = Not available for this radionuclide
Concentration that exceeds NRC screening value is highlighted.

Note: Sub-floor samples are shaded.

Table 50. Pit 34 Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	NRC Screening Values[1]	Sample Number (All results in pCi/g)													
		BLT-P34-SO-04b		BLT-P34-SO-05c		BLT-P34-SO-05d		BLT-P34-SO-05e		BLT-P34-SO-05f		BLT-P34-SO-05g		BLT-P34-SO-06g	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Gamma Scan (901.1mod/HASL 300)															
Actinium-228	NA	1.07		1.04		0.89		0.89		1.40		1.19		1.18	
Bismuth-212	NA	0.84		1.01		0.40	U	1.04		0.81		1.39		0.81	
Bismuth-214	NA	0.61		0.61		0.00	UI	0.56		0.70		0.57		0.64	
Lead-210	0.90	0.87		3.57	U	0.25	U	0.78		0.55	U	0.42	U	0.78	U
Lead-212	NA	0.95		0.95		0.96		1.12		0.99		1.01		1.16	
Lead-214	NA	0.87		0.68		0.69		0.68		0.57		0.65		0.79	
Potassium-40	NA	4.81		3.58		5.32		6.85		6.42		8.09		4.41	
Radium-226	0.70			0.61		0.62		0.56		0.70		0.57			
Radium-228	NA	1.07		1.04		0.89		0.89		1.40		1.19		1.18	
Thallium-208	NA	0.33		0.35		0.23		0.33		0.38		0.40		0.40	
Thorium-230	1.8	0.61		0.61		0.62		0.56		0.70		0.57		0.64	
Thorium-234	14.0	1.91		1.18	U	-0.39	U	0.60	U	1.06		0.43	U	1.22	
Uranium-238	14.0	1.91		1.18	U	-0.39	U	0.60	U	1.06		0.43	U	1.22	
C-14 (EERF C-01 mod)	12.0	4.73		1.96		0.71	U	0.56	U			1.56		0.94	U
H-3 (906.0 mod)	110.0	7.95		15.60		-0.16	U	24.80				19.20		7.31	

1 From NUREG 1757, Appendix B, Table B-2
NA = Not available for this radionuclide
Concentration that exceeds NRC screening value is highlighted.

Note: Sub-floor samples are shaded.

Table 51. Pit 34 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

													Sample Number	
	BLT-P34-SO-01a		BLT-P34-SO-01b		BLT-P34-SO-02a		BLT-P34-SO-02b		BLT-P34-SO-03a		BLT-P34-SO-03b		BLT-P34-SO-04a	
Parameter	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)														
1,1,1,2-Tetrachloroethane	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U
1,1,1-Trichloroethane	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
1,1,2,2-Tetrachloroethane	0.253	U	0.269	U	0.277	U	0.262	U	0.327	U	0.29	U	250	U
1,1,2-Trichloroethane	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
1,1-Dichloroethane	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
1,1-Dichloroethylene	0.304	U	0.323	U	0.332	U	0.315	U	0.916	J	1.13	J	300	U
1,1-Dichloropropene	0.253	U	0.269	U	0.277	U	0.262	U	0.327	U	0.29	U	250	U
1,2,3-Trichlorobenzene	0.253	U	0.269	U	0.277	U	0.262	U	0.327	U	0.29	U	250	U
1,2,3-Trichloropropane	0.506	U	0.538	U	0.553	U	0.525	U	0.654	U	0.581	U	501	U
1,2,4-Trichlorobenzene	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
1,2,4-Trimethylbenzene	5.93		1.78		2.33		6.92		2.73		7.87		34600	
1,2-Dibromo-3-chloropropane	0.506	U	0.538	U	0.553	U	0.525	U	0.654	U	0.581	U	501	U
1,2-Dibromoethane	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U
1,2-Dichlorobenzene	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U
1,2-Dichloroethane	0.253	U	0.269	U	0.277	U	0.262	U	0.327	U	0.29	U	250	U
1,2-Dichloroethylene (total)	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
1,2-Dichloropropane	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
1,3,5-Trimethylbenzene	1.27		0.23	J	0.42	J	1.3		0.262	U	1.81		9690	
1,3-Dichlorobenzene	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U
1,3-Dichloropropane	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
1,4-Dichlorobenzene	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U
2,2-Dichloropropane	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
2-Butanone	1.72	U	1.83	U	1.88	U	1.78	U	2.22	U	1.97	U	1700	U
2-Chloro-1,3-butadiene	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
2-Chloroethylvinyl ether	1.27	U	1.35	U	1.38	U	1.31	U	1.63	U	1.45	U	1250	U
2-Chlorotoluene	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U
2-Hexanone	1.54	U	1.64	U	1.68	U	1.59	U	1.99	U	1.77	U	1520	U
2-Nitropropane	0.911	U	0.969	U	0.996	U	0.944	U	1.18	U	1.05	U	901	U
4-Chlorotoluene	0.243	U	0.258	U	0.266	U	0.252	U	0.314	U	0.279	U	240	U
4-Isopropyltoluene	0.253	U	0.269	U	0.277	U	0.262	U	0.327	U	0.29	U	250	U
4-Methyl-2-pentanone	1.1	U	1.17	U	1.21	U	1.14	U	1.43	U	1.27	U	1090	U
Acetone	195		192		134		144		265		274		2580	
Acetonitrile	85.7		37.6		10.1	U	9.56	U	11.9	U	10.6	U	9130	
Acrolein	3.04	U	3.23	U	3.32	U	3.15	U	3.92	U	3.49	U	3000	U
Acrylonitrile	1.01	U	1.08	U	1.11	U	1.05	U	1.31	U	1.16	U	1000	U
Allyl chloride	2.02	U	2.15	U	2.21	U	2.1	U	2.62	U	2.32	U	2000	U
Benzene	0.488	J	0.355	U	0.365	U	0.346	U	0.432	U	0.383	U	331	U
Benzyl chloride	0.607	U	0.646	U	0.664	U	0.629	U	0.785	U	0.697	U	601	U
bis(2-Chloroisopropyl)ether	1.52	U	1.61	U	1.66	U	1.57	U	1.96	U	1.74	U	1500	U
Bromobenzene	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U
Bromochloromethane	0.506	U	0.538	U	0.553	U	0.525	U	0.654	U	0.581	U	501	U
Bromodichloromethane	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U
Bromoform	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
Bromomethane	0.506	U	0.538	U	0.553	U	0.525	U	0.654	U	0.581	U	501	U
Carbon disulfide	1.27	U	1.35	U	1.38	U	1.31	U	1.63	U	1.45	U	1250	U
Carbon tetrachloride	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U
Chlorobenzene	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U

Note: Sub-floor samples are shaded.

Table 51. Pit 34 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

													Sample Number	
	BLT-P34-SO-01a		BLT-P34-SO-01b		BLT-P34-SO-02a		BLT-P34-SO-02b		BLT-P34-SO-03a		BLT-P34-SO-03b		BLT-P34-SO-04a	
Parameter	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Chloroethane	0.506	U	0.538	U	0.553	U	0.525	U	0.654	U	0.581	U	501	U
Chloroform	2.37		1.44		0.628	J	1.37		0.441	J	0.464	J	200	
Chloromethane	0.506	U	0.538	U	0.553	U	0.525	U	0.654	U	0.581	U	501	U
cis-1,2-Dichloroethylene	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
cis-1,3-Dichloropropylene	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U
cis-1,4-Dichloro-2-butene	0.506	U	0.538	U	0.553	U	0.525	U	0.654	U	0.581	U	501	U
Cyclohexane	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
Cyclohexanone	15.2	U	16.1	U	16.6	U	15.7	U	19.6	U	17.4	U	15000	U
Dibromochloromethane	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
Dibromomethane	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
Dichlorodifluoromethane	0.506	U	0.538	U	0.553	U	0.525	U	0.654	U	0.581	U	501	U
Ethyl ether	2.18		0.269	U	0.277	U	0.262	U	0.327	U	0.29	U	250	U
Ethyl methacrylate	0.506	U	0.538	U	0.553	U	0.525	U	0.654	U	0.581	U	501	U
Ethylbenzene	2.84		0.66	J	0.221	U	0.349	J	0.262	U	0.232	U	1100	J
Hexachlorobutadiene	0.506	U	0.538	U	0.553	U	0.525	U	0.654	U	0.581	U	501	U
Iodomethane	1.69	U	1.8	U	1.85	U	1.75	U	2.18	U	1.94	U	1670	U
Isobutyl alcohol	10.1	U	10.8	U	11.1	U	10.5	U	13.1	U	11.6	U	10000	U
Isopropylbenzene	0.331	J	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	818	U
m,p-Xylenes	6		2.03	J	0.541	J	1.9	J	0.389	J	0.399	J	7580	
Methacrylonitrile	0.709	U	0.754	U	0.774	U	0.734	U	0.915	U	0.813	U	701	U
Methyl acetate	7.82	J	1.8	U	1.85	U	1.75	U	2.18	U	1.94	U	1670	U
Methyl methacrylate	1.01	U	1.08	U	1.11	U	1.05	U	1.31	U	1.16	U	1000	U
Methylcyclohexane	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
Methylene chloride	2.02	U	2.15	U	2.21	U	2.1	U	2.62	U	2.32	U	2000	U
Naphthalene	0.202	U	0.215	U	0.221	U	1.64		0.262	U	1.69		200	
n-Butyl alcohol	27.3	U	29.1	U	29.9	U	28.3	U	35.3	U	31.4	U	27000	U
n-Butylbenzene	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U
n-Propylbenzene	0.484	J	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	1810	
o-Xylene	5.35		1.4		0.692	J	2.07		0.262	U	0.493	J	2540	
Pentachloroethane	1.52	U	1.61	U	1.66	U	1.57	U	1.96	U	1.74	U	1500	U
Propionitrile	1.01	U	1.08	U	1.11	U	1.05	U	1.31	U	1.16	U	1000	U
sec-Butylbenzene	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U
Styrene	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U
tert-Butyl methyl ether	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U
tert-Butylbenzene	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U
Tetrachloroethylene	0.202	U	0.215	U	0.221	U	0.21	U	0.262	U	0.232	U	200	U
Toluene	17.8		4.79		0.629	J	2.9		0.512	J	0.507	J	1360	
trans-1,2-Dichloroethylene	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
trans-1,3-Dichloropropylene	0.304	U	0.323	U	0.332	U	0.315	U	0.392	U	0.349	U	300	U
trans-1,4-Dichloro-2-butene	0.506	U	0.538	U	0.553	U	0.525	U	0.654	U	0.581	U	501	U
Trichloroethylene	0.253	U	0.269	U	0.277	U	0.262	U	0.327	U	0.29	U	250	U
Trichlorofluoromethane	0.506	U	0.538	U	0.553	U	0.525	U	0.654	U	0.581	U	501	U
Trichlorotrifluoroethane	1.01	U	1.08	U	1.11	U	1.05	U	1.31	U	1.16	U	1000	U
Vinyl acetate	1.27	U	1.35	U	1.38	U	1.31	U	1.63	U	1.45	U	1250	U
Vinyl chloride	0.506	U	0.538	U	0.553	U	0.525	U	0.654	U	0.581	U	501	U
Xylenes (total)	11.3		3.43		1.23		3.97		0.389	J	0.892	J	9340	

Note: Sub-floor samples are shaded.

Table 51. Pit 34 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

													Sample Number	
	BLT-P34-SO-01a		BLT-P34-SO-01b		BLT-P34-SO-02a		BLT-P34-SO-02b		BLT-P34-SO-03a		BLT-P34-SO-03b		BLT-P34-SO-04a	
Parameter	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA SVOC (ug/kg)														
1,1'-Biphenyl	109	U	110	U	111	U	111	U	112	U	112	U	110	U
1,2,4-Trichlorobenzene	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
1,2-Dichlorobenzene	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
1,3-Dichlorobenzene	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
1,4-Dichlorobenzene	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
2,4,5-Trichlorophenol	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
2,4,6-Trichlorophenol	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
2,4-Dichlorophenol	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
2,4-Dimethylphenol	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
2,4-Dinitrophenol	138	U	139	U	140	U	141	U	142	U	141	U	140	U
2,4-Dinitrotoluene	36.4	U	36.6	U	36.9	U	37.1	U	37.5	U	37.2	U	36.7	U
2,6-Dinitrotoluene	36.4	U	36.6	U	36.9	U	37.1	U	37.5	U	37.2	U	36.7	U
2-Chloronaphthalene	12.8	U	12.8	U	12.9	U	13	U	13.1	U	13	U	12.9	U
2-Chlorophenol	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
2-Methyl-4,6-dinitrophenol	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
2-Methylnaphthalene	7.29	U	7.32	U	7.38	U	7.41	U	7.5	U	7.43	U	7.35	U
2-Nitrophenol	36.4	U	36.6	U	36.9	U	37.1	U	37.5	U	37.2	U	36.7	U
3,3'-Dichlorobenzidine	109	U	110	U	111	U	111	U	112	U	112	U	110	U
4-Bromophenylphenylether	36.4	U	36.6	U	36.9	U	37.1	U	37.5	U	37.2	U	36.7	U
4-Chloro-3-methylphenol	36.4	U	36.6	U	36.9	U	37.1	U	37.5	U	37.2	U	36.7	U
4-Chloroaniline	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
4-Chlorophenylphenylether	36.4	U	36.6	U	36.9	U	37.1	U	37.5	U	37.2	U	36.7	U
4-Nitrophenol	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Acenaphthene	12.2	U	12.2	U	12.3	U	12.4	U	12.5	U	12.4	U	12.3	U
Acenaphthylene	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
alpha-Terpineol	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Anthracene	7.29	U	7.32	U	7.38	U	7.41	U	7.5	U	7.43	U	7.35	U
Atrazine	109	U	110	U	111	U	111	U	112	U	112	U	110	U
Benzaldehyde	109	U	110	U	111	U	111	U	112	U	112	U	110	U
Benzo(a)anthracene	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Benzo(a)pyrene	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Benzo(b)fluoranthene	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Benzo(ghi)perylene	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Benzo(k)fluoranthene	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
bis(2-Chloroethoxy)methane	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
bis(2-Chloroethyl) ether	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
bis(2-Chloroisopropyl)ether	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
bis(2-Ethylhexyl)phthalate	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Butylbenzylphthalate	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Carbazole	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Chrysene	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Dibenzo(a,h)anthracene	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Dibenzofuran	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Diethylphthalate	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Dimethylphthalate	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Di-n-butylphthalate	36.4	U	36.6	U	36.9	U	37.1	U	37.5	U	37.2	U	36.7	U
Di-n-octylphthalate	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Diphenylamine	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U

Note: Sub-floor samples are shaded.

Table 51. Pit 34 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

													Sample Number	
	BLT-P34-SO-01a		**BLT-P34-SO-01b**		**BLT-P34-SO-02a**		**BLT-P34-SO-02b**		**BLT-P34-SO-03a**		**BLT-P34-SO-03b**		**BLT-P34-SO-04a**	
Parameter	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Fluoranthene	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Fluorene	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Hexachlorobenzene	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Hexachlorobutadiene	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Hexachlorocyclopentadiene	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Hexachloroethane	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Indeno(1,2,3-cd)pyrene	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Isophorone	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
m,p-Cresols	146	U	146	U	148	U	148	U	150	U	149	U	147	U
m-Nitroaniline	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Naphthalene	10.9	U	11	U	11.1	U	11.1	U	11.2	U	15.1	J	22.6	J
Nitrobenzene	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
N-Nitrosodipropylamine	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
o-Cresol	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
o-Nitroaniline	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Pentachlorophenol	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Phenanthrene	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Phenol	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
p-Nitroaniline	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Pyrene	11.4	U	11.5	U	11.6	U	11.6	U	11.8	U	11.7	U	11.5	U
RCRA Metals (mg/kg)														
Aluminum	7270		9420		15700		17000		16000		17800		12100	
Antimony	0.425	U	0.437	U	0.438	U	0.693	J	0.644	J	0.446	U	0.435	U
Arsenic	3.33		4.7		5.71		6.58		6.11		6.78		6.51	
Barium	14.6		17.2		31.9		25.8		26.3		29.7		24.2	
Beryllium	0.129	J	0.162	J	0.233	J	0.22	J	0.22	J	0.249	J	0.183	J
Cadmium	0.106	U	0.109	U	0.11	U	0.11	U	0.11	U	0.112	U	0.109	U
Calcium	20.6		33		128		102		96.3		106		87.8	
Chromium	11.5		16.6		23.5		26.8		23.5		27.9		19.4	
Cobalt	0.541		0.811		1.31		1.3		1.19		1.38		0.96	
Copper	7.24		8.69		10.9		13.9		12.6		13.3		9.08	
Iron	7150		9430		13500		15300		14100		15100		11300	
Lead	3.95		4.91		6.33		6.64		5.81		6.63		6.75	
Magnesium	225		301		509		491		485		535		393	
Manganese	9.04		15.2		16.1		15.7		16.8		17.6		18.3	
Mercury	9.68	J	12.1		23.9		19.5		24.9		36		22.8	
Nickel	2.67		3.51		5.59		5.48		5.34		6		4.34	
Potassium	330		398		604		589		588		668		514	
Selenium	0.637	U	0.655	U	0.657	U	0.659	U	0.66	U	0.669	U	0.652	U
Silver	0.106	U	0.109	U	0.11	U	0.11	U	0.11	U	0.112	U	0.109	U
Sodium	11.5	J	12.2	J	17		17.1		18.4		25.4		18.3	
Thallium	0.531	U	0.546	U	0.548	U	0.549	U	0.55	U	0.558	U	0.543	U
Vanadium	19.6		26		41.7		47.9		41.2		48.2		34	
Zinc	5.2		6.79		22.4		19.9		16.6		18.1		10.9	

Note: Sub-floor samples are shaded.

Table 51. Pit 34 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

													Sample Number	
	BLT-P34-SO-01a		BLT-P34-SO-01b		BLT-P34-SO-02a		BLT-P34-SO-02b		BLT-P34-SO-03a		BLT-P34-SO-03b		BLT-P34-SO-04a	
Parameter	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA Pesticide (ug/kg)														
4,4'-DDD	0.364	U	0.366	U	0.369	U	0.371	U	0.613	J	0.372	U	0.367	U
4,4'-DDE	0.364	U	0.366	U	0.369	U	0.371	U	0.375	U	0.372	U	0.367	U
4,4'-DDT	0.364	U	0.366	U	0.369	U	0.371	U	0.375	U	0.372	U	0.367	U
Aldrin	0.182	U	0.183	U	0.184	U	0.185	U	0.187	U	0.186	U	0.184	U
alpha-BHC	0.182	U	0.183	U	0.184	U	0.185	U	0.187	U	0.186	U	0.184	U
beta-BHC	0.182	U	0.183	U	0.184	U	0.185	U	0.187	U	0.186	U	0.184	U
Chlordane (tech.)	1.82	U	1.83	U	1.84	U	1.85	U	1.87	U	1.86	U	1.84	U
delta-BHC	0.182	U	0.183	U	0.184	U	0.185	U	0.187	U	0.186	U	0.184	U
Dieldrin	0.364	U	0.366	U	0.369	U	0.371	U	0.375	U	0.372	U	0.367	U
Endosulfan I	0.182	U	0.183	U	0.184	U	0.185	U	0.187	U	0.186	U	0.184	U
Endosulfan II	0.364	U	0.366	U	0.369	U	0.371	U	0.375	U	0.372	U	0.367	U
Endosulfan sulfate	0.364	U	0.366	U	0.369	U	0.371	U	0.375	U	0.372	U	0.367	U
Endrin	0.364	U	0.366	U	0.369	U	0.371	U	0.375	U	0.372	U	0.367	U
Endrin aldehyde	0.364	U	0.366	U	0.369	U	0.371	U	0.375	U	0.372	U	0.367	U
Endrin ketone	0.364	U	0.366	U	0.369	U	0.371	U	0.375	U	0.372	U	0.367	U
gamma-BHC (Lindane)	0.182	U	0.183	U	0.184	U	0.185	U	0.187	U	0.186	U	0.184	U
Heptachlor	0.182	U	0.183	U	0.184	U	0.185	U	0.187	U	0.186	U	0.184	U
Heptachlor epoxide	0.182	U	0.183	U	0.184	U	0.185	U	0.187	U	0.186	U	0.184	U
Methoxychlor	1.82	U	1.83	U	1.84	U	1.85	U	1.87	U	1.86	U	1.84	U
Toxaphene	6.07	U	6.09	U	6.14	U	6.17	U	6.24	U	6.19	U	6.12	U
TCLP PCB (ug/kg)														
Parameter	BLT-P34-SO-05d		BLT-P34-SO-05e		BLT-P34-SO-05f		BLT-P34-SO-05g		BLT-P34-SO-06g		BLT-REF-SO-01a		BLT-REF-SO-01a-03	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Aroclor-1016	1.25	U	1.26	U	1.22	U	1.28	U	1.25	U	1.21	U	1.2	U
Aroclor-1221	1.25	U	1.26	U	1.22	U	1.28	U	1.25	U	1.21	U	1.2	U
Aroclor-1232	1.25	U	1.26	U	1.22	U	1.28	U	1.25	U	1.21	U	1.2	U
Aroclor-1242	1.25	U	1.26	U	1.22	U	1.28	U	1.25	U	1.21	U	1.2	U
Aroclor-1248	1.25	U	1.26	U	1.22	U	1.28	U	1.25	U	1.21	U	1.2	U
Aroclor-1254	1.25	U	1.26	U	1.22	U	1.28	U	1.25	U	1.21	U	1.2	U
Aroclor-1260	1.25	U	1.26	U	1.22	U	1.28	U	1.25	U	1.21	U	1.2	U
Herbicides (ug/kg)														
2,4,5-T	3.02	U	3.04	U	3.06	U	3.08	U	3.11	U	3.09	U	3.05	U
2,4,5-TP	3.02	U	3.04	U	3.06	U	3.08	U	3.11	U	3.09	U	3.05	U
2,4-D	3.02	U	3.04	U	3.06	U	3.08	U	3.11	U	3.09	U	3.05	U
TOC (mg/kg)														
Total Organic Carbon #1	319		239		540		555		656		701		680	
Total Organic Carbon #2	228		223		609		545		623		622		775	
Total Organic Carbon #3	225		230		630		562		670		658		784	
Total Organic Carbon #4	292		232		546		573		661		679		762	
Total Organic Carbon Average	266		231		581		559		653		665		750	
Cyanide (ug/kg)														
Cyanide, Amenable to CL	82	U	82.4	U	83	U	83.4	U	84.4	U	83.6	U	82.6	U
Cyanide, Total	82	U	82.4	U	83	U	83.4	U	84.4	U	83.6	U	82.6	U

Note: Sub-floor samples are shaded.

Table 51. Pit 34 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	BLT-P34-SO-04b		BLT-P34-SO-05c		BLT-P34-SO-05d		BLT-P34-SO-05e		BLT-P34-SO-05f		BLT-P34-SO-05g		BLT-P34-SO-06g	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)														
1,1,1,2-Tetrachloroethane	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
1,1,1-Trichloroethane	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
1,1,2,2-Tetrachloroethane	24.5	U	474	U	25.7	U	0.254	U	0.27	U	0.284	U	29.2	U
1,1,2-Trichloroethane	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
1,1-Dichloroethane	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
1,1-Dichloroethylene	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
1,1-Dichloropropene	24.5	U	474	U	25.7	U	0.254	U	0.27	U	0.284	U	29.2	U
1,2,3-Trichlorobenzene	24.5	U	474	U	25.7	U	0.254	U	0.27	U	0.284	U	29.2	U
1,2,3-Trichloropropane	48.9	U	948	U	51.3	U	0.508	U	0.54	U	0.567	U	58.5	U
1,2,4-Trichlorobenzene	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
1,2,4-Trimethylbenzene	5860		159000		681		8.59	B	7.11	B	27.1		134	U
1,2-Dibromo-3-chloropropane	48.9	U	948	U	51.3	U	0.508	U	0.54	U	0.567	U	58.5	U
1,2-Dibromoethane	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
1,2-Dichlorobenzene	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
1,2-Dichloroethane	24.5	U	474	U	25.7	U	0.254	U	0.27	U	0.284	U	29.2	U
1,2-Dichloroethylene (total)	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
1,2-Dichloropropane	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
1,3,5-Trimethylbenzene	889		379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	
1,3-Dichlorobenzene	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
1,3-Dichloropropane	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
1,4-Dichlorobenzene	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
2,2-Dichloropropane	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
2-Butanone	166		3220	U	174	U	3.57	J	3.54	J	3.4	J	199	U
2-Chloro-1,3-butadiene	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
2-Chloroethylvinyl ether	122	U	2370	U	128	U	1.27	U	1.35	U	1.42	U	146	U
2-Chlorotoluene	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
2-Hexanone	149	U	2880	U	156	U	1.55	U	1.64	U	1.72	U	178	U
2-Nitropropane	88	U	1710	U	92.4	U	0.915	U	0.972	U	1.02	U	105	U
4-Chlorotoluene	23.5	U	455	U	24.6	U	0.244	U	0.259	U	0.272	U	28.1	U
4-Isopropyltoluene	24.5	U	474	U	25.7	U	0.254	U	0.27	U	0.284	U	29.2	U
4-Methyl-2-pentanone	107	U	2070	U	112	U	4.85	J	2.7	J	9.47		127	U
Acetone	276		4890	U	265	U	43.8		30.8		44.2		302	
Acetonitrile	891		17300	U	935	U	54.4		9.84	U	68.4		1070	U
Acrolein	293	U	5690	U	308	U	3.05	U	3.24	U	3.4	U	351	U
Acrylonitrile	97.8	U	1900	U	103	U	1.02	U	1.08	U	1.13	U	117	U
Allyl chloride	196	U	3790	U	205	U	2.03	U	2.16	U	2.27	U	234	U
Benzene	32.3	U	625	U	33.9	U	0.336	U	0.356	U	0.374	U	38.6	U
Benzyl chloride	58.7	U	1140	U	61.6	U	0.61	U	0.648	U	0.68	U	70.2	U
bis(2-Chloroisopropyl)ether	147	U	2840	U	154	U	1.53	U	1.62	U	1.7	U	175	U
Bromobenzene	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
Bromochloromethane	48.9	U	948	U	51.3	U	0.508	U	0.54	U	0.567	U	58.5	U
Bromodichloromethane	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
Bromoform	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
Bromomethane	48.9	U	948	U	51.3	U	0.508	U	0.54	U	0.567	U	58.5	U
Carbon disulfide	122	U	3130	J	164	J	1.27	U	1.35	U	1.42	U	146	U
Carbon tetrachloride	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
Chlorobenzene	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U

Note: Sub-floor samples are shaded.

Table 51. Pit 34 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	BLT-P34-SO-04b		BLT-P34-SO-05c		BLT-P34-SO-05d		BLT-P34-SO-05e		BLT-P34-SO-05f		BLT-P34-SO-05g		BLT-P34-SO-06g	
Parameter	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Chloroethane	48.9	U	948	U	51.3	U	0.508	U	0.54	U	0.567	U	58.5	U
Chloroform	19.7	J	379	U	20.8	J	0.355	J	0.216	U	0.227	U	23.4	
Chloromethane	48.9	U	948	U	51.3	U	0.508	U	0.54	U	0.567	U	58.5	U
cis-1,2-Dichloroethylene	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
cis-1,3-Dichloropropylene	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
cis-1,4-Dichloro-2-butene	48.9	U	948	U	51.3	U	0.508	U	0.54	U	0.567	U	58.5	U
Cyclohexane	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
Cyclohexanone	1470	U	28400	U	1540	U	15.3	U	16.2	U	17	U	1750	U
Dibromochloromethane	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
Dibromomethane	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
Dichlorodifluoromethane	48.9	U	948	U	51.3	U	0.508	U	0.54	U	0.567	U	58.5	U
Ethyl ether	24.5	U	474	U	25.7	U	0.254	U	0.27	U	0.284	U	29.2	U
Ethyl methacrylate	48.9	U	948	U	51.3	U	0.508	U	0.54	U	0.567	U	58.5	U
Ethylbenzene	464		2340		20.9	J	0.477	J	0.345	J	0.699	J	23.4	
Hexachlorobutadiene	48.9	U	948	U	51.3	U	0.508	U	0.54	U	0.567	U	58.5	U
Iodomethane	163	U	3170	U	171	U	1.7	U	1.8	U	1.89	U	195	U
Isobutyl alcohol	978	U	19000	U	1030	U	10.2	U	10.8	U	11.3	U	1170	U
Isopropylbenzene	184		583	J	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
m,p-Xylenes	2440		23700		147	J	3.17	B	1.97	BJ	7.15		41.8	
Methacrylonitrile	68.5	U	1330	U	71.9	U	0.712	U	0.756	U	0.794	U	81.9	U
Methyl acetate	163	U	3170	U	171	U	10.7		4.45	J	7.69	J	195	U
Methyl methacrylate	97.8	U	1900	U	103	U	1.02	U	1.08	U	1.13	U	117	U
Methylcyclohexane	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
Methylene chloride	196	U	3790	U	205	U	2.03	U	2.16	U	2.27	U	234	U
Naphthalene	298		379	U	20.5	U	7.31		4.04		7.07		23.4	
n-Butyl alcohol	2640	U	51200	U	2770	U	27.5	U	29.2	U	30.6	U	3160	U
n-Butylbenzene	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
n-Propylbenzene	458		1090	J	20.5	U	0.203	U	0.216	U	0.227	U	23.4	
o-Xylene	913		4080		33.4	J	0.728	J	0.451	J	1.95		23.4	
Pentachloroethane	147	U	2840	U	154	U	1.53	U	1.62	U	1.7	U	175	U
Propionitrile	97.8	U	1900	U	103	U	1.02	U	1.08	U	1.13	U	117	U
sec-Butylbenzene	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
Styrene	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
tert-Butyl methyl ether	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
tert-Butylbenzene	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
Tetrachloroethylene	19.6	U	379	U	20.5	U	0.203	U	0.216	U	0.227	U	23.4	U
Toluene	716		8320		55.8	J	10.5		3.56		12.9		83.8	
trans-1,2-Dichloroethylene	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
trans-1,3-Dichloropropylene	29.3	U	569	U	30.8	U	0.305	U	0.324	U	0.34	U	35.1	U
trans-1,4-Dichloro-2-butene	48.9	U	948	U	51.3	U	0.508	U	0.54	U	0.567	U	58.5	U
Trichloroethylene	24.5	U	474	U	25.7	U	0.254	U	0.27	U	0.284	U	51.6	U
Trichlorofluoromethane	48.9	U	948	U	51.3	U	0.508	U	0.54	U	0.567	U	58.5	U
Trichlorotrifluoroethane	97.8	U	1900	U	103	U	1.02	U	1.08	U	1.13	U	117	U
Vinyl acetate	122	U	2370	U	128	U	1.27	U	1.35	U	1.42	U	146	U
Vinyl chloride	48.9	U	948	U	51.3	U	0.508	U	0.54	U	0.567	U	58.5	U
Xylenes (total)	3350		27800		181		3.9	B	2.42	B	9.11		57.3	

Note: Sub-floor samples are shaded.

Table 51. Pit 34 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	BLT-P34-SO-04b		BLT-P34-SO-05c		BLT-P34-SO-05d		BLT-P34-SO-05e		BLT-P34-SO-05f		BLT-P34-SO-05g		BLT-P34-SO-06g	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA SVOC (ug/kg)														
1,1'-Biphenyl	112	U	114	U	113	U	114	U	110	U	116	U	112	U
1,2,4-Trichlorobenzene	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
1,2-Dichlorobenzene	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
1,3-Dichlorobenzene	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
1,4-Dichlorobenzene	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
2,4,5-Trichlorophenol	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
2,4,6-Trichlorophenol	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
2,4-Dichlorophenol	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
2,4-Dimethylphenol	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
2,4-Dinitrophenol	141	U	144	U	143	U	144	U	140	U	147	U	142	U
2,4-Dinitrotoluene	37.2	U	37.9	U	37.6	U	38	U	36.7	U	38.6	U	37.4	U
2,6-Dinitrotoluene	37.2	U	37.9	U	37.6	U	38	U	36.7	U	38.6	U	37.4	U
2-Chloronaphthalene	13	U	13.3	U	13.2	U	13.3	U	12.9	U	13.5	U	13.1	U
2-Chlorophenol	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
2-Methyl-4,6-dinitrophenol	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
2-Methylnaphthalene	7.43	U	2560		7.53	U	7.59	U	7.34	U	7.71	U	7.49	U
2-Nitrophenol	37.2	U	37.9	U	37.6	U	38	U	36.7	U	38.6	U	37.4	U
3,3'-Dichlorobenzidine	112	U	114	U	113	U	114	U	110	U	116	U	112	U
4-Bromophenylphenylether	37.2	U	37.9	U	37.6	U	38	U	36.7	U	38.6	U	37.4	U
4-Chloro-3-methylphenol	37.2	U	37.9	U	37.6	U	38	U	36.7	U	38.6	U	37.4	U
4-Chloroaniline	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
4-Chlorophenylphenylether	37.2	U	37.9	U	37.6	U	38	U	36.7	U	38.6	U	37.4	U
4-Nitrophenol	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Acenaphthene	12.4	U	12.7	U	12.6	U	12.7	U	12.3	U	12.9	U	12.5	U
Acenaphthylene	11.2	U	11.4	U	11.3	U	11.4	U	11	U	11.6	U	11.2	U
alpha-Terpineol	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Anthracene	7.43	U	7.58	U	7.53	U	7.59	U	7.34	U	7.71	U	7.49	U
Atrazine	112	U	114	U	113	U	114	U	110	U	116	U	112	U
Benzaldehyde	112	U	114	U	113	U	114	U	110	U	116	U	112	U
Benzo(a)anthracene	11.2	U	11.4	U	11.3	U	11.4	U	11	U	11.6	U	11.2	U
Benzo(a)pyrene	11.2	U	11.4	U	11.3	U	11.4	U	11	U	11.6	U	11.2	U
Benzo(b)fluoranthene	11.2	U	11.4	U	11.3	U	11.4	U	11	U	11.6	U	11.2	U
Benzo(ghi)perylene	11.2	U	11.4	U	11.3	U	11.4	U	11	U	11.6	U	11.2	U
Benzo(k)fluoranthene	11.2	U	11.4	U	11.3	U	11.4	U	11	U	11.6	U	11.2	U
bis(2-Chloroethoxy)methane	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
bis(2-Chloroethyl) ether	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
bis(2-Chloroisopropyl)ether	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
bis(2-Ethylhexyl)phthalate	74.3	U	2020		113	J	75.9	U	186		77.1	U	74.9	U
Butylbenzylphthalate	74.3	U	189	J	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Carbazole	11.2	U	11.4	U	11.3	U	11.4	U	11	U	11.6	U	11.2	U
Chrysene	11.2	U	11.4	U	11.3	U	11.4	U	11	U	11.6	U	11.2	U
Dibenzo(a,h)anthracene	11.2	U	11.4	U	11.3	U	11.4	U	11	U	11.6	U	11.2	U
Dibenzofuran	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Diethylphthalate	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Dimethylphthalate	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Di-n-butylphthalate	37.2	U	179	J	37.6	U	38	U	36.7	U	38.6	U	37.4	U
Di-n-octylphthalate	74.3	U	109	J	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Diphenylamine	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U

Note: Sub-floor samples are shaded.

Table 51. Pit 34 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	BLT-P34-SO-04b		BLT-P34-SO-05c		BLT-P34-SO-05d		BLT-P34-SO-05e		BLT-P34-SO-05f		BLT-P34-SO-05g		BLT-P34-SO-06g	
Parameter	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Fluoranthene	11.2	U	11.4	U	11.3	U	11.4	U	11	U	11.6	U	11.2	U
Fluorene	11.2	U	11.4	U	11.3	U	11.4	U	11	U	11.6	U	11.2	U
Hexachlorobenzene	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Hexachlorobutadiene	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Hexachlorocyclopentadiene	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Hexachloroethane	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Indeno(1,2,3-cd)pyrene	11.2	U	11.4	U	11.3	U	11.4	U	11	U	11.6	U	11.2	U
Isophorone	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
m,p-Cresols	149	U	152	U	151	U	152	U	147	U	154	U	150	U
m-Nitroaniline	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Naphthalene	37.1	J	161		11.3	U	11.4	U	11	U	11.6	U	11.2	U
Nitrobenzene	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
N-Nitrosodipropylamine	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
o-Cresol	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
o-Nitroaniline	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Pentachlorophenol	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Phenanthrene	11.2	U	11.4	U	11.3	U	11.4	U	11	U	11.6	U	11.2	U
Phenol	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
p-Nitroaniline	74.3	U	75.8	U	75.3	U	75.9	U	73.4	U	77.1	U	74.9	U
Pyrene	11.7	U	11.9	U	11.8	U	11.9	U	11.5	U	12.1	U	11.8	U
RCRA Metals (mg/kg)														
Aluminum	14400		8110		10100		2910				3510		18000	
Antimony	0.443	U	0.434	U	0.712	J	0.441	U			1.3		0.468	J
Arsenic	6.07		4.13		4.93		1.28	J			59.6		6.87	
Barium	25.4		32.4		17.3		10.5				9.98		28.8	
Beryllium	0.217	J	0.117	J	0.131	J	0.11	U			0.112	U	0.238	J
Cadmium	0.111	U	0.109	U	0.108	U	0.11	U			0.19	J	0.112	U
Calcium	98.1		155		165		24				21.8		86.6	
Chromium	21.6		18.9		24.5		6.94				61.1		26.7	
Cobalt	1.2		0.651		0.737		0.221	U			0.223	U	1.36	
Copper	9.8		11.5		14.5		2.67				10.4		13.9	
Iron	13200		9140		11500		1750				18100		15300	
Lead	6.69		5		5.41		4.45				9.22		7.02	
Magnesium	473		247		288		68.8				115		529	
Manganese	20.5		13.3		16.4		2.9				6.73		17.1	
Mercury	23.8		20.8		30.3		10.2	J	13.7		12.8		19.5	
Nickel	5.16		4.66		4.44		0.909				0.863		6.13	
Potassium	548		319		351		334				327		623	
Selenium	0.664	U	0.651	U	0.645	U	0.662	U			0.67	U	0.671	U
Silver	0.111	U	0.109	U	0.108	U	0.11	U			0.112	U	0.112	U
Sodium	18.6		26.5		10.4	J	12.1	J			13	J	22	
Thallium	0.553	U	0.543	U	0.538	U	0.552	U			0.558	U	0.559	U
Vanadium	40.1		25.4		31.7		15.3				90.3		47.2	
Zinc	16.4		56.5		72.7		1.61				2.72		22.7	

Note: Sub-floor samples are shaded.

Table 51. Pit 34 Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	BLT-P34-SO-04b		BLT-P34-SO-05c		BLT-P34-SO-05d		BLT-P34-SO-05e		BLT-P34-SO-05f		BLT-P34-SO-05g		BLT-P34-SO-06g	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA Pesticide (ug/kg)														
4,4'-DDD	0.372	6	0.379	U	1.7		0.38	U	0.367	6	0.386	U	1.13	J
4,4'-DDE	0.372	6	0.379	U	0.376	U	0.38	U	0.367	6	0.386	U	0.374	U
4,4'-DDT	0.372	6	0.379	U	1.15	JP	0.38	U	0.367	6	0.386	U	0.374	U
Aldrin	0.186	6	0.19	U	0.188	U	0.19	U	0.184	6	0.193	U	0.187	U
alpha-BHC	0.186	6	0.19	U	0.188	U	0.19	U	0.184	6	0.193	U	0.187	U
beta-BHC	0.186	6	0.19	U	0.188	U	0.19	U	0.184	6	0.193	U	0.187	U
Chlordane (tech.)	1.86	6	1.9	U	1.88	U	1.9	U	1.84	6	1.93	U	1.87	U
delta-BHC	0.186	6	0.19	U	0.188	U	0.19	U	0.184	6	0.193	U	0.187	U
Dieldrin	0.372	6	0.379	U	0.376	U	0.38	U	0.367	6	0.386	U	0.374	U
Endosulfan I	0.186	6	0.19	U	0.188	U	0.19	U	0.184	6	0.193	U	0.187	U
Endosulfan II	0.372	6	0.379	U	0.376	U	0.38	U	0.367	6	0.386	U	0.374	U
Endosulfan sulfate	0.372	6	0.379	U	0.376	U	0.38	U	0.367	6	0.386	U	0.374	U
Endrin	0.372	6	0.379	U	0.376	U	0.38	U	0.367	6	0.386	U	0.374	U
Endrin aldehyde	0.372	6	0.379	U	0.376	U	0.38	U	0.367	6	0.386	U	0.374	U
Endrin ketone	0.372	6	0.379	U	0.376	U	0.38	U	0.367	6	0.386	U	0.374	U
gamma-BHC (Lindane)	0.186	6	0.19	U	0.188	U	0.19	U	0.184	6	0.193	U	0.187	U
Heptachlor	0.186	6	0.19	U	0.188	U	0.19	U	0.184	6	0.193	U	0.187	U
Heptachlor epoxide	0.186	6	0.19	U	0.188	U	0.19	U	0.184	6	0.193	U	0.187	U
Methoxychlor	1.86	6	1.9	U	1.88	U	1.9	U	1.84	6	1.93	U	1.87	U
Toxaphene	6.19	6	6.31	U	6.27	U	6.32	U	6.11	6	6.42	U	6.23	U
TCLP PCB (ug/kg)														
Parameter	**BLT-REF-SO-01a-2**		**BLT-REF-SO-01b**		**BLT-REF-SO-01b-03**		**BLT-REF-SO-01b-2**		**BLT-REF-SO-02a**		**BLT-REF-SO-02a-03**		**BLT-REF-SO-02a-2**	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Aroclor-1016	1.2	6	1.21	6	1.19	6	1.23	6	1.19	6	1.22	6	1.27	6
Aroclor-1221	1.2	6	1.21	6	1.19	6	1.23	6	1.19	6	1.22	6	1.27	6
Aroclor-1232	1.2	6	1.21	6	1.19	6	1.23	6	1.19	6	1.22	6	1.27	6
Aroclor-1242	1.2	6	1.21	6	1.19	6	1.23	6	1.19	6	1.22	6	1.27	6
Aroclor-1248	1.2	6	1.21	6	1.19	6	1.23	6	1.19	6	1.22	6	1.27	6
Aroclor-1254	1.2	6	1.21	6	1.19	6	1.23	6	1.19	6	1.22	6	1.27	6
Aroclor-1260	1.2	6	1.21	6	1.19	6	1.23	6	1.19	6	1.22	6	1.27	6
Herbicides (ug/kg)														
2,4,5-T	3.09	U	1.89	U	1.87	U	1.89	U	1.83	U	1.92	U	3.11	U
2,4,5-TP	3.09	U	1.89	U	1.87	U	1.89	U	1.83	U	1.92	U	3.11	U
2,4-D	3.09	U	1.89	U	1.87	U	1.89	U	1.83	U	1.92	U	3.11	U
TOC (mg/kg)														
Total Organic Carbon #1	846		443		1210		430		70.1	J	128		616	
Total Organic Carbon #2	781		441		1230		467		76.2	J	114		736	
Total Organic Carbon #3	767		425		1240		581		80.3	J	127		619	
Total Organic Carbon #4	840		450		1180		490		86.3	J	153		631	
Total Organic Carbon Average	808		440		1210		492		78.2	J	131		651	
Cyanide (ug/kg)														
Cyanide, Amenable to CL	83.6	U											84.2	U
Cyanide, Total	83.6	U											84.2	U

Note: Sub-floor samples are shaded.

Table 52. Pit 34 Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																										
	BLT-P34-SO-01a				BLT-P34-SO-01b				BLT-P34-SO-02a				BLT-P34-SO-02b				BLT-P34-SO-03a				BLT-P34-SO-03b				BLT-P34-SO-04a			
	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual
Gamma Scan (901.1mod/HASL 300)																												
Actinium-228	0.74	+/-	0.15		0.66	+/-	0.12		1.21	+/-	0.17		1.22	+/-	0.26		1.03	+/-	0.18		1.46	+/-	0.20		0.89	+/-	0.25	
Americium-241	0.00	+/-	0.07	U	0.02	+/-	0.07	U	-0.14	+/-	0.08	U	-0.03	+/-	0.04	U	0.00	+/-	0.02	U	-0.01	+/-	0.10	U	0.12	+/-	0.16	U
Antimony-124	0.00	+/-	0.03	U	0.00	+/-	0.03	U	0.00	+/-	0.04	U	-0.02	+/-	0.05	U	-0.01	+/-	0.04	U	0.02	+/-	0.05	U	0.02	+/-	0.05	U
Antimony-125	0.02	+/-	0.04	U	0.00	+/-	0.04	U	0.04	+/-	0.05	U	0.01	+/-	0.07	U	0.01	+/-	0.04	U	0.01	+/-	0.06	U	-0.07	+/-	0.07	U
Barium-133	-0.01	+/-	0.02	U	0.00	+/-	0.02	U	-0.01	+/-	0.03	U	0.01	+/-	0.03	U	-0.04	+/-	0.02	U	-0.01	+/-	0.03	U	-0.01	+/-	0.03	U
Barium-140	-0.02	+/-	0.07	U	0.01	+/-	0.07	U	0.03	+/-	0.08	U	0.10	+/-	0.14	U	0.00	+/-	0.08	U	0.11	+/-	0.10	U	-0.04	+/-	0.11	U
Beryllium-7	-0.11	+/-	0.13	U	-0.04	+/-	0.12	U	-0.04	+/-	0.15	U	-0.01	+/-	0.23	U	-0.12	+/-	0.13	U	0.07	+/-	0.18	U	-0.08	+/-	0.19	U
Bismuth-212	0.32	+/-	0.19		0.57	+/-	0.21		0.67	+/-	0.19		1.04	+/-	0.41		0.71	+/-	0.23		0.73	+/-	0.36		0.53	+/-	0.31	
Bismuth-214	0.49	+/-	0.07		0.37	+/-	0.06		0.72	+/-	0.08		0.72	+/-	0.12		0.60	+/-	0.07		0.72	+/-	0.09		0.51	+/-	0.12	
Cerium-139	0.00	+/-	0.01	U	0.00	+/-	0.01	U	-0.01	+/-	0.01	U	0.02	+/-	0.02	U	0.00	+/-	0.01	U	0.00	+/-	0.02	U	0.00	+/-	0.02	U
Cerium-141	0.01	+/-	0.03	U	0.01	+/-	0.02	U	0.03	+/-	0.04	U	0.01	+/-	0.03	U	0.01	+/-	0.03	U	0.01	+/-	0.04	U	0.00	+/-	0.03	U
Cerium-144	-0.03	+/-	0.08	U	-0.04	+/-	0.08	U	-0.06	+/-	0.10	U	-0.12	+/-	0.13	U	-0.01	+/-	0.07	U	0.01	+/-	0.12	U	0.05	+/-	0.14	U
Cesium-134	0.03	+/-	0.03	U	0.00	+/-	0.03	U	0.00	+/-	0.03	UI	0.00	+/-	0.07	UI	0.00	+/-	0.03	UI	0.00	+/-	0.04	UI	0.05	+/-	0.03	U
Cesium-136	-0.01	+/-	0.03	U	-0.01	+/-	0.03	U	-0.01	+/-	0.03	U	0.04	+/-	0.05	U	0.01	+/-	0.03	U	0.01	+/-	0.04	U	0.00	+/-	0.04	U
Cesium-137	-0.01	+/-	0.02	U	0.00	+/-	0.02	U	0.02	+/-	0.02	U	0.00	+/-	0.03	U	0.00	+/-	0.02	U	0.01	+/-	0.03	U	0.01	+/-	0.03	U
Chromium-51	-0.04	+/-	0.14	U	0.06	+/-	0.13	U	-0.02	+/-	0.16	U	0.05	+/-	0.22	U	-0.03	+/-	0.13	U	0.20	+/-	0.19	U	-0.08	+/-	0.18	U
Cobalt-56	-0.01	+/-	0.02	U	0.00	+/-	0.02	U	0.00	+/-	0.02	U	0.00	+/-	0.03	U	-0.02	+/-	0.02	U	0.02	+/-	0.02	U	0.00	+/-	0.02	U
Cobalt-57	0.01	+/-	0.01	U	0.01	+/-	0.01	U	-0.01	+/-	0.01	U	0.01	+/-	0.02	U	0.00	+/-	0.01	U	0.00	+/-	0.02	U	0.00	+/-	0.02	U
Cobalt-58	-0.01	+/-	0.01	U	0.01	+/-	0.02	U	-0.02	+/-	0.02	U	0.00	+/-	0.03	U	0.00	+/-	0.02	U	0.00	+/-	0.02	U	-0.02	+/-	0.02	U
Cobalt-60	0.00	+/-	0.02	U	0.00	+/-	0.02	U	0.00	+/-	0.02	U	0.02	+/-	0.03	U	0.00	+/-	0.02	U	0.00	+/-	0.02	U	-0.02	+/-	0.03	U
Europium-152	-0.02	+/-	0.04	U	0.00	+/-	0.04	U	-0.02	+/-	0.05	U	-0.01	+/-	0.07	U	0.01	+/-	0.04	U	-0.06	+/-	0.06	U	-0.03	+/-	0.06	U
Europium-154	0.02	+/-	0.05	U	0.04	+/-	0.05	U	-0.01	+/-	0.05	U	-0.05	+/-	0.08	U	0.02	+/-	0.05	U	0.05	+/-	0.07	U	-0.07	+/-	0.09	U
Europium-155	0.03	+/-	0.04	U	0.05	+/-	0.05	U	0.05	+/-	0.07	U	0.09	+/-	0.10	U	0.00	+/-	0.05	UI	0.08	+/-	0.08	U	0.02	+/-	0.07	U
Iridium-192	0.00	+/-	0.01	U	0.01	+/-	0.01	U	0.00	+/-	0.02	U	-0.01	+/-	0.02	U	0.01	+/-	0.01	U	-0.01	+/-	0.02	U	0.00	+/-	0.02	U
Iron-59	0.03	+/-	0.05	U	0.00	+/-	0.03	U	-0.01	+/-	0.03	U	0.00	+/-	0.06	U	-0.02	+/-	0.03	U	-0.01	+/-	0.05	U	-0.02	+/-	0.06	U
Lead-210	0.34	+/-	1.98	U	0.00	+/-	2.55	UI	0.04	+/-	2.55	U	0.79	+/-	0.69		1.00	+/-	0.37		1.43	+/-	3.39	U	4.69	+/-	4.16	
Lead-212	0.68	+/-	0.05		0.62	+/-	0.05		1.15	+/-	0.06		1.36	+/-	0.08		1.19	+/-	0.05		1.25	+/-	0.08		0.97	+/-	0.11	
Lead-214	0.51	+/-	0.07		0.46	+/-	0.07		0.68	+/-	0.08		0.75	+/-	0.13		0.76	+/-	0.07		0.75	+/-	0.11		0.68	+/-	0.11	
Manganese-54	0.00	+/-	0.02	U	0.01	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.03	U	0.01	+/-	0.02	U	0.00	+/-	0.03	UI	0.02	+/-	0.03	U
Mercury-203	0.00	+/-	0.03	UI	0.02	+/-	0.03	U	0.00	+/-	0.02	UI	0.02	+/-	0.03	U	0.00	+/-	0.02	UI	0.00	+/-	0.04	UI	0.00	+/-	0.04	UI
Neodymium-147	0.06	+/-	0.15	U	0.02	+/-	0.13	U	0.12	+/-	0.15	U	0.11	+/-	0.26	U	0.05	+/-	0.14	U	0.04	+/-	0.20	U	-0.07	+/-	0.22	U
Neptunium-239	-0.03	+/-	0.08	U	0.04	+/-	0.08	U	-0.02	+/-	0.09	U	0.07	+/-	0.12	U	-0.07	+/-	0.07	U	-0.07	+/-	0.11	U	0.04	+/-	0.12	U
Niobium-94	0.01	+/-	0.02	U	0.00	+/-	0.01	U	0.00	+/-	0.02	U	-0.02	+/-	0.03	U	0.03	+/-	0.02	U	-0.01	+/-	0.02	U	-0.01	+/-	0.02	U
Niobium-95	0.01	+/-	0.02	U	0.00	+/-	0.02	U	0.02	+/-	0.02	U	0.05	+/-	0.03	U	0.03	+/-	0.02	U	0.03	+/-	0.03	U	0.02	+/-	0.03	U
Potassium-40	2.75	+/-	0.46		2.99	+/-	0.44		4.77	+/-	0.54		4.40	+/-	0.66		4.16	+/-	0.51		4.94	+/-	0.62		4.22	+/-	0.66	
Promethium-144	0.01	+/-	0.02	U	0.00	+/-	0.01	U	0.00	+/-	0.02	U	0.01	+/-	0.03	U	0.01	+/-	0.02	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U
Promethium-146	0.01	+/-	0.02	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U	0.04	+/-	0.03	U	0.02	+/-	0.02	U	0.01	+/-	0.03	U	0.02	+/-	0.03	U
Radium-226		+/-				+/-				+/-				+/-				+/-				+/-				+/-		
Radium-228	0.74	+/-	0.15		0.66	+/-	0.12		1.21	+/-	0.17		1.22	+/-	0.26		1.03	+/-	0.18		1.46	+/-	0.20		0.89	+/-	0.25	
Ruthenium-106	-0.03	+/-	0.14	U	-0.07	+/-	0.14	U	0.08	+/-	0.15	U	-0.18	+/-	0.25	U	0.05	+/-	0.14	U	0.02	+/-	0.20	U	0.20	+/-	0.26	U
Silver-110m	0.00	+/-	0.01	U	0.00	+/-	0.01	U	-0.02	+/-	0.02	U	0.00	+/-	0.03	U	0.00	+/-	0.02	U	-0.01	+/-	0.02	U	-0.01	+/-	0.02	U
Sodium-22	0.01	+/-	0.02	U	0.02	+/-	0.02	U	0.00	+/-	0.02	U	-0.02	+/-	0.03	U	0.01	+/-	0.02	U	0.02	+/-	0.03	U	-0.03	+/-	0.03	U
Thallium-208	0.25	+/-	0.04		0.24	+/-	0.04		0.36	+/-	0.05		0.43	+/-	0.06		0.40	+/-	0.04		0.35	+/-	0.06		0.30	+/-	0.06	
Thorium-230	0.49	+/-	0.07		0.37	+/-	0.06		0.72	+/-	0.08		0.72	+/-	0.12		0.60	+/-	0.07		0.72	+/-	0.09		0.51	+/-	0.12	
Thorium-234	0.96	+/-	0.83		1.45	+/-	1.16		1.42	+/-	0.96		1.74	+/-	0.75		1.24	+/-	0.40		1.43	+/-	1.20		1.23	+/-	1.36	U
Tin-113	-0.01	+/-	0.02	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U	-0.01	+/-	0.03	U	0.01	+/-	0.02	U	-0.02	+/-	0.03	U	0.00	+/-	0.03	U
Uranium-235	0.07	+/-	0.14	U	0.05	+/-	0.13	U	0.18	+/-	0.21	U	0.08	+/-	0.24	U	0.05	+/-	0.13	U	0.07	+/-	0.19	U	0.05	+/-	0.13	U
Uranium-238	0.96	+/-	0.83		1.45	+/-	1.16		1.42	+/-	0.96		1.74	+/-	0.75		1.24	+/-	0.40		1.43	+/-	1.20		1.23	+/-	1.36	U

Note: Sub-floor samples are shaded.

Table 52. Pit 34 Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																											
	BLT-P34-SO-01a				BLT-P34-SO-01b				BLT-P34-SO-02a				BLT-P34-SO-02b				BLT-P34-SO-03a				BLT-P34-SO-03b				BLT-P34-SO-04a			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (901.1mod/HASL 300)																												
Yttrium-88	0.00	+/-	0.02	U	0.00	+/-	0.02	U	-0.01	+/-	0.02	U	0.00	+/-	0.03	U	0.01	+/-	0.02	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U
Zinc-65	0.02	+/-	0.04	U	0.00	+/-	0.04	U	-0.02	+/-	0.04	U	0.01	+/-	0.07	U	0.01	+/-	0.04	U	0.03	+/-	0.06	U	-0.01	+/-	0.06	U
Zirconium-95	0.01	+/-	0.03	U	0.01	+/-	0.03	U	0.04	+/-	0.05	U	0.00	+/-	0.06	U	0.03	+/-	0.03	U	0.01	+/-	0.04	U	0.01	+/-	0.04	U
C-14 (EERF C-01 mod)	-0.28	+/-	0.67	U	-0.23	+/-	0.62	U	0.10	+/-	0.70	U	0.02	+/-	0.62	U	1.61	+/-	0.70		1.24	+/-	0.74		7.31	+/-	0.89	
Cl-36 (GL-Rad-A033)	0.11	+/-	0.07	U	0.08	+/-	0.06	U	0.06	+/-	0.06	U	-0.04	+/-	0.03	U	0.01	+/-	0.06	U	-0.02	+/-	0.04	U	-0.02	+/-	0.05	U
Ni-63 (RESL Ni-1 mod)	-3.58	+/-	0.86	U	-0.50	+/-	1.05	U	0.41	+/-	1.31	U	-0.45	+/-	1.15	U	-1.30	+/-	0.99	U	0.07	+/-	1.02	U	-0.86	+/-	1.02	U
Sr-90 (905.0 mod)	0.04	+/-	0.08	U	0.05	+/-	0.06	U	0.03	+/-	0.07	U	0.01	+/-	0.08	U	-0.02	+/-	0.06	U	-0.02	+/-	0.07	U	0.07	+/-	0.08	U
H-3 (906.0 mod)	5.10	+/-	0.65		5.29	+/-	0.76		0.45	+/-	0.54	U	1.89	+/-	0.62		5.21	+/-	0.76		4.91	+/-	0.58		6.32	+/-	0.78	

Note: Sub-floor samples are shaded.

Table 52. Pit 34 Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																											
	BLT-P34-SO-04b				BLT-P34-SO-05c				BLT-P34-SO-05d				BLT-P34-SO-05e				BLT-P34-SO-05f				BLT-P34-SO-05g				BLT-P34-SO-06g			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (901																												
Actinium-228	1.07	+/-	0.21		1.04	+/-	0.20		0.89	+/-	0.21		0.89	+/-	0.37		1.40	+/-	0.36		1.19	+/-	0.27		1.18	+/-	0.19	
Americium-241	0.01	+/-	0.04	U	0.02	+/-	0.20	U	0.09	+/-	0.12	U	-0.01	+/-	0.04	U	-0.02	+/-	0.06	U	0.00	+/-	0.05	U	0.00	+/-	0.06	U
Antimony-124	0.01	+/-	0.06	U	0.02	+/-	0.05	U	-0.02	+/-	0.07	U	0.04	+/-	0.08	U	-0.04	+/-	0.10	U	0.04	+/-	0.07	U	0.01	+/-	0.02	U
Antimony-125	0.01	+/-	0.07	U	0.00	+/-	0.07	U	-0.02	+/-	0.08	U	-0.04	+/-	0.09	U	0.10	+/-	0.12	U	-0.07	+/-	0.08	U	0.01	+/-	0.03	U
Barium-133	0.00	+/-	0.04	U	0.00	+/-	0.03	U	0.02	+/-	0.05	U	0.01	+/-	0.04	U	-0.03	+/-	0.06	U	-0.03	+/-	0.04	U	0.00	+/-	0.02	U
Barium-140	0.10	+/-	0.17	U	0.05	+/-	0.26	U	0.00	+/-	0.25	U	-0.09	+/-	0.28	U	-0.14	+/-	0.43	U	0.08	+/-	0.29	U	0.05	+/-	0.07	U
Beryllium-7	-0.07	+/-	0.20	U	0.01	+/-	0.23	U	0.24	+/-	0.30	U	0.03	+/-	0.29	U	-0.01	+/-	0.41	U	-0.22	+/-	0.30	U	0.04	+/-	0.11	U
Bismuth-212	0.84	+/-	0.49		1.01	+/-	0.36		0.40	+/-	0.51	U	1.04	+/-	0.42		0.81	+/-	0.70		1.39	+/-	0.52		0.81	+/-	0.22	
Bismuth-214	0.61	+/-	0.13		0.61	+/-	0.11		0.00	+/-	0.13	UI	0.56	+/-	0.18		0.70	+/-	0.15		0.57	+/-	0.13		0.64	+/-	0.09	
Cerium-139	0.01	+/-	0.02	U	-0.01	+/-	0.02	U	-0.03	+/-	0.03	U	0.01	+/-	0.02	U	0.00	+/-	0.03	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U
Cerium-141	-0.04	+/-	0.03	U	0.00	+/-	0.05	U	0.01	+/-	0.09	U	0.05	+/-	0.05	U	0.02	+/-	0.07	U	0.02	+/-	0.05	U	0.02	+/-	0.03	U
Cerium-144	-0.14	+/-	0.13	U	0.04	+/-	0.17	U	0.16	+/-	0.16	U	0.00	+/-	0.16	U	0.05	+/-	0.19	U	0.01	+/-	0.13	U	-0.01	+/-	0.09	U
Cesium-134	0.05	+/-	0.05	U	0.06	+/-	0.05	U	0.04	+/-	0.04	U	0.08	+/-	0.06	U	0.10	+/-	0.09	U	0.00	+/-	0.05	UI	0.00	+/-	0.03	UI
Cesium-136	-0.04	+/-	0.05	U	0.05	+/-	0.09	U	0.09	+/-	0.07	U	0.03	+/-	0.19	U	0.02	+/-	0.15	U	-0.10	+/-	0.11	U	0.00	+/-	0.02	U
Cesium-137	-0.05	+/-	0.04	U	-0.01	+/-	0.03	U	0.03	+/-	0.06	U	0.02	+/-	0.04	U	-0.02	+/-	0.05	U	0.00	+/-	0.03	U	-0.01	+/-	0.01	U
Chromium-51	0.01	+/-	0.19	U	0.10	+/-	0.37	U	0.06	+/-	0.34	U	-0.03	+/-	0.33	U	-0.56	+/-	0.49	U	-0.18	+/-	0.34	U	-0.01	+/-	0.12	U
Cobalt-56	0.00	+/-	0.03	U	-0.01	+/-	0.03	U	0.00	+/-	0.04	U	0.00	+/-	0.04	U	-0.01	+/-	0.05	U	-0.01	+/-	0.03	U	0.01	+/-	0.01	U
Cobalt-57	0.02	+/-	0.01	U	0.00	+/-	0.02	U	-0.01	+/-	0.02	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.02	U	-0.01	+/-	0.01	U
Cobalt-58	0.03	+/-	0.03	U	0.01	+/-	0.03	U	0.01	+/-	0.03	U	0.02	+/-	0.04	U	0.00	+/-	0.05	U	0.00	+/-	0.04	U	-0.01	+/-	0.01	U
Cobalt-60	0.00	+/-	0.03	U	0.01	+/-	0.03	U	-0.01	+/-	0.03	U	0.02	+/-	0.03	U	0.05	+/-	0.05	U	0.03	+/-	0.03	U	-0.01	+/-	0.02	U
Europium-152	-0.03	+/-	0.06	U	-0.02	+/-	0.07	U	-0.03	+/-	0.08	U	-0.04	+/-	0.08	U	0.06	+/-	0.11	U	-0.03	+/-	0.08	U	-0.02	+/-	0.04	U
Europium-154	0.02	+/-	0.08	U	0.03	+/-	0.08	U	-0.04	+/-	0.10	U	0.07	+/-	0.11	U	0.10	+/-	0.16	U	-0.06	+/-	0.09	U	0.00	+/-	0.04	U
Europium-155	0.04	+/-	0.09	U	0.01	+/-	0.09	U	0.07	+/-	0.08	U	0.06	+/-	0.09	U	0.05	+/-	0.10	U	0.10	+/-	0.09	U	0.05	+/-	0.05	U
Iridium-192	0.01	+/-	0.02	U	-0.02	+/-	0.03	U	0.00	+/-	0.03	U	0.00	+/-	0.03	U	0.03	+/-	0.04	U	0.01	+/-	0.03	U	0.00	+/-	0.01	U
Iron-59	-0.05	+/-	0.06	U	-0.02	+/-	0.07	U	0.02	+/-	0.07	U	0.04	+/-	0.08	U	0.03	+/-	0.10	U	-0.04	+/-	0.08	U	-0.01	+/-	0.03	U
Lead-210	0.87	+/-	0.64		3.57	+/-	6.85	U	0.25	+/-	3.70	U	0.78	+/-	0.73		0.55	+/-	0.97	U	0.42	+/-	0.73	U	0.78	+/-	1.79	U
Lead-212	0.95	+/-	0.07		0.95	+/-	0.11		0.96	+/-	0.10		1.12	+/-	0.16		0.99	+/-	0.18		1.01	+/-	0.10		1.16	+/-	0.10	
Lead-214	0.87	+/-	0.12		0.68	+/-	0.12		0.69	+/-	0.12		0.68	+/-	0.16		0.57	+/-	0.17		0.65	+/-	0.11		0.79	+/-	0.09	
Manganese-54	0.00	+/-	0.03	UI	0.03	+/-	0.03	U	0.05	+/-	0.02	U	0.02	+/-	0.03	U	0.00	+/-	0.05	U	0.00	+/-	0.03	U	0.02	+/-	0.02	U
Mercury-203	0.02	+/-	0.03	U	0.01	+/-	0.04	U	0.00	+/-	0.07	UI	0.00	+/-	0.04	U	-0.02	+/-	0.05	U	0.04	+/-	0.04	U	0.02	+/-	0.01	U
Neodymium-147	-0.01	+/-	0.24	U	-0.31	+/-	0.57	U	-0.39	+/-	0.57	U	-0.42	+/-	0.69	U	0.22	+/-	0.90	U	0.00	+/-	0.61	U	-0.07	+/-	0.13	U
Neptunium-239	0.05	+/-	0.11	U	-0.03	+/-	0.14	U	-0.11	+/-	0.15	U	0.04	+/-	0.14	U	-0.12	+/-	0.17	U	0.00	+/-	0.12	U	-0.03	+/-	0.08	U
Niobium-94	0.00	+/-	0.03	U	0.02	+/-	0.03	U	-0.01	+/-	0.03	U	0.02	+/-	0.03	U	0.01	+/-	0.04	U	0.01	+/-	0.03	U	0.01	+/-	0.01	U
Niobium-95	0.03	+/-	0.03	U	0.00	+/-	0.05	U	0.05	+/-	0.05	U	0.01	+/-	0.05	U	0.01	+/-	0.08	U	0.03	+/-	0.04	U	0.03	+/-	0.02	U
Potassium-40	4.81	+/-	0.84		3.58	+/-	0.86		5.32	+/-	1.07		6.85	+/-	1.09		6.42	+/-	1.14		8.09	+/-	0.97		4.41	+/-	0.54	
Promethium-144	-0.01	+/-	0.03	U	0.04	+/-	0.07	U	0.02	+/-	0.03	U	-0.01	+/-	0.03	U	-0.01	+/-	0.05	U	0.01	+/-	0.03	U	0.00	+/-	0.01	U
Promethium-146	0.00	+/-	0.03	U	0.00	+/-	0.03	U	-0.03	+/-	0.04	U	0.00	+/-	0.04	U	-0.03	+/-	0.05	U	0.04	+/-	0.03	U	0.02	+/-	0.02	U
Radium-226		+/-			0.61	+/-	0.11		0.62	+/-	0.13		0.56	+/-	0.18		0.70	+/-	0.15		0.57	+/-	0.13			+/-		
Radium-228	1.07	+/-	0.21		1.04	+/-	0.20		0.89	+/-	0.21		0.89	+/-	0.37		1.40	+/-	0.36		1.19	+/-	0.27		1.18	+/-	0.19	
Ruthenium-106	-0.33	+/-	0.24	U	0.07	+/-	0.27	U	-0.15	+/-	0.27	U	0.07	+/-	0.31	U	0.29	+/-	0.41	U	0.24	+/-	0.30	U	0.16	+/-	0.13	U
Silver-110m	0.02	+/-	0.03	U	0.03	+/-	0.02	U	0.01	+/-	0.03	U	-0.01	+/-	0.03	U	0.02	+/-	0.05	U	-0.02	+/-	0.03	U	0.00	+/-	0.01	U
Sodium-22	0.01	+/-	0.03	U	0.01	+/-	0.03	U	-0.02	+/-	0.04	U	0.02	+/-	0.04	U	0.04	+/-	0.06	U	-0.02	+/-	0.03	U	0.00	+/-	0.01	U
Thallium-208	0.33	+/-	0.06		0.35	+/-	0.06		0.23	+/-	0.07		0.33	+/-	0.08		0.38	+/-	0.13		0.40	+/-	0.07		0.40	+/-	0.05	
Thorium-230	0.61	+/-	0.13		0.61	+/-	0.11		0.62	+/-	0.13		0.56	+/-	0.18		0.70	+/-	0.15		0.57	+/-	0.13		0.64	+/-	0.09	
Thorium-234	1.91	+/-	0.74		1.18	+/-	2.30	U	-0.39	+/-	1.05	U	0.60	+/-	0.67	U	1.06	+/-	1.06		0.43	+/-	0.95	U	1.22	+/-	0.82	
Tin-113	0.01	+/-	0.03	U	0.00	+/-	0.04	U	-0.01	+/-	0.04	U	0.02	+/-	0.04	U	-0.01	+/-	0.06	U	-0.01	+/-	0.04	U	-0.01	+/-	0.02	U
Uranium-235	0.16	+/-	0.13	U	0.10	+/-	0.16	U	0.04	+/-	0.27	U	0.03	+/-	0.17	U	0.32	+/-	0.33	U	0.01	+/-	0.24	U	0.10	+/-	0.14	U
Uranium-238	1.91	+/-	0.74		1.18	+/-	2.30	U	-0.39	+/-	1.05	U	0.60	+/-	0.67	U	1.06	+/-	1.06		0.43	+/-	0.95	U	1.22	+/-	0.82	

Note: Sub-floor samples are shaded.

Table 52. Pit 34 Soil - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																											
	BLT-P34-SO-04b				BLT-P34-SO-05c				BLT-P34-SO-05d				BLT-P34-SO-05e				BLT-P34-SO-05f				BLT-P34-SO-05g				BLT-P34-SO-06g			
	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual
Gamma Scan (901																												
Yttrium-88	0.01	+/-	0.03	U	0.02	+/-	0.03	U	-0.03	+/-	0.04	U	0.01	+/-	0.03	U	0.01	+/-	0.05	U	0.02	+/-	0.03	U	0.01	+/-	0.01	U
Zinc-65	0.02	+/-	0.07	U	0.02	+/-	0.06	U	-0.01	+/-	0.08	U	-0.03	+/-	0.09	U	0.03	+/-	0.11	U	-0.07	+/-	0.08	U	0.00	+/-	0.03	U
Zirconium-95	0.03	+/-	0.05	U	0.04	+/-	0.05	U	0.03	+/-	0.06	U	0.02	+/-	0.07	U	-0.04	+/-	0.10	U	0.03	+/-	0.07	U	0.04	+/-	0.03	U
C-14 (EERF C-01 mod)	4.73	+/-	0.81		1.96	+/-	0.89		0.71	+/-	0.87	U	0.56	+/-	0.84	U		+/-			1.56	+/-	0.83		0.94	+/-	0.73	U
Cl-36 (GL-Rad-A033)	-0.03	+/-	0.04	U	0.05	+/-	0.07	U	0.02	+/-	0.05	U	-0.03	+/-	0.04	U		+/-			0.00	+/-	0.04	U	0.03	+/-	0.06	U
Ni-63 (RESL Ni-1 mod)	-0.96	+/-	1.02	U	0.65	+/-	1.48	U	-1.10	+/-	1.39	U	-0.62	+/-	1.62	U	-0.14	+/-	1.64	U	-0.16	+/-	1.54	U	0.71	+/-	1.02	U
Sr-90 (905.0 mod)	0.08	+/-	0.09	U	0.03	+/-	0.05	U	0.08	+/-	0.07	U	-0.01	+/-	0.05	U	0.08	+/-	0.08	U	0.00	+/-	0.06	U	0.08	+/-	0.08	U
H-3 (906.0 mod)	7.95	+/-	0.73		15.60	+/-	0.78		-0.16	+/-	0.55	U	24.80	+/-	0.93			+/-			19.20	+/-	0.84		7.31	+/-	0.85	

Note: Sub-floor samples are shaded.

Table 53. Pit 34 Groundwater - Non-Radiological Detection
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	Sample Number							
		BLT-P34-SO-06l		BLT-P34-TW-01f		BLT-P34-TW-01u		BLT-P34-TW-03u	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/l)									
1,2,4-Trimethylbenzene	NA	0.25	U	0.365	BJ	0.539	BJ	0.892	BJ
2-Butanone	NA	1.25	U	13.9		1.25	U	1.25	U
Acetone	5475	8.6		28.3		1.25	U	1.25	U
Benzene	0.34	0.3	U	0.3	U	0.3	U	0.906	J
Chloroform	0.15	0.25	U	0.25	U	0.33	J	0.25	U
Chloromethane	189.8	0.5	U	0.5	U	0.505	J	0.5	U
Ethylbenzene	1339.87	0.25	U	0.25	U	0.282	J	0.744	J
m,p-Xylenes	NA	0.25	U	0.567	J	0.672	J	2.47	
o-Xylene	NA	0.25	U	0.25	U	0.25	U	0.837	J
Toluene	2271.11	0.269	J	1.58		3.21		2.73	
Xylenes (total)	212.6	0.25	U	0.567	J	0.672	J	3.31	
RCRA SVOC (ug/l)									
RCRA Metals (ug/l)									
Aluminum	NA	68	U	68	U	24600			
Antimony	14.6	4	U	4.95	J	6.46	J		
Arsenic	0.04	6	U	6	U	**34.7**			
Barium	7300	1	U	50.4		85.3			
Calcium	NA	36	U	4030		2750			
Chromium	109.5	1	U	1	U	93.1			
Cobalt	NA	1	U	3.13	J	3.44	J		
Copper	1460	3	U	3	U	75.5			
Iron	10950	18	U	2470		**40000**			
Lead	NA	2.5	U	2.5	U	11.7			
Magnesium	NA	85	U	3410		2930			
Manganese	730	2	U	70		62.1			
Nickel	730	1	U	11.6		33.1			
Potassium	NA	50	U	1820		3460			
Selenium	182.5	6	U	6	U	9.08	J		
Sodium	NA	93.8	J	1180000		955000			
Vanadium	36.5	1	U	1	U	**113**			
Zinc	10950	2	U	64.9		46.3			
RCRA Pesticide (ug/l)									
TCL PCB (ug/l)									
Herbicides (ug/l)									
NA = Not Available									

Note: Sub-floor samples are shaded.

Table 54. Pit 34 Groundwater - Radiological Detection
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	MCL	BLT-P34-SO-06l		BLT-P34-TW-01f		BLT-P34-TW-01u	
		Result	Qual	Result	Qual	Result	Qual
Gamma Scan (901.1mod/HASL 300)							
Bismuth-214	NA	0	UI	6.80	U	17.70	
Lead-212	NA	2.67	U	5.02	U	10.10	
Lead-214	NA	1.99	U	5.63	U	19.90	
Thorium-230[1]	15	0	UI	6.80	U	**17.70**	
Thorium-234	NA	78.9	U	73.40	U	342	

1 MCL is 15 pCi/L with the concentration level combined for all alpha emitters, except for radon and uranium
Note: Sub-floor samples are shaded.

Table 55. Pit 34 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number							
	BLT-P34-SO-06l		BLT-P34-TW-01f		BLT-P34-TW-01u		BLT-P34-TW-03u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/l)								
1,1,1,2-Tetrachloroethane	0.25	U	0.25	U	0.25	U	0.25	U
1,1,1-Trichloroethane	0.3	U	0.3	U	0.3	U	0.3	U
1,1,2,2-Tetrachloroethane	0.25	U	0.25	U	0.25	U	0.25	U
1,1,2-Trichloroethane	0.25	U	0.25	U	0.25	U	0.25	U
1,1-Dichloroethane	0.3	U	0.3	U	0.3	U	0.3	U
1,1-Dichloroethylene	0.3	U	0.3	U	0.3	U	0.3	U
1,1-Dichloropropene	0.25	U	0.25	U	0.25	U	0.25	U
1,2,3-Trichlorobenzene	0.3	U	0.3	U	0.3	U	0.3	U
1,2,3-Trichloropropane	0.3	U	0.3	U	0.3	U	0.3	U
1,2,4-Trichlorobenzene	0.3	U	0.3	U	0.3	U	0.3	U
1,2,4-Trimethylbenzene	0.25	U	0.365	BJ	0.539	BJ	0.892	BJ
1,2-Dibromo-3-chloropropane	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dibromoethane	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichloroethane	0.25	U	0.25	U	0.25	U	0.25	U
1,2-Dichloroethylene (total)	0.3	U	0.3	U	0.3	U	0.3	U
1,2-Dichloropropane	0.25	U	0.25	U	0.25	U	0.25	U
1,3,5-Trimethylbenzene	0.25	U	0.25	U	0.25	U	0.25	U
1,3-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U
1,3-Dichloropropane	0.25	U	0.25	U	0.25	U	0.25	U
1,4-Dichlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U
2,2-Dichloropropane	0.3	U	0.3	U	0.3	U	0.3	U
2-Butanone	1.25	U	13.9		1.25	U	1.25	U
2-Chloro-1,3-butadiene	0.3	U	0.3	U	0.3	U	0.3	U
2-Chloroethylvinyl ether	1.5	U	1.5	U	1.5	U	1.5	U
2-Chlorotoluene	0.25	U	0.25	U	0.25	U	0.25	U
2-Hexanone	1.25	U	1.25	U	1.25	U	1.25	U
2-Nitropropane	1	U	1	U	1	U	1	U
4-Chlorotoluene	0.25	U	0.25	U	0.25	U	0.25	U
4-Isopropyltoluene	0.25	U	0.25	U	0.25	U	0.25	U
4-Methyl-2-pentanone	1.25	U	1.25	U	1.25	U	1.25	U
Acetone	8.6		28.3		1.25	U	1.25	U
Acetonitrile	6.25	U	6.25	U	6.25	U	6.25	U
Acrolein	3	U	3	U	3	U	3	U
Acrylonitrile	1	U	1	U	1	U	1	U
Allyl chloride	3.7	U	3.7	U	3.7	U	3.7	U
Benzene	0.3	U	0.3	U	0.3	U	0.906	J
Benzyl chloride	1	U	1	U	1	U	1	U
bis(2-Chloroisopropyl)ether	1.5	U	1.5	U	1.5	U	1.5	U
Bromobenzene	0.25	U	0.25	U	0.25	U	0.25	U
Bromochloromethane	0.3	U	0.3	U	0.3	U	0.3	U
Bromodichloromethane	0.25	U	0.25	U	0.25	U	0.25	U
Bromoform	0.25	U	0.25	U	0.25	U	0.25	U
Bromomethane	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide	1.25	U	1.25	U	1.25	U	1.25	U
Carbon tetrachloride	0.25	U	0.25	U	0.25	U	0.25	U
Chlorobenzene	0.25	U	0.25	U	0.25	U	0.25	U
Chloroethane	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.25	U	0.25	U	0.33	J	0.25	U

Note: Sub-floor samples are shaded.

Table 55. Pit 34 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number							
	BLT-P34-SO-06l		BLT-P34-TW-01f		BLT-P34-TW-01u		BLT-P34-TW-03u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Chloromethane	0.5	U	0.5	U	0.505	J	0.5	U
cis-1,2-Dichloroethylene	0.3	U	0.3	U	0.3	U	0.3	U
cis-1,3-Dichloropropylene	0.25	U	0.25	U	0.25	U	0.25	U
cis-1,4-Dichloro-2-butene	1	U	1	U	1	U	1	U
Cyclohexane	0.3	U	0.3	U	0.3	U	0.3	U
Cyclohexanone	15	U	15	U	15	U	15	U
Dibromochloromethane	0.25	U	0.25	U	0.25	U	0.25	U
Dibromomethane	0.3	U	0.3	U	0.3	U	0.3	U
Dichlorodifluoromethane	0.5	U	0.5	U	0.5	U	0.5	U
Ethyl ether	0.3	U	0.3	U	0.3	U	0.3	U
Ethyl methacrylate	1	U	1	U	1	U	1	U
Ethylbenzene	0.25	U	0.25	U	0.282	J	0.744	J
Hexachlorobutadiene	0.25	U	0.25	U	0.25	U	0.25	U
Iodomethane	1.25	U	1.25	U	1.25	U	1.25	U
Isobutyl alcohol	12.5	U	12.5	U	12.5	U	12.5	U
Isopropylbenzene	0.25	U	0.25	U	0.25	U	0.25	U
m,p-Xylenes	0.25	U	0.567	J	0.672	J	2.47	
Methacrylonitrile	1	U	1	U	1	U	1	U
Methyl acetate	1.25	U	1.25	U	1.25	U	1.25	U
Methyl methacrylate	1	U	1	U	1	U	1	U
Methylcyclohexane	0.25	U	0.25	U	0.25	U	0.25	U
Methylene chloride	2	U	2	U	2	U	2	U
Naphthalene	0.25	U	0.25	U	0.25	U	0.25	U
n-Butyl alcohol	13	U	13	U	13	U	13	U
n-Butylbenzene	0.25	U	0.25	U	0.25	U	0.25	U
n-Propylbenzene	0.25	U	0.25	U	0.25	U	0.25	U
o-Xylene	0.25	U	0.25	U	0.25	U	0.837	J
Pentachloroethane	1	U	1	U	1	U	1	U
Propionitrile	1.5	U	1.5	U	1.5	U	1.5	U
sec-Butylbenzene	0.25	U	0.25	U	0.25	U	0.25	U
Styrene	0.25	U	0.25	U	0.25	U	0.25	U
tert-Butyl methyl ether	0.25	U	0.25	U	0.25	U	0.25	U
tert-Butylbenzene	0.25	U	0.25	U	0.25	U	0.25	U
Tetrachloroethylene	0.25	U	0.25	U	0.25	U	0.25	U
Toluene	0.269	J	1.58		3.21		2.73	
trans-1,2-Dichloroethylene	0.3	U	0.3	U	0.3	U	0.3	U
trans-1,3-Dichloropropylene	0.25	U	0.25	U	0.25	U	0.25	U
trans-1,4-Dichloro-2-butene	1	U	1	U	1	U	1	U
Trichloroethylene	0.25	U	0.25	U	0.25	U	0.25	U
Trichlorofluoromethane	0.31	U	0.31	U	0.31	U	0.31	U
Trichlorotrifluoroethane	1	U	1	U	1	U	1	U
Vinyl acetate	1.5	U	1.5	U	1.5	U	1.5	U
Vinyl chloride	0.5	U	0.5	U	0.5	U	0.5	U
Xylenes (total)	0.25	U	0.567	J	0.672	J	3.31	
RCRA SVOC (ug/l)								
1,1'-Biphenyl	2.83	U	3	U	2.97	U		
1,2,4-Trichlorobenzene	1.89	U	2	U	1.98	U		
1,2-Dichlorobenzene	1.89	U	2	U	1.98	U		
1,3-Dichlorobenzene	1.89	U	2	U	1.98	U		
1,4-Dichlorobenzene	1.89	U	2	U	1.98	U		

Note: Sub-floor samples are shaded.

Table 55. Pit 34 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number							
	BLT-P34-SO-06l		BLT-P34-TW-01f		BLT-P34-TW-01u		BLT-P34-TW-03u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual
2,4,5-Trichlorophenol	0.943	U	1	U	0.99	U		
2,4,6-Trichlorophenol	1.89	U	2	U	1.98	U		
2,4-Dichlorophenol	1.89	U	2	U	1.98	U		
2,4-Dimethylphenol	1.89	U	2	U	1.98	U		
2,4-Dinitrophenol	9.43	U	10	U	9.9	U		
2,4-Dinitrotoluene	1.89	U	2	U	1.98	U		
2,6-Dinitrotoluene	1.89	U	2	U	1.98	U		
2-Chloronaphthalene	0.33	U	0.35	U	0.347	U		
2-Chlorophenol	1.89	U	2	U	1.98	U		
2-Methyl-4,6-dinitrophenol	2.83	U	3	U	2.97	U		
2-Methylnaphthalene	0.283	U	0.3	U	0.297	U		
2-Nitrophenol	1.89	U	2	U	1.98	U		
3,3'-Dichlorobenzidine	0.943	U	1	U	0.99	U		
4-Bromophenylphenylether	1.89	U	2	U	1.98	U		
4-Chloro-3-methylphenol	1.89	U	2	U	1.98	U		
4-Chloroaniline	1.89	U	2	U	1.98	U		
4-Chlorophenylphenylether	1.89	U	2	U	1.98	U		
4-Nitrophenol	1.89	U	2	U	1.98	U		
Acenaphthene	0.292	U	0.31	U	0.307	U		
Acenaphthylene	0.189	U	0.2	U	0.198	U		
alpha-Terpineol	2.83	U	3	U	2.97	U		
Anthracene	0.189	U	0.2	U	0.198	U		
Atrazine	1.89	U	2	U	1.98	U		
Benzaldehyde	2.83	U	3	U	2.97	U		
Benzo(a)anthracene	0.189	U	0.2	U	0.198	U		
Benzo(a)pyrene	0.189	U	0.2	U	0.198	U		
Benzo(b)fluoranthene	0.189	U	0.2	U	0.198	U		
Benzo(ghi)perylene	0.189	U	0.2	U	0.198	U		
Benzo(k)fluoranthene	0.189	U	0.2	U	0.198	U		
bis(2-Chloroethoxy)methane	2.83	U	3	U	2.97	U		
bis(2-Chloroethyl) ether	1.89	U	2	U	1.98	U		
bis(2-Chloroisopropyl)ether	1.89	U	2	U	1.98	U		
bis(2-Ethylhexyl)phthalate	1.89	U	2	U	1.98	U		
Butylbenzylphthalate	1.89	U	2	U	1.98	U		
Carbazole	0.189	U	0.2	U	0.198	U		
Chrysene	0.189	U	0.2	U	0.198	U		
Dibenzo(a,h)anthracene	0.189	U	0.2	U	0.198	U		
Dibenzofuran	1.89	U	2	U	1.98	U		
Diethylphthalate	1.89	U	2	U	1.98	U		
Dimethylphthalate	1.89	U	2	U	1.98	U		
Di-n-butylphthalate	1.89	U	2	U	1.98	U		
Di-n-octylphthalate	2.83	U	3	U	2.97	U		
Diphenylamine	2.83	U	3	U	2.97	U		
Fluoranthene	0.189	U	0.2	U	0.198	U		
Fluorene	0.189	U	0.2	U	0.198	U		
Hexachlorobenzene	1.89	U	2	U	1.98	U		
Hexachlorobutadiene	1.89	U	2	U	1.98	U		
Hexachlorocyclopentadiene	1.89	U	2	U	1.98	U		
Hexachloroethane	1.89	U	2	U	1.98	U		
Indeno(1,2,3-cd)pyrene	0.189	U	0.2	U	0.198	U		

Note: Sub-floor samples are shaded.

Table 55. Pit 34 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number							
	BLT-P34-SO-06l		BLT-P34-TW-01f		BLT-P34-TW-01u		BLT-P34-TW-03u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Isophorone	1.89	U	2	U	1.98	U		
m,p-Cresols	2.83	U	3	U	2.97	U		
m-Nitroaniline	1.89	U	2	U	1.98	U		
Naphthalene	0.283	U	0.3	U	0.297	U		
Nitrobenzene	2.83	U	3	U	2.97	U		
N-Nitrosodipropylamine	1.89	U	2	U	1.98	U		
o-Cresol	1.89	U	2	U	1.98	U		
o-Nitroaniline	1.89	U	2	U	1.98	U		
Pentachlorophenol	1.89	U	2	U	1.98	U		
Phenanthrene	0.189	U	0.2	U	0.198	U		
Phenol	0.943	U	1	U	0.99	U		
p-Nitroaniline	2.83	U	3	U	2.97	U		
Pyrene	0.283	U	0.3	U	0.297	U		
RCRA Metals (ug/l)								
Aluminum	68	U	68	U	24600			
Antimony	4	U	4.95	J	6.46	J		
Arsenic	6	U	6	U	34.7			
Barium	1	U	50.4		85.3			
Beryllium	1	U	1	U	1	U		
Cadmium	1	U	1	U	1	U		
Calcium	36	U	4030		2750			
Chromium	1	U	1	U	93.1			
Cobalt	1	U	3.13	J	3.44	J		
Copper	3	U	3	U	75.5			
Iron	18	U	2470		40000			
Lead	2.5	U	2.5	U	11.7			
Magnesium	85	U	3410		2930			
Manganese	2	U	70		62.1			
Mercury	0.06	U	0.06	U	0.06	U		
Nickel	1	U	11.6		33.1			
Potassium	50	U	1820		3460			
Selenium	6	U	6	U	9.08	J		
Silver	1	U	1	U	1	U		
Sodium	93.8	J	1180000		955000			
Thallium	5	U	5	U	5	U		
Vanadium	1	U	1	U	113			
Zinc	2	U	64.9		46.3			
RCRA Pesticide (ug/l)								
4,4'-DDD	0.005	U	0.01	U	0.005	U		
4,4'-DDE	0.005	U	0.01	U	0.005	U		
4,4'-DDT	0.009	U	0.01	U	0.010	U		
Aldrin	0.005	U	0.01	U	0.005	U		
alpha-BHC	0.005	U	0.01	U	0.005	U		
beta-BHC	0.008	U	0.01	U	0.008	U		
Chlordane (tech.)	0.070	U	0.08	U	0.073	U		
delta-BHC	0.005	U	0.01	U	0.005	U		
Dieldrin	0.005	U	0.01	U	0.005	U		
Endosulfan I	0.005	U	0.01	U	0.005	U		
Endosulfan II	0.005	U	0.01	U	0.005	U		
Endosulfan sulfate	0.005	U	0.01	U	0.005	U		

Note: Sub-floor samples are shaded.

Table 55. Pit 34 Groundwater - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number							
	BLT-P34-SO-06l		BLT-P34-TW-01f		BLT-P34-TW-01u		BLT-P34-TW-03u	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Endrin	0.005	U	0.01	U	0.005	U		
Endrin aldehyde	0.005	U	0.01	U	0.005	U		
Endrin ketone	0.012	U	0.01	U	0.012	U		
gamma-BHC (Lindane)	0.005	U	0.01	U	0.005	U		
Heptachlor	0.006	U	0.01	U	0.006	U		
Heptachlor epoxide	0.005	U	0.01	U	0.005	U		
Methoxychlor	0.046	U	0.05	U	0.048	U		
Toxaphene	0.138	U	0.15	U	0.143	U		
TCL PCB (ug/l)								
Aroclor-1016	0.033	U	0.03	U	0.032	U		
Aroclor-1221	0.033	U	0.03	U	0.032	U		
Aroclor-1232	0.033	U	0.03	U	0.032	U		
Aroclor-1242	0.033	U	0.03	U	0.032	U		
Aroclor-1248	0.033	U	0.03	U	0.032	U		
Aroclor-1254	0.033	U	0.03	U	0.032	U		
Aroclor-1260	0.033	U	0.03	U	0.032	U		
Herbicides (ug/l)								
2,4,5-T	0.0755	U	0.0806	U	0.0806	U		
2,4,5-TP	0.0755	U	0.0806	U	0.0806	U		
2,4-D	0.0755	U	0.0806	U	0.0806	U		
TOC (mg/l)								
Total Organic Carbon #1	0.33	U	5.39		2.98			
Total Organic Carbon #2	0.33	U	5.45		3.05			
Total Organic Carbon #3	0.33	U	5.57		2.98			
Total Organic Carbon #4	0.33	U	5.56		3.05			
Total Organic Carbon Average	0.33	U	99		3.01			
Cyanide (ug/l)								
Cyanide, Amenable to CL	1.5	U	1.5	U	1.5	U		
Cyanide, Total	1.5	U	1.5	U	1.5	U		
pH			5.29	H	5.25	H		

Note: Sub-floor samples are shaded.

Table 56. Pit 34 Groundwater - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (Unit is pCi/L)											
	BLT-P34-SO-06I				BLT-P34-TW-01f				BLT-P34-TW-01u			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (901.1mod/HASL 300)												
Actinium-228	5.46	+/-	13.7	U	16.40	+/-	14.50	U	11.00	+/-	8.08	U
Americium-241	-5.86	+/-	10.7	U	0.47	+/-	16.90	U	11.40	+/-	18.90	U
Antimony-124	-1.86	+/-	5.13	U	0.79	+/-	5.63	U	1.36	+/-	4.86	U
Antimony-125	2.41	+/-	5.96	U	2.75	+/-	7.15	U	-1.37	+/-	5.80	U
Barium-133	0.663	+/-	3.26	U	-0.20	+/-	3.48	U	0.13	+/-	3.10	U
Barium-140	-4.11	+/-	11.1	U	3.76	+/-	15.30	U	-5.97	+/-	13.40	U
Beryllium-7	0.43	+/-	19.8	U	-0.59	+/-	23.30	U	1.31	+/-	20.80	U
Bismuth-212	5.57	+/-	18.7	U	-0.42	+/-	21.50	U	-2.73	+/-	21.30	U
Bismuth-214	0	+/-	5.17	UI	6.80	+/-	7.04	U	17.70	+/-	7.57	
Cerium-139	-0.0797	+/-	1.93	U	0.39	+/-	2.52	U	0.39	+/-	2.13	U
Cerium-141	0.72	+/-	3.55	U	-1.49	+/-	5.12	U	-0.64	+/-	4.25	U
Cerium-144	8.09	+/-	13.9	U	8.09	+/-	17.5	U	2.11	+/-	15.10	U
Cesium-134	0.46	+/-	2.59	U	2.27	+/-	2.47	U	-1.1	+/-	2.43	U
Cesium-136	2.97	+/-	3.48	U	-1.09	+/-	4.83	U	0.00	+/-	9.67	UI
Cesium-137	-0.402	+/-	2.36	U	-0.09	+/-	2.52	U	2.16	+/-	2.51	U
Chromium-51	4.07	+/-	22	U	11.10	+/-	25.80	U	3.25	+/-	22.60	U
Cobalt-56	0.173	+/-	3.3	U	0.22	+/-	2.23	U	2.02	+/-	2.45	U
Cobalt-57	-0.349	+/-	1.78	U	-0.30	+/-	2.11	U	0.98	+/-	1.91	U
Cobalt-58	-0.774	+/-	2.3	U	-1.24	+/-	2.05	U	-0.30	+/-	1.94	U
Cobalt-60	0.999	+/-	2.5	U	0.04	+/-	2.26	U	0.84	+/-	2.41	U
Europium-152	2.96	+/-	7.08	U	-8.53	+/-	7.80	U	4.25	+/-	6.25	U
Europium-154	-5.44	+/-	6.94	U	3.67	+/-	6.54	U	2.93	+/-	7.27	U
Europium-155	-2.53	+/-	7.34	U	-0.49	+/-	8.91	U	1.90	+/-	8.05	U
Iridium-192	0.339	+/-	2.23	U	0.13	+/-	2.65	U	0.79	+/-	2.30	U
Iron-59	4.12	+/-	4.39	U	-2.62	+/-	5.02	U	1.56	+/-	6.29	U
Lead-210	383	+/-	877	U	-274.00	+/-	545.00	U	297.00	+/-	943.00	U
Lead-212	2.67	+/-	8.4	U	5.02	+/-	4.95	U	10.10	+/-	6.32	
Lead-214	1.99	+/-	10.4	U	5.63	+/-	8.88	U	19.90	+/-	10.40	
Manganese-54	1.33	+/-	2.33	U	1.70	+/-	2.16	U	-1.09	+/-	2.17	U
Mercury-203	0.933	+/-	2.61	U	1.16	+/-	3.31	U	0.48	+/-	2.70	U
Neodymium-147	-4.02	+/-	22.1	U	-5.72	+/-	32.10	U	2.71	+/-	27.60	U
Neptunium-239	-1.36	+/-	13.5	U	9.44	+/-	15.40	U	12.80	+/-	14.60	U
Niobium-94	0.536	+/-	1.97	U	0.93	+/-	2.07	U	0.55	+/-	2.13	U
Niobium-95	-0.206	+/-	2.65	U	0.16	+/-	2.72	U	-0.03	+/-	2.58	U
Potassium-40	0	+/-	32.4	UI	9.83	+/-	60.50	U	12.30	+/-	43.40	U
Promethium-144	0.995	+/-	2.29	U	1.21	+/-	2.08	U	0.22	+/-	2.03	U
Promethium-146	0.43	+/-	2.92	U	5.88	+/-	4.69	U	-0.28	+/-	2.83	U
Radium-228	5.46	+/-	13.7	U	16.40	+/-	14.50	U	11.00	+/-	8.08	U
Ruthenium-106	7.58	+/-	20.9	U	0.08	+/-	20.60	U	24.40	+/-	19.10	U
Silver-110m	-0.694	+/-	1.98	U	1.80	+/-	2.30	U	-0.44	+/-	2.39	U
Sodium-22	-1.97	+/-	2.47	U	1.31	+/-	2.34	U	1.05	+/-	2.60	U
Thallium-208	3.73	+/-	2.37	U	3.44	+/-	4.79	U	1.34	+/-	2.76	U
Thorium-230	0	+/-	5.17	UI	6.80	+/-	7.04	U	17.70	+/-	7.57	
Thorium-234	78.9	+/-	152	U	73.40	+/-	158	U	342	+/-	306	
Tin-113	0.89	+/-	3.04	U	-1.78	+/-	3.43	U	0	+/-	2.88	U
Uranium-235	4.32	+/-	13.9	U	13.90	+/-	18.30	U	-0.25	+/-	15.30	U
Uranium-238	78.9	+/-	152	U	73.40	+/-	158	U	0.00	+/-	306	UI
Yttrium-88	-1.52	+/-	2.7	U	1.00	+/-	2.45	U	-0.17	+/-	2.71	U
Zinc-65	0.353	+/-	5.21	U	1.00	+/-	4.66	U	-5.84	+/-	5.16	U

Note: Sub-floor samples are shaded.

Table 56. Pit 34 Groundwater - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (Unit is pCi/L)											
	BLT-P34-SO-06l				BLT-P34-TW-01f				BLT-P34-TW-01u			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Zirconium-95	-0.162	+/-	4.39	U	-2.71	+/-	4.59	U	-2.32	+/-	4.04	U
C-14 (EERF C-01 mod)	3.51	+/-	17.9	U	-8.22	+/-	17.20	U	-2.08	+/-	17.40	U
Cl-36 (GL-Rad-A033)	-5.28	+/-	6.12	U	0.56	+/-	6.66	U	13.00	+/-	8.98	U
Ni-63 (RESL Ni-1 mod)	-9.44	+/-	13.4	U	1.82	+/-	17.20	U	3.31	+/-	17.10	U
Sr-90 (905.0 mod)	0.582	+/-	0.492	U	-0.30	+/-	0.53	U	-0.31	+/-	0.46	U
H-3 (906.0 mod)	-72.6	+/-	228	U	81.80	+/-	228	U	164	+/-	231	U

Note: Sub-floor samples are shaded.

Table 57. Pit 34 Waste Solid and Waste Liquid - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	TCLP	UTS	BLT-P34-WS-01		BLT-P34-WS-02		BLT-P34-WS-03		BLT-P34-WS-04		BLT-P34-WS-05	
			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
TCLP VOC (mg/l)												
1,1,1-Trichloroethane	NA	0.054	0.00461	J	0.03	U	0.003	U	0.003	U	0.003	U
2-Butanone	NA		0.0125	U	0.125	U	0.0125	U	0.0159	J	0.0125	U
Acetone	NA	0.28	0.0859		0.151		0.0486	J	0.127		0.056	
Benzene	0.5	0.14	0.003	U	***0.162***		0.003	U	0.003	U	0.003	U
Chloroform	6	0.046	0.00357	J	***0.187***		0.0025	U	0.0025	U	0.0025	U
Ethylbenzene	NA	0.057	0.0025	U	***0.929***		0.00543	J	0.00362	J	0.0025	U
Methylene chloride	NA	0.089	0.02	U	0.2	U	0.02	U	0.02	U	0.02	U
Toluene	NA	0.08	***0.012***		***5.41***		0.0131		0.00434	J	0.0037	J
Xylenes (total)	NA	0.32	0.0381		***10.5***		0.127		0.0454		0.00422	J
TCLP SVOC (mg/l)												
o-Cresol	200	0.11	0.01	U	0.0887		0.0108	J	0.01	U	0.01	U
TCLP Metals (mg/l)												
Barium	100	1.2	0.137		0.282		0.158		0.179		0.109	
Lead	5	0.69	0.025	U	0.3		0.131		0.0294	J	0.0292	J
Mercury	0.2	0.15	0.00093	J	0.0006	U	0.0006	U	0.0006	U	0.0006	U
RCRA PCB (ug/kg)												
TCLP Pesticides (mg/l)												
Aroclor-1248	NA	0.1	***81.3***	J	33.3	U	1.11	U	1.11	U	1.11	U
Aroclor-1254	NA	0.1	***38.1***	J	33.3	U	1.11	U	1.11	U	1.11	U

Parameter	TCLP	UTS	BLT-P34-WL-01		BLT-P34-WL-02	
			Result	Qual	Result	Qual
TCLP VOC (ug/l)						
Acetone	NA	280	4.22	U	***3990***	
Benzene	500	140	0.3	U	**3430**	
Chloroform	6000	46	0.25	U	***526***	
Ethyl ether	NA	120	0.3	U	***2550***	
Ethylbenzene	NA	57	0.39	U	***458***	
Isopropylbenzene	NA		0.25	U	132	J
m,p-Xylenes	NA	320	1.45	U	***4940***	
Methyl acetate	NA		1.25	U	13700	
Methylene chloride	NA	89	2	U	***789***	J
Naphthalene	NA	59	0.25	U	***139***	J
n-Propylbenzene	NA		0.25	U	132	J
o-Xylene	NA	320	0.509	U	***2060***	

Table 57. Pit 34 Waste Solid and Waste Liquid - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	TCLP	UTS	BLT-P34-WL-01		BLT-P34-WL-02	
			Result	Qual	Result	Qual
Toluene	NA	80	2.05		***9690***	
Xylenes (total)	NA		1.96		7000	
TCLP SVOC (ug/l)						
2,4-Dimethylphenol	NA	36			***108***	
bis(2-Ethylhexyl)phthalate	NA	280			***373***	
m,p-Cresols	200000	770			116	
Naphthalene	NA	59			45.8	
TCLP Metals (ug/l)						
Aluminum	NA				754000	
Antimony	NA	1900			58.9	J
Arsenic	5000	1400			220	
Barium	100000	1200			***3010***	
Beryllium	NA	820			14.7	J
Calcium	NA				49200	
Chromium	5000	2770			1010	
Cobalt	NA				127	
Copper	NA				902	
Iron	NA				683000	
Lead	5000	690			***1340***	
Magnesium	NA				61600	
Manganese	NA				2410	
Mercury	200	150			7.5	
Nickel	NA	3980			380	
Potassium	NA				44600	
Silver	5000	430			20.7	J
Sodium	NA				25100	
Vanadium	NA				1390	
Zinc	NA				2490	
RCRA PCB (ug/kg)						
4,4'-DDD	NA				0.197	
TCLP Pesticides (ug/l)						
TCLP Herbicides (ug/L)						

NA = Not Available
Note: Bolded results exceed the Universal Treatment Standard

Table 58. Pit 34 Waste Solid - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	NRC Screening Value[1]	Sample Number (All results in pCi/g)									
		BLT-P34-WS-01		BLT-P34-WS-02		BLT-P34-WS-03		BLT-P34-WS-04		BLT-P34-WS-05	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
Gamma Scan (901.1mod/HASL 300)											
Actinium-228	NA	0.71		0.66		0.79		0.87		0.90	
Bismuth-212	NA	0.00	UI	0.75	U	0.42		0.58		0.92	
Bismuth-214	NA	0.00	U	0.53		0.50		0.51		0.61	
Lead-210	0.9	0.00	UI	0.16	U	0.58	U	2.90	U	**0.92**	
Lead-212	NA	0.83		0.58		0.76		0.89		0.79	
Lead-214	NA	0.62		0.44		0.56		0.61		0.75	
Potassium-40	NA	5.12		4.64		4.52		5.36		5.43	
Radium-226	0.7	0.56		0.53		0.50		0.51		0.61	
Radium-228	NA	0.71		0.66		0.79		0.87		0.90	
Thallium-208	NA	0.27		0.22		0.23		0.25		0.24	
Thorium-230	1.8	0.56		0.53		0.50		0.51		0.61	
Thorium-234	14	0.00	UI	0.83	U	0.86		2.03		0.93	
Uranium-238	14	0.00	UI	0.83	U	0.86		2.03		0.93	
C-14 (EERF C-01 mod)	12	1.43	U	**31.50**		**24.90**		**22.00**		11.70	
Cl-36 (GL-Rad-A033)	0.36	0.01	U	0.10	U	0.16		0.06	U	0.05	U
Ni-63 (RESL Ni-1 mod)	2100	-0.11	U	0.18	U	-0.12	U	0.24	U	5.52	
H-3 (906.0 mod)	110	**397.00**		73.90		33.30		32.30		29.80	

[1] From NUREG 1757, Appendix B, Table B-2
NA = Not available for this radionuclide
Concentration that exceeds NRC screening value was highlighted.

Table 59. Pit 34 Waste Solid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number									
	BLT-P34-WS-01		BLT-P34-WS-02		BLT-P34-WS-03		BLT-P34-WS-04		BLT-P34-WS-05	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
TCLP VOC (mg/l)										
1,1,1-Trichloroethane	0.00461	J	0.03	U	0.003	U	0.003	U	0.003	U
1,1,2,2-Tetrachloroethane	0.0025	U	0.025	U	0.0025	U	0.0025	U	0.0025	U
1,1,2-Trichloroethane	0.0025	U	0.025	U	0.0025	U	0.0025	U	0.0025	U
1,1-Dichloroethane	0.003	U	0.03	U	0.003	U	0.003	U	0.003	U
1,1-Dichloroethylene	0.003	U	0.03	U	0.003	U	0.003	U	0.003	U
1,2-Dichloroethane	0.0025	U	0.025	U	0.0025	U	0.0025	U	0.0025	U
1,2-Dichloropropane	0.0025	U	0.025	U	0.0025	U	0.0025	U	0.0025	U
1,4-Dichlorobenzene	0.0025	U	0.025	U	0.0025	U	0.0025	U	0.0025	U
2-Butanone	0.0125	U	0.125	U	0.0125	U	0.0159	J	0.0125	U
2-Hexanone	0.0125	U	0.125	U	0.0125	U	0.0125	U	0.0125	U
4-Methyl-2-pentanone	0.0125	U	0.125	U	0.0125	U	0.0125	U	0.0125	U
Acetone	0.0859		0.151		0.0486	J	0.127		0.056	
Benzene	0.003	U	0.162		0.003	U	0.003	U	0.003	U
Bromodichloromethane	0.0025	U	0.025	U	0.0025	U	0.0025	U	0.0025	U
Bromoform	0.0025	U	0.025	U	0.0025	U	0.0025	U	0.0025	U
Bromomethane	0.005	U	0.05	U	0.005	U	0.005	U	0.005	U
Carbon disulfide	0.0125	U	0.125	U	0.0125	U	0.0125	U	0.0125	U
Carbon tetrachloride	0.0025	U	0.025	U	0.0025	U	0.0025	U	0.0025	U
Chlorobenzene	0.0025	U	0.025	U	0.0025	U	0.0025	U	0.0025	U
Chloroethane	0.005	U	0.05	U	0.005	U	0.005	U	0.005	U
Chloroform	0.00357	J	0.187		0.0025	U	0.0025	U	0.0025	U
Chloromethane	0.005	U	0.05	U	0.005	U	0.005	U	0.005	U
cis-1,3-Dichloropropylene	0.0025	U	0.025	U	0.0025	U	0.0025	U	0.0025	U
Dibromochloromethane	0.0025	U	0.025	U	0.0025	U	0.0025	U	0.0025	U
Ethylbenzene	0.0025	U	0.929		0.00543	J	0.00362	J	0.0025	U
Methylene chloride	0.02	U	0.2	U	0.02	U	0.02	U	0.02	U
Styrene	0.0025	U	0.025	U	0.0025	U	0.0025	U	0.0025	U
Tetrachloroethylene	0.0025	U	0.025	U	0.0025	U	0.0025	U	0.0025	U
Toluene	0.012		5.41		0.0131		0.00434	J	0.0037	J
trans-1,3-Dichloropropylene	0.0025	U	0.025	U	0.0025	U	0.0025	U	0.0025	U
Trichloroethylene	0.0025	U	0.025	U	0.0025	U	0.0025	U	0.0025	U
Vinyl acetate	0.015	U	0.15	U	0.015	U	0.015	U	0.015	U
Vinyl chloride	0.005	U	0.05	U	0.005	U	0.005	U	0.005	U
Xylenes (total)	0.0381		10.5		0.127		0.0454		0.00422	J
TCLP SVOC (mg/l)										
1,4-Dichlorobenzene	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
2,4,5-Trichlorophenol	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U
2,4,6-Trichlorophenol	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
2,4-Dinitrotoluene	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Hexachlorobenzene	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Hexachlorobutadiene	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Hexachloroethane	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
m,p-Cresols	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U
Nitrobenzene	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U
o-Cresol	0.01	U	0.0887		0.0108	J	0.01	U	0.01	U
Pentachlorophenol	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Pyridine	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U

Table 59. Pit 34 Waste Solid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number									
	BLT-P34-WS-01		BLT-P34-WS-02		BLT-P34-WS-03		BLT-P34-WS-04		BLT-P34-WS-05	
	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
TCLP Metals (mg/l)										
Arsenic	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U
Barium	0.137		0.282		0.158		0.179		0.109	
Cadmium	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Chromium	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Lead	0.025	U	0.3		0.131		0.0294	J	0.0292	J
Mercury	0.00093	J	0.0006	U	0.0006	U	0.0006	U	0.0006	U
Selenium	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U
Silver	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
RCRA PCB (ug/kg)										
Chlordane (tech.)	0.000765	U	0.000765	U	0.000765	U	0.000765	U	0.000765	U
Endrin	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
gamma-BHC (Lindane)	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
Heptachlor	0.000066	U	0.000066	U	0.000066	U	0.000066	U	0.000066	U
Heptachlor epoxide	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
Methoxychlor	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U
Toxaphene	0.0015	U	0.0015	U	0.0015	U	0.0015	U	0.0015	U
TCLP Pesticides (mg/l)										
Aroclor-1016	33.3	U	33.3	U	1.11	U	1.11	U	1.11	U
Aroclor-1221	33.3	U	33.3	U	1.11	U	1.11	U	1.11	U
Aroclor-1232	33.3	U	33.3	U	1.11	U	1.11	U	1.11	U
Aroclor-1242	33.3	U	33.3	U	1.11	U	1.11	U	1.11	U
Aroclor-1248	81.3	J	33.3	U	1.11	U	1.11	U	1.11	U
Aroclor-1254	38.1	J	33.3	U	1.11	U	1.11	U	1.11	U
Aroclor-1260	33.3	U	33.3	U	1.11	U	1.11	U	1.11	U

Table 60. Pit 34 Waste Solid- Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																			
	BLT-P34-WS-01				BLT-P34-WS-02				BLT-P34-WS-03				BLT-P34-WS-04				BLT-P34-WS-05			
	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual
Gamma Scan (901.1mod/HASL 300)																				
Actinium-228	0.71	+/-	0.20		0.66	+/-	0.36		0.79	+/-	0.10		0.87	+/-	0.17		0.90	+/-	0.29	
Americium-241	0.18	+/-	0.29	U	0.01	+/-	0.06	U	0.02	+/-	0.03	U	0.01	+/-	0.13	U	0.00	+/-	0.04	UI
Antimony-124	-0.01	+/-	0.08	U	-0.02	+/-	0.13	U	0.00	+/-	0.01	U	0.08	+/-	0.06	U	-0.06	+/-	0.12	U
Antimony-125	-0.01	+/-	0.08	U	-0.02	+/-	0.13	U	-0.01	+/-	0.02	U	0.02	+/-	0.05	U	0.03	+/-	0.08	U
Barium-133	0.04	+/-	0.04	U	0.03	+/-	0.07	U	0.00	+/-	0.01	U	0.00	+/-	0.03	U	0.00	+/-	0.04	U
Barium-140	0.10	+/-	0.26	U	0.16	+/-	0.47	U	-0.03	+/-	0.05	U	0.08	+/-	0.16	U	-0.03	+/-	0.25	U
Beryllium-7	-0.07	+/-	0.29	U	0.08	+/-	0.46	U	0.00	+/-	0.06	U	-0.09	+/-	0.19	U	0.22	+/-	0.29	U
Bismuth-212	0.00	+/-	0.36	UI	0.75	+/-	0.63	U	0.42	+/-	0.11		0.58	+/-	0.24		0.92	+/-	0.36	
Bismuth-214	0.00	+/-	0.12	U	0.53	+/-	0.17		0.50	+/-	0.06		0.51	+/-	0.09		0.61	+/-	0.17	
Cerium-139	-0.01	+/-	0.02	U	-0.03	+/-	0.03	U	0.01	+/-	0.01	U	-0.02	+/-	0.02	U	0.00	+/-	0.02	U
Cerium-141	0.01	+/-	0.06	U	0.07	+/-	0.13	U	0.02	+/-	0.02	U	0.00	+/-	0.03	U	0.00	+/-	0.05	UI
Cerium-144	-0.09	+/-	0.15	U	-0.09	+/-	0.22	U	-0.01	+/-	0.04	U	-0.02	+/-	0.12	U	0.12	+/-	0.17	U
Cesium-134	0.04	+/-	0.06	U	0.01	+/-	0.07	U	0.00	+/-	0.01	UI	0.02	+/-	0.03	U	0.04	+/-	0.05	U
Cesium-136	-0.03	+/-	0.10	U	0.12	+/-	0.19	U	-0.01	+/-	0.02	U	0.06	+/-	0.07	U	0.02	+/-	0.13	U
Cesium-137	0.00	+/-	0.05	UI	-0.02	+/-	0.06	U	0.01	+/-	0.01	U	0.01	+/-	0.02	U	0.01	+/-	0.04	U
Chromium-51	0.45	+/-	0.38	U	-0.07	+/-	0.57	U	0.02	+/-	0.07	U	-0.01	+/-	0.23	U	0.17	+/-	0.35	U
Cobalt-56	-0.02	+/-	0.04	U	0.03	+/-	0.07	U	0.00	+/-	0.01	U	-0.01	+/-	0.02	U	0.00	+/-	0.04	U
Cobalt-57	0.02	+/-	0.02	U	-0.02	+/-	0.03	U	0.00	+/-	0.01	U	0.01	+/-	0.01	U	0.01	+/-	0.02	U
Cobalt-58	0.01	+/-	0.03	U	0.01	+/-	0.06	U	-0.01	+/-	0.01	U	-0.03	+/-	0.02	U	0.02	+/-	0.04	U
Cobalt-60	0.05	+/-	0.04	U	0.00	+/-	0.06	U	0.00	+/-	0.01	U	0.02	+/-	0.02	U	-0.01	+/-	0.04	U
Europium-152	-0.05	+/-	0.09	U	0.03	+/-	0.14	U	-0.03	+/-	0.02	U	0.01	+/-	0.05	U	-0.01	+/-	0.11	U
Europium-154	-0.01	+/-	0.10	U	-0.02	+/-	0.19	U	0.01	+/-	0.02	U	-0.01	+/-	0.06	U	0.10	+/-	0.16	U
Europium-155	0.06	+/-	0.08	U	0.09	+/-	0.11	U	0.04	+/-	0.04	U	0.09	+/-	0.10	U	0.05	+/-	0.07	U
Iridium-192	-0.02	+/-	0.03	U	0.03	+/-	0.05	U	0.00	+/-	0.01	U	-0.01	+/-	0.02	U	-0.02	+/-	0.03	U
Iron-59	-0.02	+/-	0.07	U	0.06	+/-	0.13	U	0.00	+/-	0.02	U	0.00	+/-	0.07	UI	0.03	+/-	0.08	U
Lead-210	0.00	+/-	13.10	UI	0.16	+/-	1.23	U	0.58	+/-	0.91	U	2.90	+/-	4.54	U	0.92	+/-	0.42	
Lead-212	0.83	+/-	0.11		0.58	+/-	0.15		0.76	+/-	0.06		0.89	+/-	0.07		0.79	+/-	0.13	
Lead-214	0.62	+/-	0.12		0.44	+/-	0.21		0.56	+/-	0.06		0.61	+/-	0.09		0.75	+/-	0.14	
Manganese-54	-0.01	+/-	0.03	U	0.02	+/-	0.06	U	0.01	+/-	0.01	U	0.02	+/-	0.04	U	0.01	+/-	0.04	U
Mercury-203	0.02	+/-	0.04	U	0.01	+/-	0.06	U	0.00	+/-	0.01	UI	0.01	+/-	0.03	U	0.00	+/-	0.06	UI
Neodymium-147	0.11	+/-	0.58	U	-0.35	+/-	1.02	U	-0.05	+/-	0.11	U	0.19	+/-	0.35	U	0.16	+/-	0.57	U
Neptunium-239	-0.02	+/-	0.14	U	-0.10	+/-	0.19	U	-0.01	+/-	0.04	U	0.10	+/-	0.11	U	-0.06	+/-	0.12	U

Table 60. Pit 34 Waste Solid- Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																			
	BLT-P34-WS-01				BLT-P34-WS-02				BLT-P34-WS-03				BLT-P34-WS-04				BLT-P34-WS-05			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Niobium-94	-0.02	+/-	0.03	U	0.01	+/-	0.06	U	0.00	+/-	0.01	U	0.03	+/-	0.02	U	-0.01	+/-	0.04	U
Niobium-95	0.04	+/-	0.02	U	0.07	+/-	0.08	U	0.00	+/-	0.01	UI	0.00	+/-	0.03	U	0.03	+/-	0.05	U
Potassium-40	5.12	+/-	0.82		4.64	+/-	1.34		4.52	+/-	0.35		5.36	+/-	0.67		5.43	+/-	1.16	
Promethium-144	-0.01	+/-	0.03	U	-0.02	+/-	0.06	U	0.00	+/-	0.01	U	-0.01	+/-	0.02	U	0.03	+/-	0.04	U
Promethium-146	0.01	+/-	0.04	U	0.01	+/-	0.06	U	0.01	+/-	0.01	U	0.01	+/-	0.02	U	0.04	+/-	0.04	U
Radium-226	0.56	+/-	0.12		0.53	+/-	0.17		0.50	+/-	0.06		0.51	+/-	0.09		0.61	+/-	0.17	
Radium-228	0.71	+/-	0.20		0.66	+/-	0.36		0.79	+/-	0.10		0.87	+/-	0.17		0.90	+/-	0.29	
Ruthenium-106	-0.13	+/-	0.29	U	0.32	+/-	0.51	U	0.02	+/-	0.06	U	-0.12	+/-	0.18	U	-0.12	+/-	0.32	U
Silver-110m	0.04	+/-	0.03	U	-0.01	+/-	0.05	U	0.00	+/-	0.01	U	0.00	+/-	0.02	U	-0.02	+/-	0.04	U
Sodium-22	-0.01	+/-	0.03	U	-0.01	+/-	0.07	U	0.00	+/-	0.01	U	0.00	+/-	0.02	U	0.03	+/-	0.06	U
Thallium-208	0.27	+/-	0.06		0.22	+/-	0.11		0.23	+/-	0.03		0.25	+/-	0.04		0.24	+/-	0.08	
Thorium-230	0.56	+/-	0.12		0.53	+/-	0.17		0.50	+/-	0.06		0.51	+/-	0.09		0.61	+/-	0.17	
Thorium-234	0.00	+/-	2.34	UI	0.83	+/-	1.53	U	0.86	+/-	0.45		2.03	+/-	1.64		0.93	+/-	0.69	
Tin-113	0.01	+/-	0.04	U	-0.02	+/-	0.07	U	-0.01	+/-	0.01	U	0.00	+/-	0.03	U	0.02	+/-	0.04	U
Uranium-235	0.03	+/-	0.18	U	0.24	+/-	0.43	U	0.07	+/-	0.07	U	0.04	+/-	0.11	U	0.10	+/-	0.15	U
Uranium-238	0.00	+/-	2.34	UI	0.83	+/-	1.53	U	0.86	+/-	0.45		2.03	+/-	1.64		0.93	+/-	0.69	
Yttrium-88	0.02	+/-	0.04	U	0.05	+/-	0.05	U	0.00	+/-	0.01	U	-0.01	+/-	0.02	U	-0.02	+/-	0.06	U
Zinc-65	0.02	+/-	0.07	U	0.04	+/-	0.14	U	-0.01	+/-	0.02	U	0.04	+/-	0.05	U	-0.08	+/-	0.11	U
Zirconium-95	-0.01	+/-	0.06	U	-0.01	+/-	0.11	U	0.00	+/-	0.03	UI	0.00	+/-	0.04	U	-0.03	+/-	0.08	U
C-14 (EERF C-01 mod)	1.43	+/-	1.08	U	31.50	+/-	2.93		24.90	+/-	2.05		22.00	+/-	2.23		11.70	+/-	1.94	
Cl-36 (GL-Rad-A033)	0.01	+/-	0.05	U	0.10	+/-	0.06	U	0.16	+/-	0.07		0.06	+/-	0.05	U	0.05	+/-	0.06	U
Ni-63 (RESL Ni-1 mod)	-0.11	+/-	1.46	U	0.18	+/-	1.27	U	-0.12	+/-	1.20	U	0.24	+/-	1.51	U	5.52	+/-	1.67	
Sr-90 (905.0 mod)	0.04	+/-	0.09	U	-0.01	+/-	0.07	U	-0.01	+/-	0.06	U	0.03	+/-	0.08	U	-0.06	+/-	0.05	U
H-3 (906.0 mod)	397.00	+/-	7.83		73.90	+/-	2.58		33.30	+/-	1.74		32.30	+/-	1.72		29.80	+/-	1.67	

Table 61. Pit 34 Waste Liquid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number			
	BLT-P34-WL-01		BLT-P34-WL-02	
	Result	Qual	Result	Qual
TCLP VOC (ug/l)				
1,1,1,2-Tetrachloroethane	0.25	U	50	U
1,1,1-Trichloroethane	0.3	U	60	U
1,1,2,2-Tetrachloroethane	0.25	U	50	U
1,1,2-Trichloroethane	0.25	U	50	U
1,1-Dichloroethane	0.3	U	60	U
1,1-Dichloroethylene	0.323	U	60	U
1,1-Dichloropropene	0.25	U	50	U
1,2,3-Trichlorobenzene	0.3	U	60	U
1,2,3-Trichloropropane	0.3	U	60	U
1,2,4-Trichlorobenzene	0.3	U	60	U
1,2,4-Trimethylbenzene	0.451	U	9990	B
1,2-Dibromo-3-chloropropane	0.5	U	100	U
1,2-Dibromoethane	0.25	U	50	U
1,2-Dichlorobenzene	0.25	U	50	U
1,2-Dichloroethane	0.25	U	50	U
1,2-Dichloroethylene (total)	0.3	U	60	U
1,2-Dichloropropane	0.25	U	50	U
1,3,5-Trimethylbenzene	0.25	U	50	U
1,3-Dichlorobenzene	0.25	U	50	U
1,3-Dichloropropane	0.25	U	50	U
1,4-Dichlorobenzene	0.25	U	50	U
2,2-Dichloropropane	0.3	U	60	U
2-Butanone	1.25	U	250	U
2-Chloro-1,3-butadiene	0.3	U	60	U
2-Chloroethylvinyl ether	1.5	U	300	U
2-Chlorotoluene	0.25	U	50	U
2-Hexanone	1.25	U	250	U
2-Nitropropane	1	U	200	U
4-Chlorotoluene	0.25	U	50	U
4-Isopropyltoluene	0.25	U	50	U
4-Methyl-2-pentanone	1.25	U	250	U
Acetone	4.22	U	3990	
Acetonitrile	6.25	U	1250	U
Acrolein	3	U	600	U
Acrylonitrile	1	U	200	U
Allyl chloride	3.7	U	740	U
Benzene	0.3	U	3430	
Benzyl chloride	1	U	200	U
bis(2-Chloroisopropyl)ether	1.5	U	300	U
Bromobenzene	0.25	U	50	U
Bromochloromethane	0.3	U	60	U
Bromodichloromethane	0.25	U	50	U
Bromoform	0.25	U	50	U
Bromomethane	0.5	U	100	U
Carbon disulfide	1.25	U	250	U
Carbon tetrachloride	0.25	U	50	U
Chlorobenzene	0.25	U	50	U

Table 61. Pit 34 Waste Liquid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number			
	BLT-P34-WL-01		BLT-P34-WL-02	
	Result	Qual	Result	Qual
Chloroethane	0.5	U	100	U
Chloroform	0.25	U	526	
Chloromethane	0.5	U	100	U
cis-1,2-Dichloroethylene	0.3	U	60	U
cis-1,3-Dichloropropylene	0.25	U	50	U
cis-1,4-Dichloro-2-butene	1	U	200	U
Cyclohexane	0.3	U	60	U
Cyclohexanone	15	U	3000	U
Dibromochloromethane	0.25	U	50	U
Dibromomethane	0.3	U	60	U
Dichlorodifluoromethane	0.5	U	100	U
Ethyl ether	0.3	U	2550	
Ethyl methacrylate	1	U	200	U
Ethylbenzene	0.39	U	458	
Hexachlorobutadiene	0.25	U	50	U
Iodomethane	1.25	U	250	U
Isobutyl alcohol	12.5	U	2500	U
Isopropylbenzene	0.25	U	132	J
m,p-Xylenes	1.45	U	4940	
Methacrylonitrile	1	U	200	U
Methyl acetate	1.25	U	13700	
Methyl methacrylate	1	U	200	U
Methylcyclohexane	0.25	U	50	U
Methylene chloride	2	U	789	J
Naphthalene	0.25	U	139	J
n-Butyl alcohol	13	U	2600	U
n-Butylbenzene	0.25	U	50	U
n-Propylbenzene	0.25	U	132	J
o-Xylene	0.509	U	2060	
Pentachloroethane	1	U	200	U
Propionitrile	1.5	U	300	U
sec-Butylbenzene	0.25	U	50	U
Styrene	0.25	U	50	U
tert-Butyl methyl ether	0.25	U	50	U
tert-Butylbenzene	0.25	U	50	U
Tetrachloroethylene	0.25	U	50	U
Toluene	2.05		9690	
trans-1,2-Dichloroethylene	0.3	U	60	U
trans-1,3-Dichloropropylene	0.25	U	50	U
trans-1,4-Dichloro-2-butene	1	U	200	U
Trichloroethylene	0.25	U	50	U
Trichlorofluoromethane	0.31	U	62	U
Trichlorotrifluoroethane	1	U	200	U
Vinyl acetate	1.5	U	300	U
Vinyl chloride	0.5	U	100	U
Xylenes (total)	1.96		7000	

Table 61. Pit 34 Waste Liquid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number			
	BLT-P34-WL-01		BLT-P34-WL-02	
	Result	Qual	Result	Qual
TCLP SVOC (ug/l)				
1,1'-Biphenyl			30	U
1,2,4-Trichlorobenzene			20	U
1,2-Dichlorobenzene			20	U
1,3-Dichlorobenzene			20	U
1,4-Dichlorobenzene			20	U
2,4,5-Trichlorophenol			10	U
2,4,6-Trichlorophenol			20	U
2,4-Dichlorophenol			20	U
2,4-Dimethylphenol			108	
2,4-Dinitrophenol			100	U
2,4-Dinitrotoluene			20	U
2,6-Dinitrotoluene			20	U
2-Chloronaphthalene			3.5	U
2-Chlorophenol			20	U
2-Methyl-4,6-dinitrophenol			30	U
2-Methylnaphthalene			3	U
2-Nitrophenol			20	U
3,3'-Dichlorobenzidine			10	U
4-Bromophenylphenylether			20	U
4-Chloro-3-methylphenol			20	U
4-Chloroaniline			20	U
4-Chlorophenylphenylether			20	U
4-Nitrophenol			20	U
Acenaphthene			3.1	U
Acenaphthylene			2	U
alpha-Terpineol			30	U
Anthracene			2	U
Atrazine			20	U
Benzaldehyde			30	U
Benzo(a)anthracene			2	U
Benzo(a)pyrene			2	U
Benzo(b)fluoranthene			2	U
Benzo(ghi)perylene			2	U
Benzo(k)fluoranthene			2	U
bis(2-Chloroethoxy)methane			30	U
bis(2-Chloroethyl) ether			20	U
bis(2-Chloroisopropyl)ether			20	U
bis(2-Ethylhexyl)phthalate			373	
Butylbenzylphthalate			20	U
Carbazole			2	U
Chrysene			2	U
Dibenzo(a,h)anthracene			2	U
Dibenzofuran			20	U
Diethylphthalate			20	U
Dimethylphthalate			20	U
Di-n-butylphthalate			20	U
Di-n-octylphthalate			30	U

Table 61. Pit 34 Waste Liquid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number			
	BLT-P34-WL-01		BLT-P34-WL-02	
	Result	Qual	Result	Qual
Diphenylamine			30	U
Fluoranthene			2	U
Fluorene			2	U
Hexachlorobenzene			20	U
Hexachlorobutadiene			20	U
Hexachlorocyclopentadiene			20	U
Hexachloroethane			20	U
Indeno(1,2,3-cd)pyrene			2	U
Isophorone			20	U
m,p-Cresols			116	
m-Nitroaniline			20	U
Naphthalene			45.8	
Nitrobenzene			30	U
N-Nitrosodipropylamine			20	U
o-Cresol			20	U
o-Nitroaniline			20	U
Pentachlorophenol			20	U
Phenanthrene			2	U
Phenol			10	U
p-Nitroaniline			30	U
Pyrene			3	U
TCLP Metals (ug/l)				
Aluminum			754000	
Antimony			58.9	J
Arsenic			220	
Barium			3010	
Beryllium			14.7	J
Cadmium			10	U
Calcium			49200	
Chromium			1010	
Cobalt			127	
Copper			902	
Iron			683000	
Lead			1340	
Magnesium			61600	
Manganese			2410	
Mercury			7.5	
Nickel			380	
Potassium			44600	
Selenium			60	U
Silver			20.7	J
Sodium			25100	
Thallium			50	U
Vanadium			1390	
Zinc			2490	

Table 61. Pit 34 Waste Liquid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number			
	BLT-P34-WL-01		BLT-P34-WL-02	
	Result	Qual	Result	Qual
RCRA PCB (ug/kg)				
4,4'-DDD			0.197	
4,4'-DDE			0.005	U
4,4'-DDT			0.01	U
Aldrin			0.005	U
alpha-BHC			0.005	U
beta-BHC			0.00845	U
Chlordane (tech.)			0.0765	U
delta-BHC			0.005	U
Dieldrin			0.005	U
Endosulfan I			0.005	U
Endosulfan II			0.005	U
Endosulfan sulfate			0.005	U
Endrin			0.005	U
Endrin aldehyde			0.005	U
Endrin ketone			0.0126	U
gamma-BHC (Lindane)			0.005	U
Heptachlor			0.00655	U
Heptachlor epoxide			0.005	U
Methoxychlor			0.05	U
Toxaphene			0.15	U
TCLP Pesticides (ug/l)				
Aroclor-1016			0.03	U
Aroclor-1221			0.03	U
Aroclor-1232			0.03	U
Aroclor-1242			0.03	U
Aroclor-1248			0.03	U
Aroclor-1254			0.03	U
Aroclor-1260			0.03	U
TCLP Herbicides (ug/L)				
2,4,5-T			0.08	U
2,4,5-TP			0.08	U
2,4-D			0.08	U

Table 62. Pit 34 Waste Liquid - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number							
	BLT-P34-WL-02				BLT-P34-WL-03			
	Results in pCi/L				Results in pCi/g			
	Result		Uncertainty	Qual	Result		Uncertainty	Qual
Gamma Scan (901.1mod/HASL 300)								
Actinium-228	3.47	+/-	6.23	U	0.05	+/-	0.08	U
Americium-241	0.27	+/-	5.74	U	0.00	+/-	0.03	U
Antimony-124	0.78	+/-	3.76	U	0.00	+/-	0.05	U
Antimony-125	1.65	+/-	4.54	U	0.02	+/-	0.06	U
Barium-133	-1.29	+/-	2.18	U	0.00	+/-	0.02	U
Barium-140	7.28	+/-	17.60	U	0.10	+/-	0.12	U
Beryllium-7	0.22	+/-	19.00	U	0.13	+/-	0.27	U
Bismuth-212	0.00	+/-	29.00	UI	0.00	+/-	0.31	U
Bismuth-214	0.52	+/-	5.13	U	0.06	+/-	0.10	U
Cerium-139	-0.64	+/-	1.75	U	0.00	+/-	0.02	U
Cerium-141	1.01	+/-	3.81	U	-0.01	+/-	0.03	U
Cerium-144	3.91	+/-	12.30	U	0.00	+/-	0.10	U
Cesium-134	-0.34	+/-	1.92	U	-0.01	+/-	0.03	U
Cesium-136	-3.27	+/-	6.26	U	-0.03	+/-	0.06	U
Cesium-137	0.70	+/-	1.66	U	0.00	+/-	0.02	U
Chromium-51	-5.44	+/-	22.50	U	0.13	+/-	0.21	U
Cobalt-56	-0.31	+/-	2.24	U	0.01	+/-	0.03	U
Cobalt-57	1.86	+/-	1.74	U	0.02	+/-	0.01	U
Cobalt-58	0.46	+/-	2.07	U	0.00	+/-	0.03	U
Cobalt-60	0.88	+/-	1.31	U	-0.02	+/-	0.02	U
Europium-152	2.84	+/-	5.36	U	-0.01	+/-	0.05	U
Europium-154	1.99	+/-	4.47	U	0.01	+/-	0.07	U
Europium-155	3.49	+/-	6.16	U	0.03	+/-	0.05	U
Iridium-192	-0.03	+/-	1.82	U	-0.01	+/-	0.02	U
Iron-59	-3.14	+/-	4.01	U	0.01	+/-	0.05	U
Lead-210	101	+/-	169	U	0.00	+/-	0.46	U
Lead-212	1.42	+/-	6.68	U	0.04	+/-	0.04	U
Lead-214	0.90	+/-	6.03	U	0.01	+/-	0.07	U
Manganese-54	2.89	+/-	2.29	U	0.01	+/-	0.02	U
Mercury-203	0.88	+/-	2.39	U	0.01	+/-	0.03	U
Neodymium-147	-10.00	+/-	41.50	U	0.07	+/-	0.31	U
Neptunium-239	-6.44	+/-	11.00	U	-0.03	+/-	0.10	U
Niobium-94	2.26	+/-	3.04	U	-0.01	+/-	0.03	U
Niobium-95	0.67	+/-	2.60	U	0.00	+/-	0.03	U
Potassium-40	0	+/-	38	UI	0.96	+/-	0.30	
Promethium-144	0.74	+/-	5.44	U	-0.01	+/-	0.03	U
Promethium-146	0.60	+/-	2.24	U	0.00	+/-	0.03	U
Radium-226		+/-			0.06	+/-	0.10	U
Radium-228	3.47	+/-	6.23	U	0.05	+/-	0.08	U
Ruthenium-106	-7.33	+/-	15.30	U	-0.08	+/-	0.20	U
Silver-110m	-0.64	+/-	1.58	U	0.01	+/-	0.02	U
Sodium-22	0.70	+/-	1.60	U	0.00	+/-	0.02	U
Thallium-208	3.87	+/-	2.11	U	0.00	+/-	0.05	U
Thorium-230	0.52	+/-	5.13	U	0.06	+/-	0.10	U
Thorium-234	0.00	+/-	161.00	UI	0.00	+/-	0.31	U

Table 62. Pit 34 Waste Liquid - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number							
	BLT-P34-WL-02				BLT-P34-WL-03			
	Results in pCi/L				Results in pCi/g			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Tin-113	-0.33	+/-	2.62	U	0.01	+/-	0.03	U
Uranium-235	12.50	+/-	11.60	U	0.02	+/-	0.11	U
Uranium-238	0.00	+/-	161.00	UI	0.00	+/-	0.31	U
Yttrium-88	-0.21	+/-	1.96	U	0.00	+/-	0.03	U
Zinc-65	-0.22	+/-	3.37	U	-0.03	+/-	0.05	U
Zirconium-95	0.14	+/-	3.26	U	-0.01	+/-	0.05	U
C-14 (EERF C-01 mod)	2230	+/-	89		11.3	+/-	0.922	
Cl-36 (GL-Rad-A033)	48.7	+/-	12.1		0.411	+/-	0.0574	
Ni-63 (RESL Ni-1 mod)	232	+/-	15		-4.12	+/-	2.13	U
Sr-90 (905.0 mod)	0.657	+/-	0.602	U	-0.125	+/-	0.133	U
H-3 (906.0 mod)	128000	+/-	2530		171	+/-	11	

Table 63. Pit 34C Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	Sample Number									
		BLT-P34C-SO-01a		BLT-P34C-SO-01b		BLT-P34C-SO-02a		BLT-P34C-SO-02b		BLT-P34C-SO-03a	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)											
1,1-Dichloroethylene	NA	1	J	0.294	U	0.292	U	0.275	U	0.324	U
1,2,4-Trichlorobenzene	10220000	0.309	U	0.294	U	0.292	U	0.275	U	0.324	U
1,2,4-Trimethylbenzene	NA	0.206	U	0.196	U	436	E	112		19	
1,2-Dichloroethane	31446.15	0.258	U	0.245	U	0.244	U	0.298	J	0.27	U
1,3,5-Trimethylbenzene	NA	0.206	U	0.196	U	30.1		20.1	U	0.216	U
2-Butanone	NA	1.75	U	1.66	U	1.66	U	1.56	U	41.9	
4-Isopropyltoluene	NA	0.258	U	0.245	U	0.244	U	0.229	U	0.27	U
4-Methyl-2-pentanone	NA	1.12	U	1.07	U	14.3		1	U	1.18	U
Acetone	919800000	3.11	J	2.53	U	1120	E	521		72.1	
Acetonitrile	NA	9.4	U	8.92	U	668		1110		45.6	
Benzene	52029.09	0.34	U	0.323	U	0.355	J	11.7		0.356	U
Carbon disulfide	102200000	1.29	U	1.22	U	1.22	U	1.15	U	1.35	U
Chloroform	10220000	0.206	U	0.419	J	15.6		20.1	U	0.656	J
Cyclohexane	NA	0.309	U	0.294	U	0.292	U	0.7	J	0.324	U
Ethyl ether	204400000	0.258	U	0.397	J	63.4		25.1	U	6.56	
Ethylbenzene	102200000	0.206	U	0.196	U	342	E	20.1	U	0.578	J
Isopropylbenzene	NA	0.206	U	0.196	U	12.9		20.1	U	0.216	U
m,p-Xylenes	NA	0.258	U	0.245	U	1220	E	26.5	J	2.11	J
Methyl acetate	1022000000	1.72	U	1.63	U	344		198	J	5.2	J
Methylcyclohexane	NA	0.309	U	0.294	U	0.292	U	1.35	J	0.324	U
Methylene chloride	381546.7	2.06	U	1.96	U	7.85		201	U	2.16	U
Naphthalene	20440000	0.207	J	0.196	U	210	E	450		13.1	
n-Butylbenzene	NA	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U
n-Propylbenzene	NA	0.206	U	0.196	U	9.34		73.2		0.216	U
o-Xylene	NA	0.206	U	0.196	U	861	E	20.1	U	0.871	J
sec-Butylbenzene	NA	0.206	U	0.196	U	1.87		9.72		0.216	U
Toluene	81760000	0.299	U	2.66		741	E	32.4	J	7.76	
Xylenes (total)	204400000	0.206	U	0.196	U	2080		3560		2.98	

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted.
Note: Sub-floor samples are shaded.

Table 63. Pit 34C Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	Sample Number									
		BLT-P34C-SO-01a		BLT-P34C-SO-01b		BLT-P34C-SO-02a		BLT-P34C-SO-02b		BLT-P34C-SO-03a	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA SVOC (ug/kg)											
bis(2-Ethylhexyl)phthalate	204400	560		886		367		72.9	U	73.2	U
Naphthalene	20440000	11.2	U	11.2	U	11	U	10.9	U	11	U
RCRA Metals (mg/kg)											
Aluminum	NA	20100		20000		8790		10600		14400	
Antimony	408.8	0.43	U	0.422	U	0.429	U	0.431	U	0.582	J
Arsenic	1.91	**4.93**		**5.14**		**2.49**		**2.96**		**6.41**	
Barium	204400	47.8		47.1		19.4		23.1		17.4	
Beryllium	2044	0.428	J	0.435	J	0.17	J	0.198	J	0.131	J
Calcium	NA	142		130		74.3		89.9		34.8	
Chromium	3066	21		21.5		11.8		12.4		33.2	
Cobalt	NA	4.31		4.25		1.28		1.63		0.962	
Copper	40880	9.77		10.4		5.28		6.04		13.1	
Iron	306600	18300		19200		8180		9200		14000	
Lead	NA	7.65		7.55		6.03		5.27		5.52	
Magnesium	NA	1280		1190		444		556		315	
Manganese	20440	85		84.1		26.2		30.5		9.09	
Mercury	NA	43		32.7		44.7		36.2		47.3	
Nickel	20440	12		12.1		4.19		5.21		4.28	
Potassium	NA	834		806		359		439		350	
Selenium	5110	0.705	J	0.67	J	0.643	U	0.646	U	0.646	U
Silver	5110	0.107	U	0.106	U	0.929		0.435	J	0.108	U
Sodium	NA	26.6		25		15.8	J	17.7		15.3	J
Vanadium	1022	35.2		35		17.7		19.4		31.5	
Zinc	306600	24.4		24		11		12.6		11.9	
RCRA Pesticide (ug/kg)											
TCLP PCB (ug/kg)											
Herbicides (ug/kg)											

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted.
Note: Sub-floor samples are shaded.

Table 63. Pit 34C Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	Sample Number									
		BLT-P34C-SO-03b		BLT-P34C-SO-04a		BLT-P34C-SO-04b		BLT-P34C-SO-05a		BLT-P34C-SO-05b	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)											
1,1-Dichloroethylene	NA	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
1,2,4-Trichlorobenzene	10220000	2.46	B	0.318	U	0.378	U	0.274	U	0.295	U
1,2,4-Trimethylbenzene	NA	46.4		64.1		83.8	J	3.38		5.49	B
1,2-Dichloroethane	31446.15	0.273	U	0.265	U	0.315	U	0.228	U	0.246	U
1,3,5-Trimethylbenzene	NA	0.938	J	3.02		6.06		0.182	U	0.197	U
2-Butanone	NA	2.45	J	7.69		15.7		20.9		12.6	
4-Isopropyltoluene	NA	0.273	U	0.265	U	1.59		0.228	U	0.246	U
4-Methyl-2-pentanone	NA	1.19	U	1.95	J	5.34	J	0.994	U	1.36	J
Acetone	919800000	55.1		445		197		69.1		111	
Acetonitrile	NA	26	J	289		108		58.3		93.1	
Benzene	52029.09	0.36	U	0.35	U	0.415	U	0.301	U	0.325	U
Carbon disulfide	102200000	1.36	U	1.33	U	1.57	U	1.14	U	1.23	U
Chloroform	10220000	0.33	J	1.71		0.594	J	0.182	U	0.197	U
Cyclohexane	NA	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
Ethyl ether	204400000	0.978	J	12.5		1.08	J	0.228	U	0.246	U
Ethylbenzene	102200000	5.98		1.77		5.18		0.182	U	0.213	J
Isopropylbenzene	NA	0.295	J	0.212	U	0.701	J	0.182	U	0.197	U
m,p-Xylenes	NA	23.5		9.51		30.6		0.605	J	0.926	J
Methyl acetate	1022000000	1.82	U	73.5		68.5		6.74	J	9.1	J
Methylcyclohexane	NA	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
Methylene chloride	381546.7	2.18	U	2.12	U	2.52	U	1.82	U	1.97	U
Naphthalene	20440000	11.4		447		612		45.8		57.9	
n-Butylbenzene	NA	0.218	U	2.69		10.8		0.182	U	0.197	U
n-Propylbenzene	NA	0.266	J	0.264	J	0.887	J	0.182	U	0.197	U
o-Xylene	NA	12.4		4.38		13.5		0.276	J	0.709	J
sec-Butylbenzene	NA	0.218	U	0.462	J	1.61		0.182	U	0.197	U
Toluene	81760000	11.6		18.6		9.97		0.361	J	0.402	J
Xylenes (total)	204400000	35.9		13.9		44.1		0.881	J	1.64	

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted.
Note: Sub-floor samples are shaded.

Table 63. Pit 34C Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	Sample Number									
		BLT-P34C-SO-03b		BLT-P34C-SO-04a		BLT-P34C-SO-04b		BLT-P34C-SO-05a		BLT-P34C-SO-05b	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
RCRA SVOC (ug/kg)											
bis(2-Ethylhexyl)phthalate	204400	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Naphthalene	20440000	11.1	U	11.1	U	11.2	U	15.1	J	22.6	J
RCRA Metals (mg/kg)											
Aluminum	NA	15800		21000		20000		12700		17600	
Antimony	408.8	0.442	U	0.438	U	0.522	J	0.426	U	0.433	U
Arsenic	1.91	**6.05**		**7.35**		**6.31**		**3.61**		**5.44**	
Barium	204400	19.2		26.4		23.9		18		24.2	
Beryllium	2044	0.139	J	0.245	J	0.226	J	0.157	J	0.213	J
Calcium	NA	28.5		129		96.6		97.1		152	
Chromium	3066	34.4		29.3		30.7		18		24	
Cobalt	NA	1		1.62		1.44		1.15		1.51	
Copper	40880	13.5		17.6		18		10.7		14.5	
Iron	306600	14400		18100		18200		10000		14400	
Lead	NA	6.08		7.42		6.97		5.07		7.04	
Magnesium	NA	345		494		444		314		463	
Manganese	20440	9.38		17.3		14.9		12.1		17.3	
Mercury	NA	38.4		27.5		44.3		65.8		51.1	
Nickel	20440	4.71		6.89		6		4.03		5.79	
Potassium	NA	377		527		473		345		505	
Selenium	5110	0.663	U	0.657	U	0.699	J	0.639	U	0.649	U
Silver	5110	0.11	U	2.66		7.8		0.231	J	0.363	J
Sodium	NA	15.2	J	24.6		18.8		14.3	J	22.2	
Vanadium	1022	34.9		45.8		48.1		28.3		38.2	
Zinc	306600	12.2		18.8		16.5		12.2		14.5	
RCRA Pesticide (ug/kg)											
TCLP PCB (ug/kg)											
Herbicides (ug/kg)											

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted.
Note: Sub-floor samples are shaded.

Table 63. Pit 34C Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	Sample Number					
		BLT-P34C-SO-06a		BLT-P34C-SO-06b		BLT-P34C-SO-06g	
		Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)							
1,1-Dichloroethylene	NA	0.33	U	0.342	U	0.445	
1,2,4-Trichlorobenzene	10220000	0.33	U	0.342	U	0.445	
1,2,4-Trimethylbenzene	NA	6.47		7.69		437	
1,2-Dichloroethane	31446.15	0.275	U	0.285	U	0.371	
1,3,5-Trimethylbenzene	NA	0.325	J	0.335	J	39.7	
2-Butanone	NA	5.53		21.5		18	
4-Isopropyltoluene	NA	0.275	U	0.285	U	0.371	
4-Methyl-2-pentanone	NA	3.32	J	3.05	J	2.4	J
Acetone	919800000	152		176		194	
Acetonitrile	NA	97.4		129		153	
Benzene	52029.09	0.362	U	0.377	U	0.489	
Carbon disulfide	102200000	1.72	J	1.43	U	1.85	
Chloroform	10220000	0.514	J	0.271	J	0.36	J
Cyclohexane	NA	0.33	U	0.342	U	0.445	
Ethyl ether	204400000	2.56		1.55		0.927	J
Ethylbenzene	102200000	1.59		0.828	J	20.7	
Isopropylbenzene	NA	0.22	U	0.228	U	5.62	
m,p-Xylenes	NA	7.88		4.62		136	
Methyl acetate	1022000000	28.1		28.3		16.5	
Methylcyclohexane	NA	0.33	U	0.342	U	0.445	
Methylene chloride	381546.7	2.2	U	2.28	U	2.97	
Naphthalene	20440000	72.8	B	46.7		387	
n-Butylbenzene	NA	0.242	J	0.228	U	11.8	
n-Propylbenzene	NA	0.22	U	0.228	U	10.3	
o-Xylene	NA	5.12		3.03		49.6	
sec-Butylbenzene	NA	0.22	U	0.228	U	2.89	
Toluene	81760000	5.11		2.37		8.9	
Xylenes (total)	204400000	13		7.65		185	

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted.
Note: Sub-floor samples are shaded.

Table 63. Pit 34C Soil - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	Sample Number					
		BLT-P34C-SO-06a		BLT-P34C-SO-06b		BLT-P34C-SO-06g	
		Result	Qual	Result	Qual	Result	Qual
RCRA SVOC (ug/kg)							
bis(2-Ethylhexyl)phthalate	204400	74.3	U	2020		113	J
Naphthalene	20440000	37.1	J	161		11.3	U
RCRA Metals (mg/kg)							
Aluminum	NA	24200		24900		16000	
Antimony	408.8	0.445	U	2.17	U	2.12	U
Arsenic	1.91	**7.48**		**8.08**		**6.18**	
Barium	204400	29.5		30.8		24.2	
Beryllium	2044	0.274	J	0.291	J	0.243	J
Calcium	NA	130		138		111	
Chromium	3066	34		35.2		28.6	
Cobalt	NA	1.8		2.07	J	1.96	J
Copper	40880	19.4		19.6		15.9	
Iron	306600	21800		23000		32100	
Lead	NA	7.95		8.25		47	
Magnesium	NA	568		603		411	
Manganese	20440	20.6		21.9		44.7	
Mercury	NA	68.1		49.9		46.7	
Nickel	20440	7.44		7.75		6.57	
Potassium	NA	589		624		439	
Selenium	5110	0.667	U	3.25	U	3.18	U
Silver	5110	9.67		7.14		2.62	
Sodium	NA	24.7		25.5		21.8	
Vanadium	1022	55.4		57.3		37.1	
Zinc	306600	17.3		17.8		26.2	
RCRA Pesticide (ug/kg)							
TCLP PCB (ug/kg)							
Herbicides (ug/kg)							

*Result that exceeds EPA Region 3 Risk-Based Concentration value is highlighted.
Note: Sub-floor samples are shaded.

Table 64. Pit 34C Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number (All results in pCi/g)							
Parameter	**NRC Screening Values[1]**	**DCGL**	**BLT-P34C-SO-01a**		**BLT-P34C-SO-01b**		**BLT-P34C-SO-02a**		**BLT-P34C-SO-02b**	
			Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Gamma Scan (901.1mod/HASL 300)										
Actinium-228	NA		0	UI	0.878		0.234		0.767	
Bismuth-212	NA		0.303	U	0.663		0.165	U	0	UI
Bismuth-214	NA		0.344		0	UI	1.31		7.53	
Cesium-137	11.0	16.8	0.0169	U	0	UI	0.0244	U	0.0538	
Lead-210	0.9	1.62	3.51	U	-1.99	U	4.22	U	**8.04**	
Lead-212	NA		0.442		1.06		0.262		0.67	
Lead-214	NA		0.36		0.801		1.51		8.53	
Potassium-40	NA		3.17		6.85		1.42		3.3	
Radium-226	0.7	1.34	0.344		0.547		**1.31**		**7.53**	
Radium-228	NA		0	UI	0.878		0.234		0.767	
Thallium-208	NA		0.168		0.309		0.0832		0.121	
Thorium-230	1.8		0.344		0.547		1.31		**7.53**	
Thorium-234	14.0		0.113	U	0.611	U	0.187	U	2.29	
Uranium-238	14.0		0.113	U	0.611	U	0.187	U	2.29	
C-14 (EERF C-01 mod)	12.0	162	-0.72	U	-1.35	U	4.75		0.732	U
H-3 (906.0 mod)	110.0	264	-0.186	U	-0.171	U	0.572	U	0.0251	U

1 NUREG 1757, Appendix B, Table B-2

*Result that exceeds NRC screening value is highlighted.
Note: Sub-floor samples are shaded.

Table 64. Pit 34C Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number (All results in pCi/g)							
Parameter	**NRC Screening Values[1]**	**DCGL**	**BLT-P34C-SO-03a**		**BLT-P34C-SO-03b**		**BLT-P34C-SO-04a**		**BLT-P34C-SO-04b**	
			Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Gamma Scan (901.1mod/HASL 300)										
Actinium-228	NA		0.473		0.758		0.939		1.12	
Bismuth-212	NA		0	UI	0.542		0.989		0.964	
Bismuth-214	NA		0.643		0.526		0.682		0.718	
Cesium-137	11.0	16.8	0.00509	U	-0.008	U	0.0107	U	0.0148	U
Lead-210	0.9	1.62	-0.0416	U	4.24	U	-0.242	U	4.16	U
Lead-212	NA		0.405		0.599		0.924		1.07	
Lead-214	NA		0.804		0.653		0.732		0.714	
Potassium-40	NA		1.33		1.95		2.66		3.72	
Radium-226	0.7	1.34	0.643		0.526		0.682		**0.718**	
Radium-228	NA		0.473		0.758		0.939		1.12	
Thallium-208	NA		0.106		0.217		0.283		0.39	
Thorium-230	1.8		0.643		0.526		0.682		0.718	
Thorium-234	14.0		0.556	U	0.534	U	0.828	U	2.83	
Uranium-238	14.0		0.556	U	0.534	U	0.828	U	2.83	
C-14 (EERF C-01 mod)	12.0	162	2.29		0.852	U	11.8		10.3	
H-3 (906.0 mod)	110.0	264	-0.154	U	-0.057	U	1.82		1.19	

1 NUREG 1757, Appendix B, Table B-2

*Result that exceeds NRC screening value is highlighted.
Note: Sub-floor samples are shaded.

Table 64. Pit 34C Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number (All results in pCi/g)							
Parameter	**NRC Screening Values[1]**	**DCGL**	**BLT-P34C-SO-05a**		**BLT-P34C-SO-05b**		**BLT-P34C-SO-06a**		**BLT-P34C-SO-06b**	
			Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Gamma Scan (901.1mod/HASL 300)										
Actinium-228	NA		1.04		0.783		0.758		0.931	
Bismuth-212	NA		0.392	U	0.616		0.378		0.487	
Bismuth-214	NA		2.04		1.14		0.621		0.857	
Cesium-137	11.0	16.8	0.0108	U	0.0298	U	-0.0014	U	-0.0012	U
Lead-210	0.9	1.62	4.99	U	1.27	U	1.78	U	2.65	U
Lead-212	NA		0.767		0.788		0.688		0.94	
Lead-214	NA		2.29		1.11		0.561		0.995	
Potassium-40	NA		0	UI	2.51		2.36		2.3	
Radium-226	0.7	1.34	**2.04**		**1.14**		0.621		**0.857**	
Radium-228	NA		1.04		0.783		0.758		0.931	
Thallium-208	NA		0.367		0.27		0.233		0.247	
Thorium-230	1.8		**2.04**		1.14		0.621		0.857	
Thorium-234	14.0		1.17	U	0.462	U	0.36	U	2.18	
Uranium-238	14.0		1.17	U	0.462	U	0.36	U	2.18	
C-14 (EERF C-01 mod)	12.0	162	1.94		2.01		6.64		6.85	
H-3 (906.0 mod)	110.0	264	0.637	U	1.84		1.73		0.561	U

1 NUREG 1757, Appendix B, Table B-2

*Result that exceeds NRC screening value is highlighted.
Note: Sub-floor samples are shaded.

Table 64. Pit 34C Soil - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

			Sample Number (All results in pCi/g)	
Parameter	**NRC Screening Values[1]**	**DCGL**	**BLT-P34C-SO-06g**	
			Result	**Qual**
Gamma Scan (901.1mod/HASL 300)				
Actinium-228	NA		0.596	
Bismuth-212	NA		0.491	
Bismuth-214	NA		1.95	
Cesium-137	11.0	16.8	0.041	U
Lead-210	0.9	1.62	2.38	U
Lead-212	NA		0.745	
Lead-214	NA		2.18	
Potassium-40	NA		2.33	
Radium-226	0.7	1.34	**1.95**	
Radium-228	NA		0.596	
Thallium-208	NA		0.222	
Thorium-230	1.8		**1.95**	
Thorium-234	14.0		1.9	
Uranium-238	14.0		1.9	
C-14 (EERF C-01 mod)	12.0	162	3.95	
H-3 (906.0 mod)	110.0	264	1.56	

1 NUREG 1757, Appendix B, Table B-2

*Result that exceeds NRC screening value is highlighted.
Note: Sub-floor samples are shaded.

Table 65. Pit 34C Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																			
Parameter	**BLT-P34C-SO-01a**		**BLT-P34C-SO-01b**		**BLT-P34C-SO-02a**		**BLT-P34C-SO-02b**		**BLT-P34C-SO-03a**		**BLT-P34C-SO-03b**		**BLT-P34C-SO-04a**		**BLT-P34C-SO-04b**		**BLT-P34C-SO-05a**		**BLT-P34C-SO-05b**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA VOC (ug/kg)																				
1,1,1,2-Tetrachloroethane	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U	0.218	U	0.212	U	0.252	U	0.182	U	0.197	U
1,1,1-Trichloroethane	0.309	U	0.294	U	0.292	U	0.275	U	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
1,1,2,2-Tetrachloroethane	0.258	U	0.245	U	0.244	U	0.229	U	0.27	U	0.273	U	0.265	U	0.315	U	0.228	U	0.246	U
1,1,2-Trichloroethane	0.309	U	0.294	U	0.292	U	0.275	U	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
1,1-Dichloroethane	0.309	U	0.294	U	0.292	U	0.275	U	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
1,1-Dichloroethylene	1	J	0.294	U	0.292	U	0.275	U	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
1,1-Dichloropropene	0.258	U	0.245	U	0.244	U	0.229	U	0.27	U	0.273	U	0.265	U	0.315	U	0.228	U	0.246	U
1,2,3-Trichlorobenzene	0.258	U	0.245	U	0.244	U	0.229	U	0.27	U	0.273	U	0.265	U	0.315	U	0.228	U	0.246	U
1,2,3-Trichloropropane	0.516	U	0.489	U	0.487	U	0.459	U	0.54	U	0.546	U	0.531	U	0.629	U	0.456	U	0.492	U
1,2,4-Trichlorobenzene	0.309	U	0.294	U	0.292	U	0.275	U	0.324	U	2.46	B	0.318	U	0.378	U	0.274	U	0.295	U
1,2,4-Trimethylbenzene	0.206	U	0.196	U	436	E	112		19		46.4		64.1		83.8	J	3.38		5.49	B
1,2-Dibromo-3-chloropropane	0.516	U	0.489	U	0.487	U	0.459	U	0.54	U	0.546	U	0.531	U	0.629	U	0.456	U	0.492	U
1,2-Dibromoethane	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U	0.218	U	0.212	U	0.252	U	0.182	U	0.197	U
1,2-Dichlorobenzene	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U	0.218	U	0.212	U	0.252	U	0.182	U	0.197	U
1,2-Dichloroethane	0.258	U	0.245	U	0.244	U	0.298	J	0.27	U	0.273	U	0.265	U	0.315	U	0.228	U	0.246	U
1,2-Dichloroethylene (total)	0.309	U	0.294	U	0.292	U	0.275	U	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
1,2-Dichloropropane	0.309	U	0.294	U	0.292	U	0.275	U	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
1,3,5-Trimethylbenzene	0.206	U	0.196	U	30.1		20.1	U	0.216	U	0.938	J	3.02		6.06		0.182	U	0.197	U
1,3-Dichlorobenzene	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U	0.218	U	0.212	U	0.252	U	0.182	U	0.197	U
1,3-Dichloropropane	0.309	U	0.294	U	0.292	U	0.275	U	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
1,4-Dichlorobenzene	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U	0.218	U	0.212	U	0.252	U	0.182	U	0.197	U
2,2-Dichloropropane	0.309	U	0.294	U	0.292	U	0.275	U	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
2-Butanone	1.75	U	1.66	U	1.66	U	1.56	U	41.9		2.45	J	7.69		15.7		20.9		12.6	
2-Chloro-1,3-butadiene	0.309	U	0.294	U	0.292	U	0.275	U	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
2-Chloroethylvinyl ether	1.29	U	1.22	U	1.22	U	1.15	U	1.35	U	1.36	U	1.33	U	1.57	U	1.14	U	1.23	U
2-Chlorotoluene	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U	0.218	U	0.212	U	0.252	U	0.182	U	0.197	U
2-Hexanone	1.57	U	1.49	U	1.48	U	1.4	U	1.64	U	1.66	U	1.61	U	1.91	U	1.39	U	1.5	U
2-Nitropropane	0.928	U	0.881	U	0.877	U	0.826	U	0.971	U	0.983	U	0.955	U	1.13	U	0.821	U	0.886	U
4-Chlorotoluene	0.248	U	0.235	U	0.234	U	0.22	U	0.259	U	0.262	U	0.255	U	0.302	U	0.219	U	0.236	U
4-Isopropyltoluene	0.258	U	0.245	U	0.244	U	0.229	U	0.27	U	0.273	U	0.265	U	1.59		0.228	U	0.246	U
4-Methyl-2-pentanone	1.12	U	1.07	U	14.3		1	U	1.18	U	1.19	U	1.95	J	5.34	J	0.994	U	1.36	J
Acetone	3.11	J	2.53	U	1120	E	521		72.1		55.1		445		197		69.1		111	
Acetonitrile	9.4	U	8.92	U	668		1110		45.6		26	J	289		108		58.3		93.1	
Acrolein	3.09	U	2.94	U	2.92	U	2.75	U	3.24	U	3.28	U	3.18	U	3.78	U	2.74	U	2.95	U
Acrylonitrile	1.03	U	0.979	U	0.974	U	0.918	U	1.08	U	1.09	U	1.06	U	1.26	U	0.912	U	0.985	U
Allyl chloride	2.06	U	1.96	U	1.95	U	1.84	U	2.16	U	2.18	U	2.12	U	2.52	U	1.82	U	1.97	U
Benzene	0.34	U	0.323	U	0.355	J	11.7		0.356	U	0.36	U	0.35	U	0.415	U	0.301	U	0.325	U
Benzyl chloride	0.619	U	0.587	U	0.585	U	0.551	U	0.648	U	0.655	U	0.637	U	0.755	U	0.547	U	0.591	U
bis(2-Chloroisopropyl)ether	1.55	U	1.47	U	1.46	U	1.38	U	1.62	U	1.64	U	1.59	U	1.89	U	1.37	U	1.48	U
Bromobenzene	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U	0.218	U	0.212	U	0.252	U	0.182	U	0.197	U
Bromochloromethane	0.516	U	0.489	U	0.487	U	0.459	U	0.54	U	0.546	U	0.531	U	0.629	U	0.456	U	0.492	U
Bromodichloromethane	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U	0.218	U	0.212	U	0.252	U	0.182	U	0.197	U
Bromoform	0.309	U	0.294	U	0.292	U	0.275	U	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
Bromomethane	0.516	U	0.489	U	0.487	U	0.459	U	0.54	U	0.546	U	0.531	U	0.629	U	0.456	U	0.492	U
Carbon disulfide	1.29	U	1.22	U	1.22	U	1.15	U	1.35	U	1.36	U	1.33	U	1.57	U	1.14	U	1.23	U
Carbon tetrachloride	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U	0.218	U	0.212	U	0.252	U	0.182	U	0.197	U

Note: Sub-floor samples are shaded.

Table 65. Pit 34C Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																			
Parameter	**BLT-P34C-SO-01a**		**BLT-P34C-SO-01b**		**BLT-P34C-SO-02a**		**BLT-P34C-SO-02b**		**BLT-P34C-SO-03a**		**BLT-P34C-SO-03b**		**BLT-P34C-SO-04a**		**BLT-P34C-SO-04b**		**BLT-P34C-SO-05a**		**BLT-P34C-SO-05b**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Chlorobenzene	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U	0.218	U	0.212	U	0.252	U	0.182	U	0.197	U
Chloroethane	0.516	U	0.489	U	0.487	U	0.459	U	0.54	U	0.546	U	0.531	U	0.629	U	0.456	U	0.492	U
Chloroform	0.206	U	0.419	J	15.6		20.1	U	0.656	J	0.33	J	1.71		0.594	J	0.182	U	0.197	U
Chloromethane	0.516	U	0.489	U	0.487	U	0.459	U	0.54	U	0.546	U	0.531	U	0.629	U	0.456	U	0.492	U
cis-1,2-Dichloroethylene	0.309	U	0.294	U	0.292	U	0.275	U	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
cis-1,3-Dichloropropylene	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U	0.218	U	0.212	U	0.252	U	0.182	U	0.197	U
cis-1,4-Dichloro-2-butene	0.516	U	0.489	U	0.487	U	0.459	U	0.54	U	0.546	U	0.531	U	0.629	U	0.456	U	0.492	U
Cyclohexane	0.309	U	0.294	U	0.292	U	0.7	J	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
Cyclohexanone	15.5	U	14.7	U	14.6	U	13.8	U	16.2	U	16.4	U	15.9	U	18.9	U	13.7	U	14.8	U
Dibromochloromethane	0.309	U	0.294	U	0.292	U	0.275	U	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
	0.309	U	0.294	U	0.292	U	0.275	U	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
Dichlorodifluoromethane	0.516	U	0.489	U	0.487	U	0.459	U	0.54	U	0.546	U	0.531	U	0.629	U	0.456	U	0.492	U
Ethyl ether	0.258	U	0.397	J	63.4		25.1	U	6.56		0.978	J	12.5		1.08	J	0.228	U	0.246	U
Ethyl methacrylate	0.516	U	0.489	U	0.487	U	0.459	U	0.54	U	0.546	U	0.531	U	0.629	U	0.456	U	0.492	U
Ethylbenzene	0.206	U	0.196	U	342	E	20.1	U	0.578	J	5.98		1.77		5.18		0.182	U	0.213	J
Hexachlorobutadiene	0.516	U	0.489	U	0.487	U	0.459	U	0.54	U	0.546	U	0.531	U	0.629	U	0.456	U	0.492	U
Iodomethane	1.72	U	1.63	U	1.63	U	1.53	U	1.8	U	1.82	U	1.77	U	2.1	U	1.52	U	1.64	U
Isobutyl alcohol	10.3	U	9.79	U	9.74	U	9.18	U	10.8	U	10.9	U	10.6	U	12.6	U	9.12	U	9.85	U
Isopropylbenzene	0.206	U	0.196	U	12.9		20.1	U	0.216	U	0.295	J	0.212	U	0.701	J	0.182	U	0.197	U
m,p-Xylenes	0.258	U	0.245	U	1220	E	26.5	J	2.11	J	23.5		9.51		30.6		0.605	J	0.926	J
Methacrylonitrile	0.722	U	0.685	U	0.682	U	0.642	U	0.756	U	0.764	U	0.743	U	0.881	U	0.638	U	0.689	U
Methyl acetate	1.72	U	1.63	U	344		198	J	5.2	J	1.82	U	73.5		68.5		6.74	J	9.1	J
Methyl methacrylate	1.03	U	0.979	U	0.974	U	0.918	U	1.08	U	1.09	U	1.06	U	1.26	U	0.912	U	0.985	U
Methylcyclohexane	0.309	U	0.294	U	0.292	U	1.35	J	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
Methylene chloride	2.06	U	1.96	U	7.85		201	U	2.16	U	2.18	U	2.12	U	2.52	U	1.82	U	1.97	U
Naphthalene	0.207	J	0.196	U	210	E	450		13.1		11.4		447		612		45.8		57.9	
n-Butyl alcohol	27.9	U	26.4	U	26.3	U	24.8	U	29.1	U	29.5	U	28.7	U	34	U	24.6	U	26.6	U
n-Butylbenzene	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U	0.218	U	2.69		10.8		0.182	U	0.197	U
n-Propylbenzene	0.206	U	0.196	U	9.34		73.2		0.216	U	0.266	J	0.264	J	0.887	J	0.182	U	0.197	U
o-Xylene	0.206	U	0.196	U	861	E	20.1	U	0.871	J	12.4		4.38		13.5		0.276	J	0.709	J
Pentachloroethane	1.55	U	1.47	U	1.46	U	1.38	U	1.62	U	1.64	U	1.59	U	1.89	U	1.37	U	1.48	U
Propionitrile	1.03	U	0.979	U	0.974	U	0.918	U	1.08	U	1.09	U	1.06	U	1.26	U	0.912	U	0.985	U
sec-Butylbenzene	0.206	U	0.196	U	1.87		9.72		0.216	U	0.218	U	0.462	J	1.61		0.182	U	0.197	U
Styrene	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U	0.218	U	0.212	U	0.252	U	0.182	U	0.197	U
tert-Butyl methyl ether	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U	0.218	U	0.212	U	0.252	U	0.182	U	0.197	U
tert-Butylbenzene	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U	0.218	U	0.212	U	0.252	U	0.182	U	0.197	U
Tetrachloroethylene	0.206	U	0.196	U	0.195	U	0.184	U	0.216	U	0.218	U	0.212	U	0.252	U	0.182	U	0.197	U
Toluene	0.299	U	2.66		741	E	32.4	J	7.76		11.6		18.6		9.97		0.361	J	0.402	J
trans-1,2-Dichloroethylene	0.309	U	0.294	U	0.292	U	0.275	U	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
trans-1,3-Dichloropropylene	0.309	U	0.294	U	0.292	U	0.275	U	0.324	U	0.328	U	0.318	U	0.378	U	0.274	U	0.295	U
trans-1,4-Dichloro-2-butene	0.516	U	0.489	U	0.487	U	0.459	U	0.54	U	0.546	U	0.531	U	0.629	U	0.456	U	0.492	U
Trichloroethylene	0.258	U	0.245	U	0.244	U	0.229	U	0.27	U	0.273	U	0.265	U	0.315	U	0.228	U	0.246	U
Trichlorofluoromethane	0.516	U	0.489	U	0.487	U	0.459	U	0.54	U	0.546	U	0.531	U	0.629	U	0.456	U	0.492	U
Trichlorotrifluoroethane	1.03	U	0.979	U	0.974	U	0.918	U	1.08	U	1.09	U	1.06	U	1.26	U	0.912	U	0.985	U
Vinyl acetate	1.29	U	1.22	U	1.22	U	1.15	U	1.35	U	1.36	U	1.33	U	1.57	U	1.14	U	1.23	U
Vinyl chloride	0.516	U	0.489	U	0.487	U	0.459	U	0.54	U	0.546	U	0.531	U	0.629	U	0.456	U	0.492	U
Xylenes (total)	0.206	U	0.196	U	2080		3560		2.98		35.9		13.9		44.1		0.881	J	1.64	

Note: Sub-floor samples are shaded.

Table 65. Pit 34C Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																			
Parameter	**BLT-P34C-SO-01a**		**BLT-P34C-SO-01b**		**BLT-P34C-SO-02a**		**BLT-P34C-SO-02b**		**BLT-P34C-SO-03a**		**BLT-P34C-SO-03b**		**BLT-P34C-SO-04a**		**BLT-P34C-SO-04b**		**BLT-P34C-SO-05a**		**BLT-P34C-SO-05b**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA SVOC (ug/kg)																				
1,1'-Biphenyl	112	U	112	U	110	U	109	U	110	U	111	U	111	U	112	U	112	U	110	U
1,2,4-Trichlorobenzene	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
1,2-Dichlorobenzene	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
1,3-Dichlorobenzene	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
1,4-Dichlorobenzene	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
2,4,5-Trichlorophenol	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
2,4,6-Trichlorophenol	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
2,4-Dichlorophenol	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
2,4-Dimethylphenol	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
2,4-Dinitrophenol	142	U	142	U	139	U	138	U	139	U	140	U	141	U	142	U	141	U	140	U
2,4-Dinitrotoluene	37.3	U	37.3	U	36.6	U	36.4	U	36.6	U	36.9	U	37.1	U	37.5	U	37.2	U	36.7	U
2,6-Dinitrotoluene	37.3	U	37.3	U	36.6	U	36.4	U	36.6	U	36.9	U	37.1	U	37.5	U	37.2	U	36.7	U
2-Chloronaphthalene	13.1	U	13.1	U	12.8	U	12.8	U	12.8	U	12.9	U	13	U	13.1	U	13	U	12.9	U
2-Chlorophenol	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
2-Methyl-4,6-dinitrophenol	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
2-Methylnaphthalene	7.47	U	7.46	U	7.32	U	7.29	U	7.32	U	7.38	U	7.41	U	7.5	U	7.43	U	7.35	U
2-Nitrophenol	37.3	U	37.3	U	36.6	U	36.4	U	36.6	U	36.9	U	37.1	U	37.5	U	37.2	U	36.7	U
3,3'-Dichlorobenzidine	112	U	112	U	110	U	109	U	110	U	111	U	111	U	112	U	112	U	110	U
4-Bromophenylphenylether	37.3	U	37.3	U	36.6	U	36.4	U	36.6	U	36.9	U	37.1	U	37.5	U	37.2	U	36.7	U
4-Chloro-3-methylphenol	37.3	U	37.3	U	36.6	U	36.4	U	36.6	U	36.9	U	37.1	U	37.5	U	37.2	U	36.7	U
4-Chloroaniline	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
4-Chlorophenylphenylether	37.3	U	37.3	U	36.6	U	36.4	U	36.6	U	36.9	U	37.1	U	37.5	U	37.2	U	36.7	U
4-Nitrophenol	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Acenaphthene	12.5	U	12.5	U	12.2	U	12.2	U	12.2	U	12.3	U	12.4	U	12.5	U	12.4	U	12.3	U
Acenaphthylene	11.2	U	11.2	U	11	U	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
alpha-Terpineol	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Anthracene	7.47	U	7.46	U	7.32	U	7.29	U	7.32	U	7.38	U	7.41	U	7.5	U	7.43	U	7.35	U
Atrazine	112	U	112	U	110	U	109	U	110	U	111	U	111	U	112	U	112	U	110	U
Benzaldehyde	112	U	112	U	110	U	109	U	110	U	111	U	111	U	112	U	112	U	110	U
Benzo(a)anthracene	11.2	U	11.2	U	11	U	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Benzo(a)pyrene	11.2	U	11.2	U	11	U	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Benzo(b)fluoranthene	11.2	U	11.2	U	11	U	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Benzo(ghi)perylene	11.2	U	11.2	U	11	U	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Benzo(k)fluoranthene	11.2	U	11.2	U	11	U	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
bis(2-Chloroethoxy)methane	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
bis(2-Chloroethyl) ether	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
bis(2-Chloroisopropyl)ether	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
bis(2-Ethylhexyl)phthalate	560		886		367		72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Butylbenzylphthalate	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Carbazole	11.2	U	11.2	U	11	U	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Chrysene	11.2	U	11.2	U	11	U	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Dibenzo(a,h)anthracene	11.2	U	11.2	U	11	U	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Dibenzofuran	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Diethylphthalate	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Dimethylphthalate	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Di-n-butylphthalate	37.3	U	37.3	U	36.6	U	36.4	U	36.6	U	36.9	U	37.1	U	37.5	U	37.2	U	36.7	U

Note: Sub-floor samples are shaded.

Table 65. Pit 34C Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																			
Parameter	**BLT-P34C-SO-01a**		**BLT-P34C-SO-01b**		**BLT-P34C-SO-02a**		**BLT-P34C-SO-02b**		**BLT-P34C-SO-03a**		**BLT-P34C-SO-03b**		**BLT-P34C-SO-04a**		**BLT-P34C-SO-04b**		**BLT-P34C-SO-05a**		**BLT-P34C-SO-05b**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
Di-n-octylphthalate	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Diphenylamine	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Fluoranthene	11.2	U	11.2	U	11	U	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Fluorene	11.2	U	11.2	U	11	U	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Hexachlorobenzene	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Hexachlorobutadiene	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Hexachlorocyclopentadiene	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Hexachloroethane	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Indeno(1,2,3-cd)pyrene	11.2	U	11.2	U	11	U	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Isophorone	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
m,p-Cresols	149	U	149	U	146	U	146	U	146	U	148	U	148	U	150	U	149	U	147	U
m-Nitroaniline	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Naphthalene	11.2	U	11.2	U	11	U	10.9	U	11	U	11.1	U	11.1	U	11.2	U	15.1	J	22.6	J
Nitrobenzene	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
N-Nitrosodipropylamine	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
o-Cresol	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
o-Nitroaniline	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Pentachlorophenol	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Phenanthrene	11.2	U	11.2	U	11	U	10.9	U	11	U	11.1	U	11.1	U	11.2	U	11.2	U	11	U
Phenol	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
p-Nitroaniline	74.7	U	74.6	U	73.2	U	72.9	U	73.2	U	73.8	U	74.1	U	75	U	74.3	U	73.5	U
Pyrene	11.7	U	11.7	U	11.5	U	11.4	U	11.5	U	11.6	U	11.6	U	11.8	U	11.7	U	11.5	U
RCRA Metals (mg/kg)																				
Aluminum	20100		20000		8790		10600		14400		15800		21000		20000		12700		17600	
Antimony	0.43	U	0.422	U	0.429	U	0.431	U	0.582	J	0.442	U	0.438	U	0.522	J	0.426	U	0.433	U
Arsenic	4.93		5.14		2.49		2.96		6.41		6.05		7.35		6.31		3.61		5.44	
Barium	47.8		47.1		19.4		23.1		17.4		19.2		26.4		23.9		18		24.2	
Beryllium	0.428	J	0.435	J	0.17	J	0.198	J	0.131	J	0.139	J	0.245	J	0.226	J	0.157	J	0.213	J
Cadmium	0.107	U	0.106	U	0.107	U	0.108	U	0.108	U	0.11	U	0.109	U	0.107	U	0.106	U	0.108	U
Calcium	142		130		74.3		89.9		34.8		28.5		129		96.6		97.1		152	
Chromium	21		21.5		11.8		12.4		33.2		34.4		29.3		30.7		18		24	
Cobalt	4.31		4.25		1.28		1.63		0.962		1		1.62		1.44		1.15		1.51	
Copper	9.77		10.4		5.28		6.04		13.1		13.5		17.6		18		10.7		14.5	
Iron	18300		19200		8180		9200		14000		14400		18100		18200		10000		14400	
Lead	7.65		7.55		6.03		5.27		5.52		6.08		7.42		6.97		5.07		7.04	
Magnesium	1280		1190		444		556		315		345		494		444		314		463	
Manganese	85		84.1		26.2		30.5		9.09		9.38		17.3		14.9		12.1		17.3	
Mercury	43		32.7		44.7		36.2		47.3		38.4		27.5		44.3		65.8		51.1	
Nickel	12		12.1		4.19		5.21		4.28		4.71		6.89		6		4.03		5.79	
Potassium	834		806		359		439		350		377		527		473		345		505	
Selenium	0.705	J	0.67	J	0.643	U	0.646	U	0.646	U	0.663	U	0.657	U	0.699	J	0.639	U	0.649	U
Silver	0.107	U	0.106	U	0.929		0.435	J	0.108	U	0.11	U	2.66		7.8		0.231	J	0.363	J
Sodium	26.6		25		15.8	J	17.7		15.3	J	15.2	J	24.6		18.8		14.3	J	22.2	
Thallium	0.537	U	0.528	U	0.536	U	0.538	U	0.539	U	0.552	U	0.547	U	0.534	U	0.532	U	0.541	U
Vanadium	35.2		35		17.7		19.4		31.5		34.9		45.8		48.1		28.3		38.2	
Zinc	24.4		24		11		12.6		11.9		12.2		18.8		16.5		12.2		14.5	

Note: Sub-floor samples are shaded.

Table 65. Pit 34C Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Sample Number																			
Parameter	**BLT-P34C-SO-01a**		**BLT-P34C-SO-01b**		**BLT-P34C-SO-02a**		**BLT-P34C-SO-02b**		**BLT-P34C-SO-03a**		**BLT-P34C-SO-03b**		**BLT-P34C-SO-04a**		**BLT-P34C-SO-04b**		**BLT-P34C-SO-05a**		**BLT-P34C-SO-05b**	
	Result	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**	**Result**	**Qual**
RCRA Pesticide (ug/kg)																				
4,4'-DDD	0.364	U	0.359	U	0.357	U	0.361	U	0.367	U	0.371	U	0.368	U	0.369	U	0.365	U	0.368	U
4,4'-DDE	0.364	U	0.359	U	0.357	U	0.361	U	0.367	U	0.371	U	0.368	U	0.369	U	0.365	U	0.368	U
4,4'-DDT	0.364	U	0.359	U	0.357	U	0.361	U	0.367	U	0.371	U	0.368	U	0.369	U	0.365	U	0.368	U
Aldrin	0.182	U	0.179	U	0.179	U	0.181	U	0.183	U	0.186	U	0.184	U	0.185	U	0.182	U	0.184	U
alpha-BHC	0.182	U	0.179	U	0.179	U	0.181	U	0.183	U	0.186	U	0.184	U	0.185	U	0.182	U	0.184	U
beta-BHC	0.182	U	0.179	U	0.179	U	0.181	U	0.183	U	0.186	U	0.184	U	0.185	U	0.182	U	0.184	U
Chlordane (tech.)	1.82	U	1.79	U	1.79	U	1.81	U	1.83	U	1.86	U	1.84	U	1.85	U	1.82	U	1.84	U
delta-BHC	0.182	U	0.179	U	0.179	U	0.181	U	0.183	U	0.186	U	0.184	U	0.185	U	0.182	U	0.184	U
Dieldrin	0.364	U	0.359	U	0.357	U	0.361	U	0.367	U	0.371	U	0.368	U	0.369	U	0.365	U	0.368	U
Endosulfan I	0.182	U	0.179	U	0.179	U	0.181	U	0.183	U	0.186	U	0.184	U	0.185	U	0.182	U	0.184	U
Endosulfan II	0.364	U	0.359	U	0.357	U	0.361	U	0.367	U	0.371	U	0.368	U	0.369	U	0.365	U	0.368	U
Endosulfan sulfate	0.364	U	0.359	U	0.357	U	0.361	U	0.367	U	0.371	U	0.368	U	0.369	U	0.365	U	0.368	U
Endrin	0.364	U	0.359	U	0.357	U	0.361	U	0.367	U	0.371	U	0.368	U	0.369	U	0.365	U	0.368	U
Endrin aldehyde	0.364	U	0.359	U	0.357	U	0.361	U	0.367	U	0.371	U	0.368	U	0.369	U	0.365	U	0.368	U
Endrin ketone	0.364	U	0.359	U	0.357	U	0.361	U	0.367	U	0.371	U	0.368	U	0.369	U	0.365	U	0.368	U
gamma-BHC (Lindane)	0.182	U	0.179	U	0.179	U	0.181	U	0.183	U	0.186	U	0.184	U	0.185	U	0.182	U	0.184	U
Heptachlor	0.182	U	0.179	U	0.179	U	0.181	U	0.183	U	0.186	U	0.184	U	0.185	U	0.182	U	0.184	U
Heptachlor epoxide	0.182	U	0.179	U	0.179	U	0.181	U	0.183	U	0.186	U	0.184	U	0.185	U	0.182	U	0.184	U
Methoxychlor	1.82	U	1.79	U	1.79	U	1.81	U	1.83	U	1.86	U	1.84	U	1.85	U	1.82	U	1.84	U
Toxaphene	6.07	U	5.98	U	5.95	U	6.01	U	6.11	U	6.18	U	6.13	U	6.15	U	6.07	U	6.12	U
TCLP PCB (ug/kg)																				
Aroclor-1016	1.21	U	1.2	U	1.19	2	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U	1.21	U	1.22	U
Aroclor-1221	1.21	U	1.2	U	1.19	2	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U	1.21	U	1.22	U
Aroclor-1232	1.21	U	1.2	U	1.19	2	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U	1.21	U	1.22	U
Aroclor-1242	1.21	U	1.2	U	1.19	2	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U	1.21	U	1.22	U
Aroclor-1248	1.21	U	1.2	U	1.19	2	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U	1.21	U	1.22	U
Aroclor-1254	1.21	U	1.2	U	1.19	2	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U	1.21	U	1.22	U
Aroclor-1260	1.21	U	1.2	U	1.19	2	1.2	U	1.22	U	1.24	U	1.23	U	1.23	U	1.21	U	1.22	U
Herbicides (ug/kg)																				
2,4,5-T	1.82	U	1.79	U	1.78	U	1.8	U	1.83	U	1.85	U	1.83	U	1.84	U	1.82	U	1.83	U
2,4,5-TP	1.82	U	1.79	U	1.78	U	1.8	U	1.83	U	1.85	U	1.83	U	1.84	U	1.82	U	1.83	U
2,4-D	1.82	U	1.79	U	1.78	U	1.8	U	1.83	U	1.85	U	1.83	U	1.84	U	1.82	U	1.83	U
TOC (mg/kg)																				
Total Organic Carbon #1	2100		1540		1550		1900		956		971		1190		1020		919		842	
Total Organic Carbon #2	2120		1530		1520		2000		950		945		1200		1140		882		796	
Total Organic Carbon #3	2360		2140		1500		2100		961		966		1270		1070		870		827	
Total Organic Carbon #4	2090		1480		1520		1950		904		963		1200		1130		921		810	
Total Organic Carbon Average	2170		1670		1520		1990		943		961		1210		1090		898		819	

Note: Sub-floor samples are shaded.

Table 65. Pit 34C Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number					
	BLT-P34C-SO-06a		BLT-P34C-SO-06b		BLT-P34C-SO-06g	
	Result	Qual	Result	Qual	Result	Qual
RCRA VOC (ug/kg)						
1,1,1,2-Tetrachloroethane	0.22	U	0.228	U	0.297	
1,1,1-Trichloroethane	0.33	U	0.342	U	0.445	
1,1,2,2-Tetrachloroethane	0.275	U	0.285	U	0.371	
1,1,2-Trichloroethane	0.33	U	0.342	U	0.445	
1,1-Dichloroethane	0.33	U	0.342	U	0.445	
1,1-Dichloroethylene	0.33	U	0.342	U	0.445	
1,1-Dichloropropene	0.275	U	0.285	U	0.371	
1,2,3-Trichlorobenzene	0.275	U	0.285	U	0.371	
1,2,3-Trichloropropane	0.549	U	0.571	U	0.742	
1,2,4-Trichlorobenzene	0.33	U	0.342	U	0.445	
1,2,4-Trimethylbenzene	6.47		7.69		437	
1,2-Dibromo-3-chloropropane	0.549	U	0.571	U	0.742	
1,2-Dibromoethane	0.22	U	0.228	U	0.297	
1,2-Dichlorobenzene	0.22	U	0.228	U	0.297	
1,2-Dichloroethane	0.275	U	0.285	U	0.371	
1,2-Dichloroethylene (total)	0.33	U	0.342	U	0.445	
1,2-Dichloropropane	0.33	U	0.342	U	0.445	
1,3,5-Trimethylbenzene	0.325	J	0.335	J	39.7	
1,3-Dichlorobenzene	0.22	U	0.228	U	0.297	
1,3-Dichloropropane	0.33	U	0.342	U	0.445	
1,4-Dichlorobenzene	0.22	U	0.228	U	0.297	
2,2-Dichloropropane	0.33	U	0.342	U	0.445	
2-Butanone	5.53		21.5		18	
2-Chloro-1,3-butadiene	0.33	U	0.342	U	0.445	
2-Chloroethylvinyl ether	1.37	U	1.43	U	1.85	
2-Chlorotoluene	0.22	U	0.228	U	0.297	
2-Hexanone	1.67	U	1.74	U	2.25	
2-Nitropropane	0.989	U	1.03	U	1.33	
4-Chlorotoluene	0.264	U	0.274	U	0.356	
4-Isopropyltoluene	0.275	U	0.285	U	0.371	
4-Methyl-2-pentanone	3.32	J	3.05	J	2.4	J
Acetone	152		176		194	
Acetonitrile	97.4		129		153	
Acrolein	3.3	U	3.42	U	4.45	
Acrylonitrile	1.1	U	1.14	U	1.48	
Allyl chloride	2.2	U	2.28	U	2.97	
Benzene	0.362	U	0.377	U	0.489	
Benzyl chloride	0.659	U	0.685	U	0.89	
bis(2-Chloroisopropyl)ether	1.65	U	1.71	U	2.22	
Bromobenzene	0.22	U	0.228	U	0.297	
Bromochloromethane	0.549	U	0.571	U	0.742	
Bromodichloromethane	0.22	U	0.228	U	0.297	
Bromoform	0.33	U	0.342	U	0.445	
Bromomethane	0.549	U	0.571	U	0.742	
Carbon disulfide	1.72	J	1.43	U	1.85	
Carbon tetrachloride	0.22	U	0.228	U	0.297	

Note: Sub-floor samples are shaded.

Table 65. Pit 34C Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number					
	BLT-P34C-SO-06a		BLT-P34C-SO-06b		BLT-P34C-SO-06g	
	Result	Qual	Result	Qual	Result	Qual
Chlorobenzene	0.22	U	0.228	U	0.297	
Chloroethane	0.549	U	0.571	U	0.742	
Chloroform	0.514	J	0.271	J	0.36	J
Chloromethane	0.549	U	0.571	U	0.742	
cis-1,2-Dichloroethylene	0.33	U	0.342	U	0.445	
cis-1,3-Dichloropropylene	0.22	U	0.228	U	0.297	
cis-1,4-Dichloro-2-butene	0.549	U	0.571	U	0.742	
Cyclohexane	0.33	U	0.342	U	0.445	
Cyclohexanone	16.5	U	17.1	U	22.2	
Dibromochloromethane	0.33	U	0.342	U	0.445	
	0.33	U	0.342	U	0.445	
Dichlorodifluoromethane	0.549	U	0.571	U	0.742	
Ethyl ether	2.56		1.55		0.927	J
Ethyl methacrylate	0.549	U	0.571	U	0.742	
Ethylbenzene	1.59		0.828	J	20.7	
Hexachlorobutadiene	0.549	U	0.571	U	0.742	
Iodomethane	1.83	U	1.91	U	2.48	
Isobutyl alcohol	11	U	11.4	U	14.8	
Isopropylbenzene	0.22	U	0.228	U	5.62	
m,p-Xylenes	7.88		4.62		136	
Methacrylonitrile	0.769	U	0.799	U	1.04	
Methyl acetate	28.1		28.3		16.5	
Methyl methacrylate	1.1	U	1.14	U	1.48	
Methylcyclohexane	0.33	U	0.342	U	0.445	
Methylene chloride	2.2	U	2.28	U	2.97	
Naphthalene	72.8	B	46.7		387	
n-Butyl alcohol	29.7	U	30.8	U	40	
n-Butylbenzene	0.242	J	0.228	U	11.8	
n-Propylbenzene	0.22	U	0.228	U	10.3	
o-Xylene	5.12		3.03		49.6	
Pentachloroethane	1.65	U	1.71	U	2.22	
Propionitrile	1.1	U	1.14	U	1.48	
sec-Butylbenzene	0.22	U	0.228	U	2.89	
Styrene	0.22	U	0.228	U	0.297	
tert-Butyl methyl ether	0.22	U	0.228	U	0.297	
tert-Butylbenzene	0.22	U	0.228	U	0.297	
Tetrachloroethylene	0.22	U	0.228	U	0.297	
Toluene	5.11		2.37		8.9	
trans-1,2-Dichloroethylene	0.33	U	0.342	U	0.445	
trans-1,3-Dichloropropylene	0.33	U	0.342	U	0.445	
trans-1,4-Dichloro-2-butene	0.549	U	0.571	U	0.742	
Trichloroethylene	0.275	U	0.285	U	0.371	
Trichlorofluoromethane	0.549	U	0.571	U	0.742	
Trichlorotrifluoroethane	1.1	U	1.14	U	1.48	
Vinyl acetate	1.37	U	1.43	U	1.85	
Vinyl chloride	0.549	U	0.571	U	0.742	
Xylenes (total)	13		7.65		185	

Note: Sub-floor samples are shaded.

Table 65. Pit 34C Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number					
	BLT-P34C-SO-06a		BLT-P34C-SO-06b		BLT-P34C-SO-06g	
	Result	Qual	Result	Qual	Result	Qual
RCRA SVOC (ug/kg)						
1,1'-Biphenyl	112	U	114	U	113	U
1,2,4-Trichlorobenzene	74.3	U	75.8	U	75.3	U
1,2-Dichlorobenzene	74.3	U	75.8	U	75.3	U
1,3-Dichlorobenzene	74.3	U	75.8	U	75.3	U
1,4-Dichlorobenzene	74.3	U	75.8	U	75.3	U
2,4,5-Trichlorophenol	74.3	U	75.8	U	75.3	U
2,4,6-Trichlorophenol	74.3	U	75.8	U	75.3	U
2,4-Dichlorophenol	74.3	U	75.8	U	75.3	U
2,4-Dimethylphenol	74.3	U	75.8	U	75.3	U
2,4-Dinitrophenol	141	U	144	U	143	U
2,4-Dinitrotoluene	37.2	U	37.9	U	37.6	U
2,6-Dinitrotoluene	37.2	U	37.9	U	37.6	U
2-Chloronaphthalene	13	U	13.3	U	13.2	U
2-Chlorophenol	74.3	U	75.8	U	75.3	U
2-Methyl-4,6-dinitrophenol	74.3	U	75.8	U	75.3	U
2-Methylnaphthalene	7.43	U	2560		7.53	U
2-Nitrophenol	37.2	U	37.9	U	37.6	U
3,3'-Dichlorobenzidine	112	U	114	U	113	U
4-Bromophenylphenylether	37.2	U	37.9	U	37.6	U
4-Chloro-3-methylphenol	37.2	U	37.9	U	37.6	U
4-Chloroaniline	74.3	U	75.8	U	75.3	U
4-Chlorophenylphenylether	37.2	U	37.9	U	37.6	U
4-Nitrophenol	74.3	U	75.8	U	75.3	U
Acenaphthene	12.4	U	12.7	U	12.6	U
Acenaphthylene	11.2	U	11.4	U	11.3	U
alpha-Terpineol	74.3	U	75.8	U	75.3	U
Anthracene	7.43	U	7.58	U	7.53	U
Atrazine	112	U	114	U	113	U
Benzaldehyde	112	U	114	U	113	U
Benzo(a)anthracene	11.2	U	11.4	U	11.3	U
Benzo(a)pyrene	11.2	U	11.4	U	11.3	U
Benzo(b)fluoranthene	11.2	U	11.4	U	11.3	U
Benzo(ghi)perylene	11.2	U	11.4	U	11.3	U
Benzo(k)fluoranthene	11.2	U	11.4	U	11.3	U
bis(2-Chloroethoxy)methane	74.3	U	75.8	U	75.3	U
bis(2-Chloroethyl) ether	74.3	U	75.8	U	75.3	U
bis(2-Chloroisopropyl)ether	74.3	U	75.8	U	75.3	U
bis(2-Ethylhexyl)phthalate	74.3	U	2020		113	J
Butylbenzylphthalate	74.3	U	189	J	75.3	U
Carbazole	11.2	U	11.4	U	11.3	U
Chrysene	11.2	U	11.4	U	11.3	U
Dibenzo(a,h)anthracene	11.2	U	11.4	U	11.3	U
Dibenzofuran	74.3	U	75.8	U	75.3	U
Diethylphthalate	74.3	U	75.8	U	75.3	U
Dimethylphthalate	74.3	U	75.8	U	75.3	U
Di-n-butylphthalate	37.2	U	179	J	37.6	U

Note: Sub-floor samples are shaded.

Table 65. Pit 34C Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number					
	BLT-P34C-SO-06a		BLT-P34C-SO-06b		BLT-P34C-SO-06g	
	Result	Qual	Result	Qual	Result	Qual
Di-n-octylphthalate	74.3	U	109	J	75.3	U
Diphenylamine	74.3	U	75.8	U	75.3	U
Fluoranthene	11.2	U	11.4	U	11.3	U
Fluorene	11.2	U	11.4	U	11.3	U
Hexachlorobenzene	74.3	U	75.8	U	75.3	U
Hexachlorobutadiene	74.3	U	75.8	U	75.3	U
Hexachlorocyclopentadiene	74.3	U	75.8	U	75.3	U
Hexachloroethane	74.3	U	75.8	U	75.3	U
Indeno(1,2,3-cd)pyrene	11.2	U	11.4	U	11.3	U
Isophorone	74.3	U	75.8	U	75.3	U
m,p-Cresols	149	U	152	U	151	U
m-Nitroaniline	74.3	U	75.8	U	75.3	U
Naphthalene	37.1	J	161		11.3	U
Nitrobenzene	74.3	U	75.8	U	75.3	U
N-Nitrosodipropylamine	74.3	U	75.8	U	75.3	U
o-Cresol	74.3	U	75.8	U	75.3	U
o-Nitroaniline	74.3	U	75.8	U	75.3	U
Pentachlorophenol	74.3	U	75.8	U	75.3	U
Phenanthrene	11.2	U	11.4	U	11.3	U
Phenol	74.3	U	75.8	U	75.3	U
p-Nitroaniline	74.3	U	75.8	U	75.3	U
Pyrene	11.7	U	11.9	U	11.8	U
RCRA Metals (mg/kg)						
Aluminum	24200		24900		16000	
Antimony	0.445	U	2.17	U	2.12	U
Arsenic	7.48		8.08		6.18	
Barium	29.5		30.8		24.2	
Beryllium	0.274	J	0.291	J	0.243	J
Cadmium	0.111	U	0.542	U	0.53	U
Calcium	130		138		111	
Chromium	34		35.2		28.6	
Cobalt	1.8		2.07	J	1.96	J
Copper	19.4		19.6		15.9	
Iron	21800		23000		32100	
Lead	7.95		8.25		47	
Magnesium	568		603		411	
Manganese	20.6		21.9		44.7	
Mercury	68.1		49.9		46.7	
Nickel	7.44		7.75		6.57	
Potassium	589		624		439	
Selenium	0.667	U	3.25	U	3.18	U
Silver	9.67		7.14		2.62	
Sodium	24.7		25.5		21.8	
Thallium	0.556	U	2.71	U	2.65	U
Vanadium	55.4		57.3		37.1	
Zinc	17.3		17.8		26.2	

Note: Sub-floor samples are shaded.

Table 65. Pit 34C Soil - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number					
	BLT-P34C-SO-06a		BLT-P34C-SO-06b		BLT-P34C-SO-06g	
	Result	Qual	Result	Qual	Result	Qual
RCRA Pesticide (ug/kg)						
4,4'-DDD	0.373	U	0.373	U	0.366	U
4,4'-DDE	0.373	U	0.373	U	0.366	U
4,4'-DDT	0.373	U	0.373	U	0.366	U
Aldrin	0.187	U	0.186	U	0.183	U
alpha-BHC	0.187	U	0.186	U	0.183	U
beta-BHC	0.187	U	0.186	U	0.183	U
Chlordane (tech.)	1.87	U	1.86	U	1.83	U
delta-BHC	0.187	U	0.186	U	0.183	U
Dieldrin	0.373	U	0.373	U	0.366	U
Endosulfan I	0.187	U	0.186	U	0.183	U
Endosulfan II	0.373	U	0.373	U	0.366	U
Endosulfan sulfate	0.373	U	0.373	U	0.366	U
Endrin	0.373	U	0.373	U	0.366	U
Endrin aldehyde	0.373	U	0.373	U	0.366	U
Endrin ketone	0.373	U	0.373	U	0.366	U
gamma-BHC (Lindane)	0.187	U	0.186	U	0.183	U
Heptachlor	0.187	U	0.186	U	0.183	U
Heptachlor epoxide	0.187	U	0.186	U	0.183	U
Methoxychlor	1.87	U	1.86	U	1.83	U
Toxaphene	6.22	U	6.21	U	6.09	U
TCLP PCB (ug/kg)						
Aroclor-1016	1.24	U	1.24	U	1.22	U
Aroclor-1221	1.24	U	1.24	U	1.22	U
Aroclor-1232	1.24	U	1.24	U	1.22	U
Aroclor-1242	1.24	U	1.24	U	1.22	U
Aroclor-1248	1.24	U	1.24	U	1.22	U
Aroclor-1254	1.24	U	1.24	U	1.22	U
Aroclor-1260	1.24	U	1.24	U	1.22	U
Herbicides (ug/kg)						
2,4,5-T	1.86	U	1.86	U	1.82	U
2,4,5-TP	1.86	U	1.86	U	1.82	U
2,4-D	1.86	U	1.86	U	1.82	U
TOC (mg/kg)						
Total Organic Carbon #1	1120		1080		1040	
Total Organic Carbon #2	1160		1020		1080	
Total Organic Carbon #3	1150		1070		1120	
Total Organic Carbon #4	1120		990		1090	
Total Organic Carbon Average	1140		1040		1080	

Note: Sub-floor samples are shaded.

Table 66. Pit 34C Soil -Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																																
	BLT-P34C-SO-01a				BLT-P34C-SO-01b				BLT-P34C-SO-02a				BLT-P34C-SO-02b				BLT-P34C-SO-03a				BLT-P34C-SO-03b				BLT-P34C-SO-04a				BLT-P34C-SO-04b			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (901.1mod/HASL 300)																																	
Actinium-228	0	+/-	0.19	UI	0.88	+/-	0.30		0.23	+/-	0.14		0.77	+/-	0.22		0.47	+/-	0.11		0.76	+/-	0.17		0.94	+/-	0.24		1.12	+/-	0.23	
Americium-241	-0.02	+/-	0.10	U	-0.06	+/-	0.17	U	-0.02	+/-	0.09	U	0.02	+/-	0.14	U	-0.01	+/-	0.09	U	0.05	+/-	0.11	U	-0.02	+/-	0.11	U	-0.05	+/-	0.22	U
Antimony-124	0.06	+/-	0.07	U	0.01	+/-	0.08	U	0.03	+/-	0.06	U	-0.06	+/-	0.07	U	-0.01	+/-	0.04	U	-0.03	+/-	0.05	U	0.00	+/-	0.05	U	0.05	+/-	0.06	U
Antimony-125	-0.04	+/-	0.06	U	0.04	+/-	0.09	U	0.01	+/-	0.06	U	0.10	+/-	0.09	U	0.01	+/-	0.05	U	-0.02	+/-	0.05	U	0.01	+/-	0.07	U	-0.05	+/-	0.07	U
Barium-133	-0.01	+/-	0.03	U	0.00	+/-	0.05	U	0.00	+/-	0.03	U	-0.01	+/-	0.04	U	0.00	+/-	0.02	U	-0.01	+/-	0.03	U	0.02	+/-	0.03	U	-0.02	+/-	0.04	U
Barium-140	-0.12	+/-	0.23	U	-0.09	+/-	0.32	U	-0.16	+/-	0.21	U	0.15	+/-	0.33	U	-0.17	+/-	0.17	U	-0.06	+/-	0.20	U	0.06	+/-	0.27	U	0.10	+/-	0.24	U
Beryllium-7	0.09	+/-	0.23	U	0.06	+/-	0.32	U	-0.14	+/-	0.19	U	0.00	+/-	0.90	UI	0.10	+/-	0.17	U	-0.13	+/-	0.23	U	0.13	+/-	0.25	U	0.06	+/-	0.26	U
Bismuth-212	0.30	+/-	0.21	U	0.66	+/-	0.47		0.17	+/-	0.17	U	0.00	+/-	0.52	UI	0.00	+/-	0.36	UI	0.54	+/-	0.29		0.99	+/-	0.28		0.96	+/-	0.40	
Bismuth-214	0.34	+/-	0.11		0.00	+/-	0.16	UI	1.31	+/-	0.14		7.53	+/-	0.74		0.64	+/-	0.10		0.53	+/-	0.10		0.68	+/-	0.12		0.72	+/-	0.12	
Cerium-139	-0.01	+/-	0.02	U	-0.02	+/-	0.03	U	0.01	+/-	0.02	U	-0.03	+/-	0.04	U	0.01	+/-	0.02	U	0.01	+/-	0.02	U	-0.02	+/-	0.02	U	0.00	+/-	0.03	U
Cerium-141	-0.01	+/-	0.04	U	0.05	+/-	0.06	U	0.00	+/-	0.03	U	0.03	+/-	0.08	U	0.02	+/-	0.04	U	0.00	+/-	0.04	U	0.02	+/-	0.05	U	0.02	+/-	0.08	U
Cerium-144	0.00	+/-	0.13	U	0.01	+/-	0.20	U	-0.01	+/-	0.12	U	0.09	+/-	0.22	U	0.02	+/-	0.12	U	-0.01	+/-	0.12	U	-0.01	+/-	0.15	U	0.00	+/-	0.48	UI
Cesium-134	0.01	+/-	0.03	U	0.03	+/-	0.09	U	0.00	+/-	0.02	U	0.03	+/-	0.03	U	0.02	+/-	0.02	U	0.01	+/-	0.03	U	0.02	+/-	0.04	U	0.00	+/-	0.05	UI
Cesium-136	0.04	+/-	0.09	U	0.05	+/-	0.17	U	0.01	+/-	0.07	U	-0.12	+/-	0.12	U	0.00	+/-	0.08	U	-0.05	+/-	0.08	U	0.01	+/-	0.09	U	-0.11	+/-	0.10	U
Cesium-137	0.02	+/-	0.02	U	0.00	+/-	0.12	UI	0.02	+/-	0.02	U	0.05	+/-	0.05		0.01	+/-	0.02	U	-0.01	+/-	0.02	U	0.01	+/-	0.03	U	0.01	+/-	0.03	U
Chromium-51	0.04	+/-	0.31	U	-0.70	+/-	0.43	U	0.06	+/-	0.26	U	0.63	+/-	0.74	U	0.00	+/-	0.21	U	0.00	+/-	0.26	U	-0.11	+/-	0.31	U	0.06	+/-	0.36	U
Cobalt-56	0.02	+/-	0.02	U	-0.02	+/-	0.04	U	0.00	+/-	0.03	U	-0.01	+/-	0.04	U	0.01	+/-	0.02	U	0.02	+/-	0.03	U	0.00	+/-	0.03	U	0.01	+/-	0.03	U
Cobalt-57	0.00	+/-	0.02	U	-0.01	+/-	0.02	U	0.02	+/-	0.02	U	0.00	+/-	0.03	U	0.00	+/-	0.01	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U	-0.01	+/-	0.02	U
Cobalt-58	-0.01	+/-	0.03	U	-0.01	+/-	0.04	U	-0.01	+/-	0.02	U	-0.01	+/-	0.04	U	-0.01	+/-	0.02	U	0.01	+/-	0.02	U	0.00	+/-	0.03	U	-0.01	+/-	0.04	U
Cobalt-60	0.01	+/-	0.03	U	0.02	+/-	0.04	U	0.00	+/-	0.02	U	0.00	+/-	0.03	U	-0.01	+/-	0.02	U	0.02	+/-	0.02	U	0.01	+/-	0.03	U	0.06	+/-	0.05	U
Europium-152	0.02	+/-	0.07	U	-0.02	+/-	0.09	U	0.03	+/-	0.05	U	0.01	+/-	0.09	U	-0.01	+/-	0.05	U	0.04	+/-	0.05	U	0.01	+/-	0.07	U	0.07	+/-	0.08	U
Europium-154	-0.02	+/-	0.06	U	0.00	+/-	0.07	UI	0.02	+/-	0.06	U	-0.03	+/-	0.10	U	-0.02	+/-	0.06	U	0.03	+/-	0.07	U	0.09	+/-	0.06	U	-0.07	+/-	0.09	U
Europium-155	0.00	+/-	0.06	U	0.01	+/-	0.10	U	0.07	+/-	0.07	U	-0.06	+/-	0.11	U	0.08	+/-	0.06	U	0.04	+/-	0.06	U	0.03	+/-	0.08	U	0.00	+/-	0.14	UI
Iridium-192	0.00	+/-	0.03	U	0.02	+/-	0.04	U	0.01	+/-	0.02	U	-0.01	+/-	0.04	U	0.01	+/-	0.02	U	-0.01	+/-	0.02	U	0.02	+/-	0.03	U	0.00	+/-	0.03	U
Iron-59	-0.04	+/-	0.05	U	-0.02	+/-	0.09	U	0.02	+/-	0.05	U	0.00	+/-	0.07	U	0.00	+/-	0.05	U	0.00	+/-	0.06	U	-0.02	+/-	0.06	U	0.06	+/-	0.08	U
Lead-210	3.51	+/-	3.32	U	-1.99	+/-	4.43	U	4.22	+/-	3.45	U	8.04	+/-	4.19		-0.04	+/-	2.30	U	4.24	+/-	4.43	U	-0.24	+/-	2.65	U	4.16	+/-	7.02	U
Lead-212	0.44	+/-	0.07		1.06	+/-	0.12		0.26	+/-	0.05		0.67	+/-	0.10		0.41	+/-	0.05		0.60	+/-	0.07		0.92	+/-	0.09		1.07	+/-	0.10	
Lead-214	0.36	+/-	0.11		0.80	+/-	0.13		1.51	+/-	0.13		8.53	+/-	0.75		0.80	+/-	0.10		0.65	+/-	0.11		0.73	+/-	0.12		0.71	+/-	0.11	
Manganese-54	0.00	+/-	0.02	U	0.00	+/-	0.04	U	-0.02	+/-	0.02	U	0.02	+/-	0.04	U	0.00	+/-	0.02	U	-0.02	+/-	0.02	U	0.00	+/-	0.03	U	0.02	+/-	0.03	U
Mercury-203	-0.01	+/-	0.03	U	0.00	+/-	0.05	U	0.00	+/-	0.03	U	-0.01	+/-	0.04	U	-0.01	+/-	0.03	U	0.04	+/-	0.03	U	0.03	+/-	0.03	U	0.06	+/-	0.05	U
Neodymium-147	0.25	+/-	0.54	U	-0.04	+/-	0.73	U	-0.46	+/-	0.49	U	-0.09	+/-	0.81	U	-0.12	+/-	0.47	U	-0.21	+/-	0.49	U	0.03	+/-	0.60	U	-0.18	+/-	0.65	U
Neptunium-239	0.07	+/-	0.12	U	-0.12	+/-	0.16	U	-0.05	+/-	0.11	U	0.10	+/-	0.34	U	0.03	+/-	0.10	U	-0.06	+/-	0.12	U	0.05	+/-	0.14	U	0.10	+/-	0.16	U
Niobium-94	0.00	+/-	0.03	U	0.02	+/-	0.03	U	0.00	+/-	0.02	U	0.04	+/-	0.03	U	0.00	+/-	0.02	U	0.00	+/-	0.02	U	-0.01	+/-	0.02	U	0.03	+/-	0.03	U
Niobium-95	0.02	+/-	0.04	U	0.01	+/-	0.05	U	0.04	+/-	0.03	U	0.00	+/-	0.06	UI	0.01	+/-	0.03	U	-0.01	+/-	0.04	U	0.04	+/-	0.04	U	0.00	+/-	0.05	U
Potassium-40	3.17	+/-	0.83		6.85	+/-	1.10		1.42	+/-	0.52		3.30	+/-	0.79		1.33	+/-	0.43		1.95	+/-	0.59		2.66	+/-	0.67		3.72	+/-	0.73	
Promethium-144	0.01	+/-	0.03	U	0.00	+/-	0.04	U	-0.01	+/-	0.02	U	0.01	+/-	0.03	U	0.00	+/-	0.02	U	0.00	+/-	0.02	U	0.01	+/-	0.03	U	0.00	+/-	0.03	U
Promethium-146	0.02	+/-	0.03	U	0.04	+/-	0.04	U	0.00	+/-	0.05	UI	0.00	+/-	0.06	UI	0.01	+/-	0.02	U	0.00	+/-	0.02	U	0.00	+/-	0.03	U	0.00	+/-	0.03	U
Radium-226	0.34	+/-	0.11		0.55	+/-	0.16		1.31	+/-	0.14		7.53	+/-	0.74		0.64	+/-	0.10		0.53	+/-	0.10		0.68	+/-	0.12		0.72	+/-	0.12	
Radium-228	0.00	+/-	0.19	UI	0.88	+/-	0.30		0.23	+/-	0.14		0.77	+/-	0.22		0.47	+/-	0.11		0.76	+/-	0.17		0.94	+/-	0.24		1.12	+/-	0.23	
Ruthenium-106	0.18	+/-	0.23	U	0.18	+/-	0.31	U	0.01	+/-	0.19	U	-0.20	+/-	0.27	U	-0.05	+/-	0.18	U	0.13	+/-	0.21	U	0.15	+/-	0.21	U	0.00	+/-	0.26	U
Silver-110m	-0.02	+/-	0.02	U	0.01	+/-	0.03	U	-0.02	+/-	0.02	U	0.03	+/-	0.05	U	-0.01	+/-	0.02	U	0.01	+/-	0.02	U	0.01	+/-	0.03	U	-0.01	+/-	0.03	U
Sodium-22	-0.01	+/-	0.02	U	0.00	+/-	0.02	UI	0.01	+/-	0.02	U	-0.01	+/-	0.04	U	-0.01	+/-	0.02	U	0.01	+/-	0.03	U	0.03	+/-	0.02	U	-0.02	+/-	0.03	U
Thallium-208	0.17	+/-	0.05		0.31	+/-	0.08		0.08	+/-	0.05		0.12	+/-	0.05		0.11	+/-	0.04		0.22	+/-	0.05		0.28	+/-	0.06		0.39	+/-	0.07	
Thorium-230	0.34	+/-	0.11		0.55	+/-	0.16		1.31	+/-	0.14		7.53	+/-	0.74		0.64	+/-	0.10		0.53	+/-	0.10		0.68	+/-	0.12		0.72	+/-	0.12	
Thorium-234	0.11	+/-	1.16	U	0.61	+/-	1.38	U	0.19	+/-	0.75	U	2.29	+/-	1.86		0.56	+/-	0.74	U	0.53	+/-	1.51	U	0.83	+/-	1.34	U	2.83	+/-	2.59	

Note: Sub-floor samples are shaded.

Table 66. Pit 34C Soil -Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	BLT-P34C-SO-01a				BLT-P34C-SO-01b				BLT-P34C-SO-02a				BLT-P34C-SO-02b				BLT-P34C-SO-03a				BLT-P34C-SO-03b				BLT-P34C-SO-04a				BLT-P34C-SO-04b			
	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual
Gamma Scan (901.1mod/HASL 300)																																
Tin-113	0.00	+/-	0.03	U	0.00	+/-	0.05	U	-0.01	+/-	0.03	U	-0.04	+/-	0.05	U	-0.02	+/-	0.03	U	0.01	+/-	0.03	U	0.03	+/-	0.03	U	0.01	+/-	0.04	U
Uranium-235	0.09	+/-	0.13	U	0.00	+/-	0.19	U	0.08	+/-	0.15	U	0.10	+/-	0.24	U	0.03	+/-	0.12	U	0.14	+/-	0.13	U	0.04	+/-	0.16	U	0.06	+/-	0.31	U
Uranium-238	0.11	+/-	1.16	U	0.61	+/-	1.38	U	0.19	+/-	0.75	U	2.29	+/-	1.86		0.56	+/-	0.74	U	0.53	+/-	1.51	U	0.83	+/-	1.34	U	2.83	+/-	2.59	
Yttrium-88	0.00	+/-	0.03	U	-0.02	+/-	0.04	U	0.00	+/-	0.03	U	0.02	+/-	0.01	U	-0.01	+/-	0.03	U	0.00	+/-	0.03	U	0.03	+/-	0.03	U	-0.01	+/-	0.03	U
Zinc-65	-0.03	+/-	0.06	U	-0.18	+/-	0.10	U	0.03	+/-	0.04	U	0.01	+/-	0.07	U	0.04	+/-	0.05	U	-0.03	+/-	0.05	U	0.11	+/-	0.06	U	0.05	+/-	0.03	U
Zirconium-95	-0.02	+/-	0.05	U	0.04	+/-	0.07	U	0.00	+/-	0.04	U	0.00	+/-	0.06	U	0.00	+/-	0.04	U	0.00	+/-	0.05	U	0.01	+/-	0.05	U	0.04	+/-	0.06	U
C-14 (EERF C-01 mod)	-0.72	+/-	1.06	U	-1.35	+/-	1.10	U	4.75	+/-	1.91		0.73	+/-	1.22	U	2.29	+/-	1.22		0.85	+/-	1.28	U	11.80	+/-	2.10		10.30	+/-	2.15	
Cl-36 (GL-Rad-A033)	-0.02	+/-	0.04	U	0.00	+/-	0.03	U	-0.01	+/-	0.03	U	0.02	+/-	0.04	U	0.01	+/-	0.04	U	-0.06	+/-	0.03	U	-0.01	+/-	0.06	U	0.01	+/-	0.04	U
Ni-63 (RESL Ni-1 mod)	-0.77	+/-	1.50	U	0.35	+/-	1.37	U	-0.68	+/-	1.31	U	0.20	+/-	2.25	U	-0.93	+/-	1.83	U	0.69	+/-	1.48	U	0.48	+/-	1.81	U	-0.41	+/-	1.57	U
Sr-90 (905.0 mod)	0.05	+/-	0.09	U	-0.05	+/-	0.05	U	-0.01	+/-	0.06	U	0.05	+/-	0.09	U	0.00	+/-	0.07	U	-0.02	+/-	0.06	U	0.12	+/-	0.08	U	-0.08	+/-	0.06	U
H-3 (906.0 mod)	-0.19	+/-	0.52	U	-0.17	+/-	0.51	U	0.57	+/-	0.47	U	0.03	+/-	0.52	U	-0.15	+/-	0.52	U	-0.06	+/-	0.52	U	1.82	+/-	0.68		1.19	+/-	0.64	

Note: Sub-floor samples are shaded.

Table 66. Pit 34C Soil -Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)																			
	BLT-P34C-SO-05a				BLT-P34C-SO-05b				BLT-P34C-SO-06a				BLT-P34C-SO-06b				BLT-P34C-SO-06g			
	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual	Result	Uncertainty		Qual
Gamma Scan (901.1r																				
Actinium-228	1.04	+/-	0.25		0.78	+/-	0.26		0.76	+/-	0.20		0.93	+/-	0.20		0.60	+/-	0.23	
Americium-241	0.08	+/-	0.22	U	0.03	+/-	0.13	U	0.03	+/-	0.11	U	0.06	+/-	0.12	U	0.07	+/-	0.13	U
Antimony-124	-0.01	+/-	0.07	U	0.03	+/-	0.07	U	-0.04	+/-	0.07	U	0.00	+/-	0.06	U	0.01	+/-	0.06	U
Antimony-125	0.03	+/-	0.07	U	0.00	+/-	0.08	U	0.02	+/-	0.06	U	0.02	+/-	0.07	U	0.04	+/-	0.07	U
Barium-133	0.02	+/-	0.04	U	-0.01	+/-	0.04	U	0.00	+/-	0.03	U	0.02	+/-	0.04	U	0.02	+/-	0.03	U
Barium-140	-0.11	+/-	0.29	U	-0.03	+/-	0.29	U	0.18	+/-	0.22	U	0.13	+/-	0.28	U	0.13	+/-	0.26	U
Beryllium-7	-0.15	+/-	0.28	U	-0.19	+/-	0.29	U	-0.12	+/-	0.25	U	-0.08	+/-	0.26	U	0.03	+/-	0.29	U
Bismuth-212	0.39	+/-	0.50	U	0.62	+/-	0.31		0.38	+/-	0.27		0.49	+/-	0.30		0.49	+/-	0.31	
Bismuth-214	2.04	+/-	0.25		1.14	+/-	0.17		0.62	+/-	0.11		0.86	+/-	0.13		1.95	+/-	0.16	
Cerium-139	0.00	+/-	0.02	U	0.00	+/-	0.02	U	-0.01	+/-	0.02	U	-0.01	+/-	0.02	U	0.02	+/-	0.02	U
Cerium-141	-0.01	+/-	0.06	U	0.03	+/-	0.06	U	-0.01	+/-	0.05	U	0.04	+/-	0.06	U	0.03	+/-	0.07	U
Cerium-144	-0.04	+/-	0.17	U	-0.07	+/-	0.16	U	0.04	+/-	0.14	U	0.05	+/-	0.15	U	-0.04	+/-	0.16	U
Cesium-134	0.03	+/-	0.03	U	0.00	+/-	0.05	UI	0.05	+/-	0.03	U	0.03	+/-	0.05	U	0.07	+/-	0.04	U
Cesium-136	-0.02	+/-	0.13	U	-0.02	+/-	0.11	U	0.01	+/-	0.10	U	0.05	+/-	0.10	U	-0.03	+/-	0.11	U
Cesium-137	0.01	+/-	0.03	U	0.03	+/-	0.03	U	0.00	+/-	0.03	U	0.00	+/-	0.03	U	0.04	+/-	0.03	U
Chromium-51	-0.06	+/-	0.33	U	-0.30	+/-	0.36	U	0.08	+/-	0.30	U	-0.09	+/-	0.32	U	0.13	+/-	0.31	U
Cobalt-56	0.00	+/-	0.03	U	0.01	+/-	0.03	U	0.03	+/-	0.02	U	0.01	+/-	0.03	U	0.01	+/-	0.03	U
Cobalt-57	-0.01	+/-	0.02	U	0.01	+/-	0.02	U	-0.01	+/-	0.02	U	-0.01	+/-	0.02	U	-0.02	+/-	0.02	U
Cobalt-58	0.00	+/-	0.06	U	-0.02	+/-	0.03	U	-0.02	+/-	0.03	U	-0.02	+/-	0.03	U	-0.01	+/-	0.03	U
Cobalt-60	0.01	+/-	0.03	U	0.03	+/-	0.05	U	0.00	+/-	0.03	U	0.02	+/-	0.03	U	0.00	+/-	0.03	U
Europium-152	-0.06	+/-	0.08	U	-0.04	+/-	0.08	U	0.04	+/-	0.07	U	-0.02	+/-	0.07	U	0.01	+/-	0.07	U
Europium-154	0.08	+/-	0.09	U	-0.04	+/-	0.10	U	-0.06	+/-	0.07	U	-0.01	+/-	0.07	U	0.02	+/-	0.06	U
Europium-155	0.11	+/-	0.12	U	0.08	+/-	0.08	U	0.02	+/-	0.07	U	0.07	+/-	0.07	U	0.02	+/-	0.08	U
Iridium-192	0.02	+/-	0.03	U	-0.01	+/-	0.03	U	0.00	+/-	0.02	U	0.00	+/-	0.03	U	0.00	+/-	0.03	U
Iron-59	0.07	+/-	0.06	U	0.00	+/-	0.14	UI	0.02	+/-	0.09	U	-0.05	+/-	0.06	U	-0.01	+/-	0.07	U
Lead-210	4.99	+/-	6.70	U	1.27	+/-	5.97	U	1.78	+/-	3.10	U	2.65	+/-	3.52	U	2.38	+/-	4.16	U
Lead-212	0.77	+/-	0.11		0.79	+/-	0.09		0.69	+/-	0.09		0.94	+/-	0.09		0.75	+/-	0.07	
Lead-214	2.29	+/-	0.26		1.11	+/-	0.16		0.56	+/-	0.09		1.00	+/-	0.13		2.18	+/-	0.16	
Manganese-54	-0.02	+/-	0.03	U	0.00	+/-	0.03	U	0.01	+/-	0.03	U	0.00	+/-	0.03	U	-0.04	+/-	0.03	U
Mercury-203	0.04	+/-	0.05	U	0.04	+/-	0.06	U	0.04	+/-	0.05	U	0.02	+/-	0.04	U	0.01	+/-	0.04	U
Neodymium-147	-0.02	+/-	0.71	U	0.58	+/-	0.66	U	0.02	+/-	0.53	U	-0.14	+/-	0.63	U	0.22	+/-	0.60	U
Neptunium-239	0.00	+/-	0.15	U	0.09	+/-	0.14	U	-0.05	+/-	0.13	U	0.08	+/-	0.15	U	-0.14	+/-	0.14	U
Niobium-94	0.00	+/-	0.03	U	0.02	+/-	0.03	U	-0.02	+/-	0.02	U	0.00	+/-	0.03	U	0.00	+/-	0.03	U
Niobium-95	0.05	+/-	0.04	U	0.04	+/-	0.04	U	0.07	+/-	0.04	U	0.02	+/-	0.04	U	0.03	+/-	0.05	U
Potassium-40	0.00	+/-	0.54	UI	2.51	+/-	0.78		2.36	+/-	0.59		2.30	+/-	0.65		2.33	+/-	0.65	
Promethium-144	0.00	+/-	0.03	U	0.02	+/-	0.03	U	0.02	+/-	0.03	U	-0.02	+/-	0.03	U	-0.01	+/-	0.02	U
Promethium-146	-0.01	+/-	0.04	U	0.03	+/-	0.04	U	0.02	+/-	0.03	U	0.05	+/-	0.03	U	0.02	+/-	0.03	U
Radium-226	2.04	+/-	0.25		1.14	+/-	0.17		0.62	+/-	0.11		0.86	+/-	0.13		1.95	+/-	0.16	
Radium-228	1.04	+/-	0.25		0.78	+/-	0.26		0.76	+/-	0.20		0.93	+/-	0.20		0.60	+/-	0.23	
Ruthenium-106	-0.05	+/-	0.24	U	-0.09	+/-	0.26	U	0.07	+/-	0.23	U	-0.07	+/-	0.25	U	-0.04	+/-	0.24	U
Silver-110m	0.00	+/-	0.03	U	-0.01	+/-	0.03	U	0.02	+/-	0.02	U	0.00	+/-	0.03	U	-0.01	+/-	0.03	U
Sodium-22	0.03	+/-	0.03	U	-0.01	+/-	0.03	U	-0.02	+/-	0.03	U	0.00	+/-	0.02	U	0.01	+/-	0.02	U
Thallium-208	0.37	+/-	0.07		0.27	+/-	0.07		0.23	+/-	0.06		0.25	+/-	0.06		0.22	+/-	0.06	
Thorium-230	2.04	+/-	0.25		1.14	+/-	0.17		0.62	+/-	0.11		0.86	+/-	0.13		1.95	+/-	0.16	
Thorium-234	1.17	+/-	2.50	U	0.46	+/-	1.23	U	0.36	+/-	1.22	U	2.18	+/-	1.72		1.90	+/-	1.99	

Note: Sub-floor samples are shaded.

Table 66. Pit 34C Soil -Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	BLT-P34C-SO-05a				BLT-P34C-SO-05b				BLT-P34C-SO-06a				BLT-P34C-SO-06b				BLT-P34C-SO-06g			
	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual	Result		Uncertainty	Qual
Gamma Scan (901.1m																				
Tin-113	-0.02	+/-	0.04	U	0.01	+/-	0.04	U	0.03	+/-	0.03	U	0.00	+/-	0.04	U	-0.02	+/-	0.03	U
Uranium-235	0.11	+/-	0.17	U	0.16	+/-	0.17	U	0.02	+/-	0.13	U	0.07	+/-	0.17	U	0.10	+/-	0.22	U
Uranium-238	1.17	+/-	2.50	U	0.46	+/-	1.23	U	0.36	+/-	1.22	U	2.18	+/-	1.72		1.90	+/-	1.99	
Yttrium-88	0.01	+/-	0.03	U	-0.02	+/-	0.03	U	0.02	+/-	0.03	U	0.01	+/-	0.02	U	-0.01	+/-	0.02	U
Zinc-65	-0.20	+/-	0.08	U	0.01	+/-	0.07	U	-0.05	+/-	0.07	U	0.03	+/-	0.07	U	0.04	+/-	0.06	U
Zirconium-95	-0.03	+/-	0.06	U	0.02	+/-	0.05	U	0.09	+/-	0.06	U	0.10	+/-	0.09	U	0.00	+/-	0.06	U
C-14 (EERF C-01 mod)	1.94	+/-	1.02		2.01	+/-	1.04		6.64	+/-	1.24		6.85	+/-	1.29		3.95	+/-	1.28	
Cl-36 (GL-Rad-A033)	-0.03	+/-	0.03	U	0.02	+/-	0.07	U	-0.06	+/-	0.03	U	-0.01	+/-	0.04	U	0.02	+/-	0.04	U
Ni-63 (RESL Ni-1 mod)	-1.59	+/-	1.61	U	0.60	+/-	1.33	U	-0.27	+/-	1.85	U	1.15	+/-	2.08	U	0.48	+/-	1.41	U
Sr-90 (905.0 mod)	-0.02	+/-	0.05	U	-0.05	+/-	0.06	U	-0.10	+/-	0.05	U	0.03	+/-	0.08	U	0.04	+/-	0.07	U
H-3 (906.0 mod)	0.64	+/-	0.56	U	1.84	+/-	0.68		1.73	+/-	0.68		0.56	+/-	0.56	U	1.56	+/-	0.66	

Note: Sub-floor samples are shaded.

Table 67. Pit 34C Rinsate Sample - Non-Radiological Detection
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	RBC	BLT-P34C-SO-06j	
		Result	Qual
RCRA VOC (ug/l)			
1,2,4-Trimethylbenzene	NA	1.22	
1,3,5-Trimethylbenzene	NA	0.313	J
Benzene	0.34	**1.6**	
Ethyl ether	1216.67	1.38	
Ethylbenzene	1339.87	0.688	J
m,p-Xylenes	NA	2.42	
o-Xylene	NA	0.964	J
Toluene	2271.11	5.63	
Trichloroethylene	0.026	0.37	J
Xylenes (total)	212.6	3.38	
NA = Not Available			

*Result that exceeds EPA Region 3 Risk-Based Concentration value (tapwater) is highlighted.

Table 68. Pit 34C Rinsate Sample - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	BLT-P34C-SO-06j	
	Result	Qual
RCRA VOC (ug/l)		
1,1,1,2-Tetrachloroethane	0.25	U
1,1,1-Trichloroethane	0.3	U
1,1,2,2-Tetrachloroethane	0.25	U
1,1,2-Trichloroethane	0.25	U
1,1-Dichloroethane	0.3	U
1,1-Dichloroethylene	0.3	U
1,1-Dichloropropene	0.25	U
1,2,3-Trichlorobenzene	0.3	U
1,2,3-Trichloropropane	0.3	U
1,2,4-Trichlorobenzene	0.3	U
1,2,4-Trimethylbenzene	1.22	
1,2-Dibromo-3-chloropropane	0.5	U
1,2-Dibromoethane	0.25	U
1,2-Dichlorobenzene	0.25	U
1,2-Dichloroethane	0.25	U
1,2-Dichloroethylene (total)	0.3	U
1,2-Dichloropropane	0.25	U
1,3,5-Trimethylbenzene	0.313	J
1,3-Dichlorobenzene	0.25	U
1,3-Dichloropropane	0.25	U
1,4-Dichlorobenzene	0.25	U
2,2-Dichloropropane	0.3	U
2-Butanone	1.25	U
2-Chloro-1,3-butadiene	0.3	U
2-Chloroethylvinyl ether	1.5	U
2-Chlorotoluene	0.25	U
2-Hexanone	1.25	U
2-Nitropropane	1	U
4-Chlorotoluene	0.25	U
4-Isopropyltoluene	0.25	U
4-Methyl-2-pentanone	1.25	U
Acetone	1.25	U
Acetonitrile	6.25	U
Acrolein	3	U
Acrylonitrile	1	U
Allyl chloride	3.7	U
Benzene	1.6	
Benzyl chloride	1	U
bis(2-Chloroisopropyl)ether	1.5	U
Bromobenzene	0.25	U
Bromochloromethane	0.3	U
Bromodichloromethane	0.25	U
Bromoform	0.25	U
Bromomethane	0.5	U
Carbon disulfide	1.25	U
Carbon tetrachloride	0.25	U
Chlorobenzene	0.25	U

Table 68. Pit 34C Rinsate Sample - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	BLT-P34C-SO-06j	
	Result	Qual
Chloroethane	0.5	U
Chloroform	0.25	U
Chloromethane	0.5	U
cis-1,2-Dichloroethylene	0.3	U
cis-1,3-Dichloropropylene	0.25	U
cis-1,4-Dichloro-2-butene	1	U
Cyclohexane	0.3	U
Cyclohexanone	15	U
Dibromochloromethane	0.25	U
Dibromomethane	0.3	U
Dichlorodifluoromethane	0.5	U
Ethyl ether	1.38	
Ethyl methacrylate	1	U
Ethylbenzene	0.688	J
Hexachlorobutadiene	0.25	U
Iodomethane	1.25	U
Isobutyl alcohol	12.5	U
Isopropylbenzene	0.25	U
m,p-Xylenes	2.42	
Methacrylonitrile	1	U
Methyl acetate	1.25	U
Methyl methacrylate	1	U
Methylcyclohexane	0.25	U
Methylene chloride	2	U
Naphthalene	0.25	U
n-Butyl alcohol	13	U
n-Butylbenzene	0.25	U
n-Propylbenzene	0.25	U
o-Xylene	0.964	J
Pentachloroethane	1	U
Propionitrile	1.5	U
sec-Butylbenzene	0.25	U
Styrene	0.25	U
tert-Butyl methyl ether	0.25	U
tert-Butylbenzene	0.25	U
Tetrachloroethylene	0.25	U
Toluene	5.63	
trans-1,2-Dichloroethylene	0.3	U
trans-1,3-Dichloropropylene	0.25	U
trans-1,4-Dichloro-2-butene	1	U
Trichloroethylene	0.37	J
Trichlorofluoromethane	0.31	U
Trichlorotrifluoroethane	1	U
Vinyl acetate	1.5	U
Vinyl chloride	0.5	U
Xylenes (total)	3.38	

Table 69. Pit 34C Waste Solid and Liquid - Non-Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	TCLP	UTS	BLT-P34C-WS-01		BLT-P34C-WS-02		BLT-P34C-WS-03	
			Result	Qual	Result	Qual	Result	Qual
TCLP VOC (mg/l)								
Acetone	NA	0.28	***0.29***		***0.298***		0.257	
Carbon disulfide	NA	3.8	0.0301	J	0.067		0.0625	U
Chloroform	6	0.046	0.00513	J	0.0172		***0.1***	
Ethylbenzene	NA	0.057	0.0548		***0.263***		***0.772***	
Toluene	NA	0.08	0.245		***2.01***		***3.22***	
Xylenes (total)	NA	0.32	***0.376***		***1.85***		***4.85***	
TCLP SVOC (mg/l)								
o-Cresol	200	0.11	0.01	U	0.0274	J	0.029	J
TCLP Metals (mg/l)								
Barium	100	1.2	0.0872		0.16		0.241	
Chromium	5	2.77	0.01	U	0.0103	J	0.01	U
Lead	5	0.69	0.025	U	0.112		0.0475	J
Silver	5	0.43	0.0175	J	0.0148	J	0.0133	J
RCRA PCB (ug/kg)								
Heptachlor	0.008	66	0.000073	J	0.000255		0.000099	JP
TCLP Pesticides (mg/l)								

NA = Not Available

Parameter	TCLP	UTS	BLT-P34C-WL-01		BLT-P34C-WL-02	
			Result	Qual	Result	Qual
TCLP VOC (ug/l)						
Benzene	500	140	1		1.65	
Carbon disulfide	NA	3800	1.37	J	1.25	U
Chloroform	6000	46	0.27	J	0.25	U
Ethylbenzene	NA	57	0.876	J	0.975	J
Toluene	NA	80	7.6		6.23	
Xylenes (total)	NA	320	4.06		4.34	
m,p-Xylenes	NA	320	3.21		3.14	
o-Xylene	NA	320	0.855	J	1.19	

NA = Not Available; Bolded results exceed the Universal Treatment Standard

Table 70. Pit 34C Waste Solid and Waste Liquid - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	NRC Screening Value[1]	Sample Number (All results in pCi/g)							
		BLT-P34C-WS-01		BLT-P34C-WS-02		BLT-P34C-WS-03		BLT-P34C-WL-03	
		Result	Qual	Result	Qual	Result	Qual	Result	Qual
Gamma Scan (901.1mod/HASL 300)									
Actinium-228	NA	0.85		0.54	U	0.00	UI		
Bismuth-214	NA	49.50		117.00		18.60		0.14	
Lead-210	0.9	**41.80**		**93.00**		**22.30**			
Lead-212	NA	1.06		0.00	UI	0.66			
Lead-214	NA	56.80		136.00		20.10		0.19	
Potassium-40	NA	6.04		0.00	UI	5.67			
Radium-226	0.7	**49.50**		**117.00**		**18.60**		0.14	
Radium-228	NA	0.85		0.54	U	0.00	UI		
Thallium-208	NA	0.37		0.11	U	0.07	U		
Thorium-230	1.8	**49.50**		**117.00**		**18.60**		0.14	
Uranium-235	8	0.83		1.14	U	0.26	U		
C-14 (EERF C-01 mod)	12	9.82		**22.80**				**65.00**	
H-3 (906.0 mod)	110	4.68		5.86				14.4	
Cl-36 (GL-Rad-A033)								0.12	

[1] From NUREG 1757, Appendix B, Table B-2
NA = Not available for this radionuclide
Concentration that exceeds NRC screening value was highlighted.

Table 70. Pit 34C Waste Solid and Waste Liquid - Radiological Detections
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	NRC Screening Value[1]	Sample Number (All results in pCi/g)	
		BLT-P34C-WL-03	
		Result	Qual
Gamma Scan (901.1mod/HASL 300)			
Actinium-228	NA		
Bismuth-214	NA	0.14	
Lead-210	0.9		
Lead-212	NA		
Lead-214	NA	0.19	
Potassium-40	NA		
Radium-226	0.7	0.14	
Radium-228	NA		
Thallium-208	NA		
Thorium-230	1.8	0.14	
Uranium-235	8		
C-14 (EERF C-01 mod)	12	65	
H-3 (906.0 mod)	110	14.4	
Cl-36 (GL-Rad-A033)		0.12	

Table 71. Pit 34C Waste Solid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number					
	BLT-P34C-WS-01		BLT-P34C-WS-02		BLT-P34C-WS-03	
	Result	Qual	Result	Qual	Result	Qual
TCLP VOC (mg/l)						
1,1,1-Trichloroethane	0.003	U	0.003	U	0.015	U
1,1,2,2-Tetrachloroethane	0.0025	U	0.0025	U	0.0125	U
1,1,2-Trichloroethane	0.0025	U	0.0025	U	0.0125	U
1,1-Dichloroethane	0.003	U	0.003	U	0.015	U
1,1-Dichloroethylene	0.003	U	0.003	U	0.015	U
1,2-Dichloroethane	0.0025	U	0.0025	U	0.0125	U
1,2-Dichloropropane	0.0025	U	0.0025	U	0.0125	U
1,4-Dichlorobenzene	0.0025	U	0.0025	U	0.0125	U
2-Butanone	0.0125	U	0.0125	U	0.0625	U
2-Hexanone	0.0125	U	0.0125	U	0.0625	U
4-Methyl-2-pentanone	0.0125	U	0.0125	U	0.0625	U
Acetone	0.29		0.298		0.257	
Benzene	0.003	U	0.003	U	0.015	U
Bromodichloromethane	0.0025	U	0.0025	U	0.0125	U
Bromoform	0.0025	U	0.0025	U	0.0125	U
Bromomethane	0.005	U	0.005	U	0.025	U
Carbon disulfide	0.0301	J	0.067		0.0625	U
Carbon tetrachloride	0.0025	U	0.0025	U	0.0125	U
Chlorobenzene	0.0025	U	0.0025	U	0.0125	U
Chloroethane	0.005	U	0.005	U	0.025	U
Chloroform	0.00513	J	0.0172		0.1	
Chloromethane	0.005	U	0.005	U	0.025	U
cis-1,3-Dichloropropylene	0.0025	U	0.0025	U	0.0125	U
Dibromochloromethane	0.0025	U	0.0025	U	0.0125	U
Ethylbenzene	0.0548		0.263		0.772	
Methylene chloride	0.02	U	0.02	U	0.1	U
Styrene	0.0025	U	0.0025	U	0.0125	U
Tetrachloroethylene	0.0025	U	0.0025	U	0.0125	U
Toluene	0.245		2.01		3.22	
trans-1,3-Dichloropropylene	0.0025	U	0.0025	U	0.0125	U
Trichloroethylene	0.0025	U	0.0025	U	0.0125	U
Vinyl acetate	0.015	U	0.015	U	0.075	U
Vinyl chloride	0.005	U	0.005	U	0.025	U
Xylenes (total)	0.376		1.85		4.85	

Table 71. Pit 34C Waste Solid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number					
	BLT-P34C-WS-01		BLT-P34C-WS-02		BLT-P34C-WS-03	
	Result	Qual	Result	Qual	Result	Qual
TCLP SVOC (mg/l)						
1,4-Dichlorobenzene	0.01	U	0.01	U	0.01	U
2,4,5-Trichlorophenol	0.005	U	0.005	U	0.005	U
2,4,6-Trichlorophenol	0.01	U	0.01	U	0.01	U
2,4-Dinitrotoluene	0.01	U	0.01	U	0.01	U
Hexachlorobenzene	0.01	U	0.01	U	0.01	U
Hexachlorobutadiene	0.01	U	0.01	U	0.01	U
Hexachloroethane	0.01	U	0.01	U	0.01	U
m,p-Cresols	0.015	U	0.015	U	0.015	U
Nitrobenzene	0.015	U	0.015	U	0.015	U
o-Cresol	0.01	U	0.0274	J	0.029	J
Pentachlorophenol	0.01	U	0.01	U	0.01	U
Pyridine	0.005	U	0.005	U	0.005	U
TCLP Metals (mg/l)						
Arsenic	0.06	U	0.06	U	0.06	U
Barium	0.0872		0.16		0.241	
Cadmium	0.01	U	0.01	U	0.01	U
Chromium	0.01	U	0.0103	J	0.01	U
Lead	0.025	U	0.112		0.0475	J
Mercury	0.0006	U	0.0006	U	0.0006	U
Selenium	0.06	U	0.06	U	0.06	U
Silver	0.0175	J	0.0148	J	0.0133	J
RCRA PCB (ug/kg)						
Chlordane (tech.)	0.000765	U	0.000765	U	0.000765	U
Endrin	0.00005	U	0.00005	U	0.00005	U
gamma-BHC (Lindane)	0.00005	U	0.00005	U	0.00005	U
Heptachlor	0.000073	J	0.000255		0.000099	JP
Heptachlor epoxide	0.00005	U	0.00005	U	0.00005	U
Methoxychlor	0.0005	U	0.0005	U	0.0005	U
Toxaphene	0.0015	U	0.0015	U	0.0015	U
TCLP Pesticides (mg/l)						
Aroclor-1016	1.11	U	3.33	U	1.11	U
Aroclor-1221	1.11	U	3.33	U	1.11	U
Aroclor-1232	1.11	U	3.33	U	1.11	U
Aroclor-1242	1.11	U	3.33	U	1.11	U
Aroclor-1248	1.11	U	3.33	U	1.11	U
Aroclor-1254	1.11	U	3.33	U	1.11	U
Aroclor-1260	1.11	U	3.33	U	1.11	U
pH/Corrosivity	4.93	H	4.71	H		
Paint Filter	PASS		PASS		PASS	
Reactive Sulfide (mg/kg)	500	<1	500	<1	500	<1

Table 72. Pit 34C Waste Liquid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number			
	BLT-P34C-WL-01		BLT-P34C-WL-02	
	Result	Qual	Result	Qual
TCLP VOC (mg/l)				
1,1,1-Trichloroethane	0.3	U	0.3	U
1,1,2,2-Tetrachloroethane	0.25	U	0.25	U
1,1,2-Trichloroethane	0.25	U	0.25	U
1,1-Dichloroethane	0.3	U	0.3	U
1,1-Dichloroethylene	0.3	U	0.3	U
1,2-Dichloroethane	0.25	U	0.25	U
1,2-Dichloropropane	0.25	U	0.25	U
1,4-Dichlorobenzene	0.25	U	0.25	U
2-Butanone	1.25	U	1.25	U
2-Hexanone	1.25	U	1.25	U
4-Methyl-2-pentanone	1.25	U	1.25	U
Acetone	1.25	U	1.25	U
Benzene	1		1.65	
Bromodichloromethane	0.25	U	0.25	U
Bromoform	0.25	U	0.25	U
Bromomethane	0.5	U	0.5	U
Carbon disulfide	1.37	J	1.25	U
Carbon tetrachloride	0.25	U	0.25	U
Chlorobenzene	0.25	U	0.25	U
Chloroethane	0.5	U	0.5	U
Chloroform	0.27	J	0.25	U
Chloromethane	0.5	U	0.5	U
cis-1,3-Dichloropropylene	0.25	U	0.25	U
Dibromochloromethane	0.25	U	0.25	U
Ethylbenzene	J	0.975	J	
Methylene chloride	2	U	2	U
Styrene	0.25	U	0.25	U
Tetrachloroethylene	0.25	U	0.25	U
Toluene	7.6		6.23	
trans-1,3-Dichloropropylene	0.25	U	0.25	U
Trichloroethylene	0.25	U	0.25	U
Vinyl acetate	1.5	U	1.5	U
Vinyl chloride	0.5	U	0.5	U
Xylenes (total)	4.06		4.34	
1,1,1,2-Tetrachloroethane	0.25	U	0.25	U
1,1-Dichloropropene	0.25	U	0.25	U
1,2,3-Trichlorobenzene	0.3	U	0.3	U
1,2,3-Trichloropropane	0.3	U	0.3	U
1,2,4-Trichlorobenzene	0.3	U	0.3	U
1,2,4-Trimethylbenzene	0.968	BJ	1.23	B
1,2-Dibromo-3-chloropropane	0.5	U	0.5	U
1,2-Dichlorobenzene	0.25	U	0.25	U
1,2-Dichloroethane	0.25	U	0.25	U
1,2-Dichloroethylene (total)	0.3	U	0.3	U
1,3,5-Trimethylbenzene	0.25	U	0.25	U
1,3-Dichlorobenzene	0.25	U	0.25	U

Table 72. Pit 34C Waste Liquid - Non-Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number			
	BLT-P34C-WL-01		BLT-P34C-WL-02	
	Result	Qual	Result	Qual
1,3-Dichloropropane	0.25	U	0.25	U
2,2-Dichloropropane	0.3	U	0.3	U
2-Chloro-1,3-butadiene	0.3	U	0.3	U
2-Chloroethylvinyl ether	1.5	U	1.5	U
2-Chlorotoluene	0.25	U	0.25	U
2-Nitropropane	1	U	1	U
4-Chlorotoluene	0.25	U	0.25	U
4-Isopropyltoluene	0.25	U	0.25	U
Acetonitrile	6.25	U	6.25	U
Acrolein	3	U	3	U
Acrylonitrile	1	U	1	U
Allyl chloride	3.7	U	3.7	U
Benzyl chloride	1	U	1	U
bis(2-Chloroisopropyl)ether	1.5	U	1.5	U
Bromobenzene	0.25	U	0.25	U
Bromochloromethane	0.3	U	0.3	U
cis-1,2-Dichloroethylene	0.3	U	0.3	U
cis-1,4-Dichloro-2-butene	1	U	1	U
Cyclohexane	0.3	U	0.3	U
Cyclohexanone	15	U	15	U
Dibromomethane	0.3	U	0.3	U
Dichlorodifluoromethane	0.5	U	0.5	U
Ethyl ether	0.3	U	0.3	U
Ethyl methacrylate	1	U	1	U
Hexachlorobutadiene	0.25	U	0.25	U
Iodomethane	1.25	U	1.25	U
Isobutyl alcohol	12.5	U	12.5	U
Isopropylbenzene	0.25	U	0.25	U
m,p-Xylenes	3.21		3.14	
Methacrylonitrile	1	U	1	U
Methyl acetate	1.25	U	1.25	U
Methyl methacrylate	1	U	1	U
Methylcyclohexane	0.25	U	0.25	U
Naphthalene	0.25	U	0.25	U
n-Butyl alcohol	13	U	13	U
n-Butylbenzene	0.25	U	0.25	U
n-Propylbenzene	0.25	U	0.25	U
o-Xylene	0.855	J	1.19	
Pentachloroethane	1	U	1	U
Propionitrile	1.5	U	1.5	U
sec-Butylbenzene	0.25	U	0.25	U
tert-Butyl methyl ether	0.25	U	0.25	U
tert-Butylbenzene	0.25	U	0.25	U
trans-1,2-Dichloroethylene	0.3	U	0.3	U
trans-1,4-Dichloro-2-butene	1	U	1	U
Trichlorofluoromethane	0.31	U	0.31	U
Trichlorotrifluoroethane	1	U	1	U

Table 73. Pit 34C Waste Solid - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)								
	BLT-P34C-WS-01			BLT-P34C-WS-02			BLT-P34C-WS-03		
	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual
Gamma Scan (901.1mod/HASL 300)									
Actinium-228	0.85	0.39		0.54	0.59	U	0.00	0.50	UI
Americium-241	-0.07	0.26	U	0.00	0.77	UI	-0.03	0.10	U
Antimony-124	-0.18	0.15	U	0.00	0.38	UI	0.18	0.33	U
Antimony-125	0.00	0.29	UI	0.24	0.45	U	0.13	0.20	U
Barium-133	0.02	0.08	U	0.07	0.21	U	-0.05	0.10	U
Barium-140	0.39	0.61	U	1.42	1.63	U	-0.31	0.69	U
Beryllium-7	-0.11	0.84	U	0.13	2.44	U	0.54	0.84	U
Bismuth-212	0.21	0.58	U	-0.17	1.07	U	0.41	0.73	U
Bismuth-214	49.50	0.51		117.00	1.28		18.60	0.61	
Cerium-139	0.00	0.05	U	-0.01	0.15	U	-0.05	0.06	U
Cerium-141	0.00	0.16	UI	0.39	0.40	U	0.13	0.13	U
Cerium-144	-0.07	0.34	U	0.05	0.94	U	0.05	0.34	U
Cesium-134	0.04	0.06	U	0.06	0.18	U	0.02	0.09	U
Cesium-136	0.04	0.26	U	0.36	0.70	U	-0.33	0.33	U
Cesium-137	0.07	0.06	U	0.00	0.16	UI	0.00	0.11	UI
Chromium-51	-0.86	0.84	U	0.97	2.21	U	-0.46	0.81	U
Cobalt-56	-0.01	0.07	U	-0.02	0.18	U	0.03	0.09	U
Cobalt-57	0.03	0.05	U	0.10	0.11	U	-0.02	0.04	U
Cobalt-58	-0.03	0.07	U	-0.05	0.20	U	-0.04	0.10	U
Cobalt-60	-0.04	0.06	U	0.20	0.16	U	0.09	0.09	U
Europium-152	-0.08	0.18	U	-0.37	0.46	U	-0.10	0.20	U
Europium-154	0.04	0.18	U	0.53	0.55	U	0.05	0.24	U
Europium-155	-0.04	0.16	U	-0.07	0.44	U	0.16	0.15	U
Iridium-192	0.03	0.07	U	-0.22	0.17	U	0.04	0.07	U
Iron-59	-0.03	0.17	U	-0.50	0.48	U	-0.21	0.19	U
Lead-210	41.80	11.00		93.00	24.00		22.30	1.89	
Lead-212	1.06	0.13		0.00	0.26	UI	0.66	0.15	
Lead-214	56.80	0.53		136.00	1.33		20.10	0.58	
Manganese-54	0.02	0.09	U	0.12	0.26	U	-0.01	0.13	U
Mercury-203	-0.07	0.08	U	-0.10	0.20	U	0.00	0.09	U
Neodymium-147	-0.20	1.40	U	2.59	3.80	U	0.50	1.53	U
Neptunium-239	-0.16	0.30	U	-0.45	0.83	U	0.01	0.29	U
Niobium-94	0.00	0.09	UI	0.00	0.16	UI	0.03	0.07	U
Niobium-95	0.00	0.09	UI	0.00	0.54	UI	0.00	0.14	UI
Potassium-40	6.04	1.46		0.00	1.83	UI	5.67	1.96	
Promethium-144	-0.01	0.05	U	-0.15	0.15	U	0.02	0.07	U
Promethium-146	0.00	0.11	UI	0.00	0.27	UI	0.08	0.09	U
Radium-226	49.50	0.51		117.00	1.28		18.60	0.61	
Radium-228	0.85	0.39		0.54	0.59	U	0.00	0.50	UI
Ruthenium-106	-0.15	0.45	U	-0.37	1.18	U	-0.19	0.59	U
Silver-110m	-0.03	0.05	U	0.05	0.13	U	-0.01	0.07	U
Sodium-22	0.01	0.06	U	0.19	0.20	U	0.02	0.09	U
Thallium-208	0.37	0.09		0.11	0.15	U	0.07	0.14	U
Thorium-230	49.50	0.51		117.00	1.28		18.60	0.61	
Thorium-234	2.79	2.16	U	5.72	7.18	U	0.78	1.68	U
Tin-113	0.05	0.09	U	0.04	0.24	U	-0.15	0.11	U

Table 73. Pit 34C Waste Solid - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)								
	BLT-P34C-WS-01			BLT-P34C-WS-02			BLT-P34C-WS-03		
	Result	Uncertainty	Qual	Result	Uncertainty	Qual	Result	Uncertainty	Qual
Uranium-235	0.83	0.47		1.14	1.18	U	0.26	0.38	U
Uranium-238	2.79	2.16	U	5.72	7.18	U	0.78	1.68	U
Yttrium-88	0.05	0.09	U	0.00	0.24	UI	0.03	0.08	U
Zinc-65	-0.10	0.16	U	0.00	0.59	UI	0.20	0.19	U
Zirconium-95	0.06	0.12	U	-0.25	0.30	U	-0.05	0.14	U
C-14 (EERF C-01 mod)	9.82	0.71		22.80	0.94				
Cl-36 (GL-Rad-A033)	0.03	0.04	U	0.04	0.04	U	-0.02	0.06	U
Ni-63 (RESL Ni-1 mod)	1.54	1.50	U	1.42	1.45	U	0.00	1.68	U
Sr-90 (905.0 mod)	0.04	0.06	U	0.09	0.07	U	-0.04	0.05	U
H-3 (906.0 mod)	4.68	1.77		5.86	1.37				

Table 74. Pit 34C Waste Liquid - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)		
	BLT-P34C-WL-03		
	Result	Uncertainty	Qual
Gamma Scan (901.1mod/HASL 300)			
Actinium-228	0.05	0.13	U
Americium-241	-0.04	0.12	U
Antimony-124	0.04	0.03	U
Antimony-125	-0.01	0.05	U
Barium-133	0.01	0.03	U
Barium-140	0.11	0.13	U
Beryllium-7	0.01	0.15	U
Bismuth-212	0.09	0.15	U
Bismuth-214	0.14	0.08	
Cerium-139	-0.01	0.02	U
Cerium-141	0.00	0.03	U
Cerium-144	0.04	0.13	U
Cesium-134	-0.01	0.02	U
Cesium-136	0.01	0.05	U
Cesium-137	0.00	0.02	U
Chromium-51	0.07	0.20	U
Cobalt-56	-0.01	0.02	U
Cobalt-57	0.00	0.01	U
Cobalt-58	0.00	0.02	U
Cobalt-60	-0.01	0.02	U
Europium-152	0.03	0.05	U
Europium-154	0.03	0.06	U
Europium-155	0.06	0.05	U
Iridium-192	-0.01	0.02	U
Iron-59	-0.01	0.04	U
Lead-210	1.11	4.01	U
Lead-212	0.00	0.04	U
Lead-214	0.19	0.07	
Manganese-54	0.00	0.02	U
Mercury-203	0.01	0.02	U
Neodymium-147	-0.08	0.26	U
Neptunium-239	-0.07	0.10	U
Niobium-94	0.01	0.02	U
Niobium-95	0.02	0.02	U
Potassium-40	0.18	0.22	U
Promethium-144	0.00	0.02	U
Promethium-146	0.00	0.02	U
Radium-226	0.14	0.08	
Radium-228	0.05	0.13	U
Ruthenium-106	-0.01	0.18	U
Silver-110m	-0.02	0.02	U
Sodium-22	0.01	0.02	U
Thallium-208	0.01	0.04	U
Thorium-230	0.14	0.08	
Thorium-234	0.04	1.15	U

Table 74. Pit 34C Waste Liquid - Radiological Results
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Parameter	Sample Number (All results in pCi/g)		
	BLT-P34C-WL-03		
	Result	Uncertainty	Qual
Tin-113	-0.01	0.02	U
Uranium-235	0.05	0.11	U
Uranium-238	0.04	1.15	U
Yttrium-88	0.00	0.02	U
Zinc-65	0.03	0.04	U
Zirconium-95	0.00	0.03	U
C-14 (EERF C-01 mod)	65	1.78	
Cl-36 (GL-Rad-A033)	0.12	0.06	
Ni-63 (RESL Ni-1 mod)	-3.2	1.66	U
Sr-90 (905.0 mod)	0.02	0.11	U
H-3 (906.0 mod)	14.4	5.8	

Table 75. Laboratory Qualifiers
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

<	Result is less than value reported
>	Result is greater than value reported
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
E	Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
E	Organics--Concentration of the target analyte exceeds the instrument calibration range
H	Analytical holding time was exceeded
J	Value is estimated
N	Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
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
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.
^	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.
d	5-day BOD--The 2:1 depletion requirement was not met for this sample
h	Preparation or preservation holding time was exceeded

Table 76. Pit 1 - Cabrera Radioactive Inventory Licensed Material
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Cabrera Soil Drum No. (Pit No. - Drum No.)	Cabrera Debris (metal, glass, ceramic, plastics) Drum No. (Pit No. - Drum No.)	Corresponding Laboratory Sample Composite Number	Radionuclide by Composite Sample, pCi/g*							Total Activity in Container, Ci**	Fraction of Cabrera NRC limit 100 Ci total (At. No. 1-83)
			^{3}H	^{14}C	^{36}Cl	^{63}Ni	^{90}Sr	^{210}Pb	^{226}Ra***		
		BLT-PO1-WS-01	0	0	0	0	0	14.3	0.871		
1-7			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-06	2.90E-07	5.06E-06	5.06E-08
1-8			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-06	2.90E-07	5.06E-06	5.06E-08
1-9			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-06	2.90E-07	5.06E-06	5.06E-08
1-10			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-06	2.90E-07	5.06E-06	5.06E-08
1-11			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-06	2.90E-07	5.06E-06	5.06E-08
1-12			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-06	2.90E-07	5.06E-06	5.06E-08
1-13			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-06	2.90E-07	5.06E-06	5.06E-08
1-14			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-06	2.90E-07	5.06E-06	5.06E-08
1-15			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.77E-06	2.90E-07	5.06E-06	5.06E-08
		BLT-PO1-WS-02	0	0	0	0	0	0	1.52		
1-1			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-07	5.07E-07	5.07E-09
1-2			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-07	5.07E-07	5.07E-09
1-4			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-07	5.07E-07	5.07E-09
1-17			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-07	5.07E-07	5.07E-09
1-18			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-07	5.07E-07	5.07E-09
1-20			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-07	5.07E-07	5.07E-09
1-24			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-07	5.07E-07	5.07E-09
1-29			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-07	5.07E-07	5.07E-09
1-32			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-07	5.07E-07	5.07E-09
1-33			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.07E-07	5.07E-07	5.07E-09
		BLT-PO1-WS-03	0	0	0	0	0	0	1.39		
1-3			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-07	4.63E-07	4.63E-09
1-19			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-07	4.63E-07	4.63E-09
1-21			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-07	4.63E-07	4.63E-09
1-25			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-07	4.63E-07	4.63E-09
1-27			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-07	4.63E-07	4.63E-09
1-30			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-07	4.63E-07	4.63E-09
1-36			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-07	4.63E-07	4.63E-09
1-38			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-07	4.63E-07	4.63E-09
1-39			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-07	4.63E-07	4.63E-09
1-40			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-07	4.63E-07	4.63E-09
		BLT-PO1-WS-04	0	0	0	0	0	0	1.29		
1-5			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-07	4.30E-07	4.30E-09
1-6			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-07	4.30E-07	4.30E-09
1-16			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-07	4.30E-07	4.30E-09
1-22			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-07	4.30E-07	4.30E-09

Table 76. Pit 1 - Cabrera Radioactive Inventory Licensed Material
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Cabrera Soil Drum No. (Pit No. - Drum No.)	Cabrera Debris (metal, glass, ceramic, plastics) Drum No. (Pit No. - Drum No.)	Corresponding Laboratory Sample Composite Number	Radionuclide by Composite Sample, pCi/g*							Total Activity in Container, Ci**	Fraction of Cabrera NRC limit 100 Ci total (At. No. 1-83)
			^{3}H	^{14}C	^{36}Cl	^{63}Ni	^{90}Sr	^{210}Pb	^{226}Ra***		
1-23			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-07	4.30E-07	4.30E-09
1-26			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-07	4.30E-07	4.30E-09
1-28			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-07	4.30E-07	4.30E-09
1-31			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-07	4.30E-07	4.30E-09
1-34			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-07	4.30E-07	4.30E-09
1-35			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-07	4.30E-07	4.30E-09
1-37			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-07	4.30E-07	4.30E-09
		BLT-PO1-WS-05	2.09	27.4	0	0	0	0	1.14		
	D-1-1		1.42E-07	1.87E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.76E-08	2.09E-06	2.09E-08
	D-1-2		9.49E-08	1.24E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.18E-08	1.39E-06	1.39E-08
									Total	**6.34E-05**	

* Composite samples utilize reported laboratory results in all cases except where negative values are reported; negative values are carried as zero
** Container activity based on soil density of 1.6 with a drum weight 734 lbs; debris drum based on estimated weights of 150 and 100 lbs
*** ^{226}Ra based on Bi-214 progeny; equilibrium assumed

Table 77. Pit 14 - Cabrera Radioactive Inventory Licensed Material
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Cabrera Soil Drum No. (Pit No. - Drum No.)	Cabrera Animal-Biological Fiber Box (Pit No. - Fiber Box No.)	Corresponding Laboratory Sample Composite Number	Radionuclide by Composite Sample, pCi/g*							Total Activity in Container, Ci**	Fraction of Cabrera NRC limit 100 Ci total (At. No. 1-83)
			^{3}H	^{14}C	^{36}Cl	^{63}Ni	^{90}Sr	^{210}Pb	^{226}Ra***		
		BLT-P14-WS-01	0	30.3	0	0	0	0	0.484		
14-2			0.00E+00	1.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-07	1.03E-05	1.03E-07
14-10			0.00E+00	1.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-07	1.03E-05	1.03E-07
14-12			0.00E+00	1.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-07	1.03E-05	1.03E-07
14-14			0.00E+00	1.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-07	1.03E-05	1.03E-07
14-18			0.00E+00	1.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-07	1.03E-05	1.03E-07
14-23			0.00E+00	1.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-07	1.03E-05	1.03E-07
14-28			0.00E+00	1.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-07	1.03E-05	1.03E-07
14-29			0.00E+00	1.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-07	1.03E-05	1.03E-07
14-33			0.00E+00	1.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-07	1.03E-05	1.03E-07
14-39			0.00E+00	1.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-07	1.03E-05	1.03E-07
		BLT-P14-WS-02	0	27.6	0	0	0	0	0.367		
14-3			0.00E+00	9.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-07	9.32E-06	9.32E-08
14-8			0.00E+00	9.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-07	9.32E-06	9.32E-08
14-9			0.00E+00	9.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-07	9.32E-06	9.32E-08
14-16			0.00E+00	9.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-07	9.32E-06	9.32E-08
14-19			0.00E+00	9.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-07	9.32E-06	9.32E-08
14-22			0.00E+00	9.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-07	9.32E-06	9.32E-08
14-24			0.00E+00	9.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-07	9.32E-06	9.32E-08
14-27			0.00E+00	9.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-07	9.32E-06	9.32E-08
14-32			0.00E+00	9.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-07	9.32E-06	9.32E-08
14-36			0.00E+00	9.20E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-07	9.32E-06	9.32E-08
		BLT-P14-WS-03	0	15	0	0	0	0	0.341		
14-1			0.00E+00	5.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-07	5.11E-06	5.11E-08
14-4			0.00E+00	5.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-07	5.11E-06	5.11E-08
14-6			0.00E+00	5.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-07	5.11E-06	5.11E-08
14-7			0.00E+00	5.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-07	5.11E-06	5.11E-08
14-15			0.00E+00	5.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-07	5.11E-06	5.11E-08
14-21			0.00E+00	5.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-07	5.11E-06	5.11E-08
14-25			0.00E+00	5.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-07	5.11E-06	5.11E-08
14-31			0.00E+00	5.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-07	5.11E-06	5.11E-08
14-35			0.00E+00	5.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-07	5.11E-06	5.11E-08
14-38			0.00E+00	5.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-07	5.11E-06	5.11E-08
		BLT-P14-WS-04	0	16.1	0	0	0	0	0.652		
14-5			0.00E+00	5.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-07	5.58E-06	5.58E-08
14-11			0.00E+00	5.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-07	5.58E-06	5.58E-08
14-13			0.00E+00	5.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-07	5.58E-06	5.58E-08
14-17			0.00E+00	5.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-07	5.58E-06	5.58E-08

Table 77. Pit 14 - Cabrera Radioactive Inventory Licensed Material
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Cabrera Soil Drum No. (Pit No. - Drum No.)	Cabrera Animal-Biological Fiber Box (Pit No. - Fiber Box No.)	Corresponding Laboratory Sample Composite Number	Radionuclide by Composite Sample, pCi/g*							Total Activity in Container, Ci**	Fraction of Cabrera NRC limit 100 Ci total (At. No. 1-83)
			^{3}H	^{14}C	^{36}Cl	^{63}Ni	^{90}Sr	^{210}Pb	^{226}Ra***		
14-20			0.00E+00	5.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-07	5.58E-06	5.58E-08
14-26			0.00E+00	5.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-07	5.58E-06	5.58E-08
14-30			0.00E+00	5.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-07	5.58E-06	5.58E-08
14-34			0.00E+00	5.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-07	5.58E-06	5.58E-08
14-37			0.00E+00	5.37E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.17E-07	5.58E-06	5.58E-08
		BLT-P14-WS-06	0.538	25.0	0	0	1.90	-	-		
	AB-14-1	bones stored in fiber box	4.89E-09	2.27E-07	0.00E+00	0.00E+00	1.73E-08	-	-	2.49E-07	2.49E-09
	AB-14-2	bones stored in fiber box	4.89E-09	2.27E-07	0.00E+00	0.00E+00	1.73E-08	-	-	2.49E-07	2.49E-09
	AB-14-3	bones stored in fiber box	4.89E-09	2.27E-07	0.00E+00	0.00E+00	1.73E-08	-	-	2.49E-07	2.49E-09
	AB-14-4	bones stored in fiber box	4.89E-09	2.27E-07	0.00E+00	0.00E+00	1.73E-08	-	-	2.49E-07	2.49E-09
	AB-14-5	bones stored in fiber box	4.89E-09	2.27E-07	0.00E+00	0.00E+00	1.73E-08	-	-	2.49E-07	2.49E-09
									Total	**2.98E-04**	

* Composite samples utilize reported laboratory results in all cases except where negative values are reported; negative values are carried as zero
** Container activity based on soil density of 1.6; drum weight 734 lbs; animal-biological box assumed to contain 20 lb animal bone and biologicals per box
*** ^{226}Ra based on Bi-214 progeny; equilibrium assumed

Table 78. Pit 26 - Cabrera Radioactive Inventory Licensed Material
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Cabrera Soil Drum No. (Pit No. - Drum No.)	Cabrera Debris (metal, glass, ceramic, plastics) Drum No. (Pit No. - Drum No.)	Cabrera Animal-Biological Fiber Box (Pit No. - Fiber Box No.)	Cabrera Liquid Scintillation Vials Drum No. (Pit No. - Drum No.)	Cabrera Perched Water from Pits (275 Gal DOT Poly Container (Pit No. - Container No.)	Corresponding Laboratory Sample Composite Number	Radionuclide by Composite Sample, pCi/g or pCi/L*							Total Activity in Container, Ci**	Fraction of Cabrera NRC limit 100 Ci total (At. No. 1-83)
						^{3}H	^{14}C	^{36}Cl	^{63}Ni	^{90}Sr	^{210}Pb	^{226}Ra***		
					BLT-P26-WS-01	54.5	223	0	20.4	0	0	0.736		
	D-26-1					1.82E-05	7.43E-05	0.00E+00	6.80E-06	0.00E+00	0.00E+00	2.45E-07	9.95E-05	9.95E-07
	D-26-2					1.82E-05	7.43E-05	0.00E+00	6.80E-06	0.00E+00	0.00E+00	2.45E-07	9.95E-05	9.95E-07
	D-26-3					1.82E-05	7.43E-05	0.00E+00	6.80E-06	0.00E+00	0.00E+00	2.45E-07	9.95E-05	9.95E-07
	D-26-4					1.82E-05	7.43E-05	0.00E+00	6.80E-06	0.00E+00	0.00E+00	2.45E-07	9.95E-05	9.95E-07
	D-26-5					1.82E-05	7.43E-05	0.00E+00	6.80E-06	0.00E+00	0.00E+00	2.45E-07	9.95E-05	9.95E-07
	D-26-6					1.82E-05	7.43E-05	0.00E+00	6.80E-06	0.00E+00	0.00E+00	2.45E-07	9.95E-05	9.95E-07
	D-26-7					1.82E-05	7.43E-05	0.00E+00	6.80E-06	0.00E+00	0.00E+00	2.45E-07	9.95E-05	9.95E-07
	D-26-8					1.82E-05	7.43E-05	0.00E+00	6.80E-06	0.00E+00	0.00E+00	2.45E-07	9.95E-05	9.95E-07
	D-26-9					1.82E-05	7.43E-05	0.00E+00	6.80E-06	0.00E+00	0.00E+00	2.45E-07	9.95E-05	9.95E-07
	D-26-10					1.82E-05	7.43E-05	0.00E+00	6.80E-06	0.00E+00	0.00E+00	2.45E-07	9.95E-05	9.95E-07
	D-26-11					1.82E-05	7.43E-05	0.00E+00	6.80E-06	0.00E+00	0.00E+00	2.45E-07	9.95E-05	9.95E-07
	D-26-12					1.82E-05	7.43E-05	0.00E+00	6.80E-06	0.00E+00	0.00E+00	2.45E-07	9.95E-05	9.95E-07
	D-26-13					1.82E-05	7.43E-05	0.00E+00	6.80E-06	0.00E+00	0.00E+00	2.45E-07	9.95E-05	9.95E-07
	D-26-14					1.82E-05	7.43E-05	0.00E+00	6.80E-06	0.00E+00	0.00E+00	2.45E-07	9.95E-05	9.95E-07
	D-26-15					1.82E-05	7.43E-05	0.00E+00	6.80E-06	0.00E+00	0.00E+00	2.45E-07	9.95E-05	9.95E-07
	D-26-16					1.82E-05	7.43E-05	0.00E+00	6.80E-06	0.00E+00	0.00E+00	2.45E-07	9.95E-05	9.95E-07
					BLT-P26-WS-02	7.06	0	0	3.52	0	0	0.385		
WS-26-1						2.35E-06	0.00E+00	0.00E+00	1.17E-06	0.00E+00	0.00E+00	1.28E-07	3.65E-06	3.65E-08
WS-26-2						2.35E-06	0.00E+00	0.00E+00	1.17E-06	0.00E+00	0.00E+00	1.28E-07	3.65E-06	3.65E-08
WS-26-3						2.35E-06	0.00E+00	0.00E+00	1.17E-06	0.00E+00	0.00E+00	1.28E-07	3.65E-06	3.65E-08
WS-26-4						2.35E-06	0.00E+00	0.00E+00	1.17E-06	0.00E+00	0.00E+00	1.28E-07	3.65E-06	3.65E-08
WS-26-5						2.35E-06	0.00E+00	0.00E+00	1.17E-06	0.00E+00	0.00E+00	1.28E-07	3.65E-06	3.65E-08
WS-26-6						2.35E-06	0.00E+00	0.00E+00	1.17E-06	0.00E+00	0.00E+00	1.28E-07	3.65E-06	3.65E-08
WS-26-7						2.35E-06	0.00E+00	0.00E+00	1.17E-06	0.00E+00	0.00E+00	1.28E-07	3.65E-06	3.65E-08
WS-26-8						2.35E-06	0.00E+00	0.00E+00	1.17E-06	0.00E+00	0.00E+00	1.28E-07	3.65E-06	3.65E-08
WS-26-9						2.35E-06	0.00E+00	0.00E+00	1.17E-06	0.00E+00	0.00E+00	1.28E-07	3.65E-06	3.65E-08
WS-26-10						2.35E-06	0.00E+00	0.00E+00	1.17E-06	0.00E+00	0.00E+00	1.28E-07	3.65E-06	3.65E-08
					BLT-P26-WS-03	32.2	11.4	0	12.9	0	0	0.518		
S-26-1						1.07E-05	3.80E-06	0.00E+00	4.30E-06	0.00E+00	0.00E+00	1.73E-07	1.90E-05	1.90E-07
S-26-2						1.07E-05	3.80E-06	0.00E+00	4.30E-06	0.00E+00	0.00E+00	1.73E-07	1.90E-05	1.90E-07
S-26-3						1.07E-05	3.80E-06	0.00E+00	4.30E-06	0.00E+00	0.00E+00	1.73E-07	1.90E-05	1.90E-07
S-26-4						1.07E-05	3.80E-06	0.00E+00	4.30E-06	0.00E+00	0.00E+00	1.73E-07	1.90E-05	1.90E-07
S-26-5						1.07E-05	3.80E-06	0.00E+00	4.30E-06	0.00E+00	0.00E+00	1.73E-07	1.90E-05	1.90E-07
S-26-6						1.07E-05	3.80E-06	0.00E+00	4.30E-06	0.00E+00	0.00E+00	1.73E-07	1.90E-05	1.90E-07
S-26-7						1.07E-05	3.80E-06	0.00E+00	4.30E-06	0.00E+00	0.00E+00	1.73E-07	1.90E-05	1.90E-07
S-26-8						1.07E-05	3.80E-06	0.00E+00	4.30E-06	0.00E+00	0.00E+00	1.73E-07	1.90E-05	1.90E-07
S-26-9						1.07E-05	3.80E-06	0.00E+00	4.30E-06	0.00E+00	0.00E+00	1.73E-07	1.90E-05	1.90E-07
					BLT-P26-WL-02	53800	12100	40.3	536	0	0	0		
				PW-26-01	275-gallon blue poly tank	5.60E-05	1.26E-05	4.20E-08	5.58E-07	0.00E+00	0.00E+00	0.00E+00	6.92E-05	6.92E-07
					BLT-P26-WL-03	45700	5550	30.0	530	0	0	0		
				PW-26-02	275-gallon blue poly tank	4.76E-05	5.78E-06	3.12E-08	5.52E-07	0.00E+00	0.00E+00	0.00E+00	5.39E-05	5.39E-07

Table 78. Pit 26 - Cabrera Radioactive Inventory Licensed Material
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

						Radionuclide by Composite Sample, pCi/g or pCi/L*								
Cabrera Soil Drum No. (Pit No. - Drum No.)	**Cabrera Debris (metal, glass, ceramic, plastics) Drum No. (Pit No. - Drum No.)**	**Cabrera Animal-Biological Fiber Box (Pit No. - Fiber Box No.)**	**Cabrera Liquid Scintillation Vials Drum No. (Pit No. - Drum No.)**	**Cabrera Perched Water from Pits (275 Gal DOT Poly Container (Pit No. - Container No.)**	**Corresponding Laboratory Sample Composite Number**	**^{3}H**	**^{14}C**	**^{36}Cl**	**^{63}Ni**	**^{90}Sr**	**^{210}Pb**	**^{226}Ra***	**Total Activity in Container, Ci****	**Fraction of Cabrera NRC limit 100 Ci total (At. No. 1-83)**
					Whole rats, not analyzed; estimate based on average isotopic activity of Pit 26 dry samples	31.25	78.13	0.00	12.27	0.00	0.00	0.55		
		AB-26-01				2.03E-07	5.08E-07	0.00E+00	7.98E-08	0.00E+00	0.00E+00	3.55E-09	7.94E-07	7.94E-09
												Total	**1.92E-03**	

* Composite samples utilize reported laboratory results in all cases except where negative values are reported; negative values are carried as zero
** Container activity based on soil density of 1.6; drum weight for soil and debris estimated as 734 lbs; 5 gallons liquid scintillation vials per drum; 275 gallons per poly tank; 500 g rats
*** ^{226}Ra based on Bi-214 progeny; equilibrium assumed

Table 79. Pit 34 - Cabrera Radioactive Inventory Licensed Material
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Cabrera Soil Drum No. (Pit No. - Drum No.)	Cabrera Debris (metal, glass, ceramic, plastics) Drum No. (Pit No. - Drum No.)	Cabrera Liquid Scintillation Vials Drum No. (Pit No. - Drum No.)	Cabrera Animal-Biological Fiber Box (Pit No. - Fiber Box No.)	Cabrera Perched Water from Pits (275 Gal DOT Poly Container (Pit No. - Container No.)	Corresponding Laboratory Sample Composite Number	Radionuclide by Composite Sample, pCi/g or pCi/L*							Total Activity in Container, Ci**	Fraction of Cabrera NRC limit 100 Ci total (At. No. 1-83)
						^{3}H	^{14}C	^{36}Cl	^{63}Ni	^{90}Sr	^{210}Pb	^{226}Ra***		
					BLT-P34-WS-03	33.3	24.9	0.159	0	0	0	0.499		
	D-34-1					1.11E-05	8.30E-06	5.30E-08	0.00E+00	0.00E+00	0.00E+00	1.66E-07	1.96E-05	1.96E-07
	D-34-2					1.11E-05	8.30E-06	5.30E-08	0.00E+00	0.00E+00	0.00E+00	1.66E-07	1.96E-05	1.96E-07
	D-34-3					1.11E-05	8.30E-06	5.30E-08	0.00E+00	0.00E+00	0.00E+00	1.66E-07	1.96E-05	1.96E-07
	D-34-4					1.11E-05	8.30E-06	5.30E-08	0.00E+00	0.00E+00	0.00E+00	1.66E-07	1.96E-05	1.96E-07
	D-34-5					1.11E-05	8.30E-06	5.30E-08	0.00E+00	0.00E+00	0.00E+00	1.66E-07	1.96E-05	1.96E-07
	D-34-6					1.11E-05	8.30E-06	5.30E-08	0.00E+00	0.00E+00	0.00E+00	1.66E-07	1.96E-05	1.96E-07
	D-34-7					1.11E-05	8.30E-06	5.30E-08	0.00E+00	0.00E+00	0.00E+00	1.66E-07	1.96E-05	1.96E-07
	D-34-8					1.11E-05	8.30E-06	5.30E-08	0.00E+00	0.00E+00	0.00E+00	1.66E-07	1.96E-05	1.96E-07
	D-34-9					1.11E-05	8.30E-06	5.30E-08	0.00E+00	0.00E+00	0.00E+00	1.66E-07	1.96E-05	1.96E-07
	D-34-10					1.11E-05	8.30E-06	5.30E-08	0.00E+00	0.00E+00	0.00E+00	1.66E-07	1.96E-05	1.96E-07
					BLT-P34-WS-04	32.3	22.0	0	0	0	0	0.514		
	D-34-11					1.08E-05	7.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-07	1.83E-05	1.83E-07
	D-34-12					1.08E-05	7.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-07	1.83E-05	1.83E-07
	D-34-13					1.08E-05	7.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-07	1.83E-05	1.83E-07
	D-34-14					1.08E-05	7.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-07	1.83E-05	1.83E-07
	D-34-15					1.08E-05	7.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-07	1.83E-05	1.83E-07
	D-34-16					1.08E-05	7.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-07	1.83E-05	1.83E-07
	D-34-17					1.08E-05	7.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-07	1.83E-05	1.83E-07
	D-34-18					1.08E-05	7.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-07	1.83E-05	1.83E-07
	D-34-19					1.08E-05	7.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-07	1.83E-05	1.83E-07
	D-34-20					1.08E-05	7.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E-07	1.83E-05	1.83E-07
					BLT-P34-WS-05	29.8	11.7	0	5.52	0	0.924	0.608		
	D-34-21					9.93E-06	3.90E-06	0.00E+00	1.84E-06	0.00E+00	3.08E-07	2.03E-07	1.62E-05	1.62E-07
	D-34-22					9.93E-06	3.90E-06	0.00E+00	1.84E-06	0.00E+00	3.08E-07	2.03E-07	1.62E-05	1.62E-07
	D-34-23					9.93E-06	3.90E-06	0.00E+00	1.84E-06	0.00E+00	3.08E-07	2.03E-07	1.62E-05	1.62E-07
	D-34-24					9.93E-06	3.90E-06	0.00E+00	1.84E-06	0.00E+00	3.08E-07	2.03E-07	1.62E-05	1.62E-07
	D-34-25					9.93E-06	3.90E-06	0.00E+00	1.84E-06	0.00E+00	3.08E-07	2.03E-07	1.62E-05	1.62E-07
	D-34-26					9.93E-06	3.90E-06	0.00E+00	1.84E-06	0.00E+00	3.08E-07	2.03E-07	1.62E-05	1.62E-07
	D-34-27					9.93E-06	3.90E-06	0.00E+00	1.84E-06	0.00E+00	3.08E-07	2.03E-07	1.62E-05	1.62E-07
	D-34-28					9.93E-06	3.90E-06	0.00E+00	1.84E-06	0.00E+00	3.08E-07	2.03E-07	1.62E-05	1.62E-07
	D-34-29					9.93E-06	3.90E-06	0.00E+00	1.84E-06	0.00E+00	3.08E-07	2.03E-07	1.62E-05	1.62E-07
	D-34-30					9.93E-06	3.90E-06	0.00E+00	1.84E-06	0.00E+00	3.08E-07	2.03E-07	1.62E-05	1.62E-07
					BLT-P34-WS-01	397	0	0	0	0	0	0.560		
S-34-1						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
S-34-2						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
S-34-3						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
S-34-4						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
S-34-5						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
S-34-6						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
S-34-7						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
S-34-8						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
S-34-9						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
S-34-10						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
S-34-11						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
S-34-12						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
S-34-13						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
S-34-14						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
S-34-15						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
S-34-16						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
S-34-17						1.32E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.87E-07	1.32E-04	1.32E-06
					BLT-P34-WS-02	73.9	31.5	0	0	0	0	0.526		

Table 79. Pit 34 - Cabrera Radioactive Inventory Licensed Material
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

						Radionuclide by Composite Sample, pCi/g or pCi/L*								
Cabrera Soil Drum No. (Pit No. - Drum No.)	Cabrera Debris (metal, glass, ceramic, plastics) Drum No. (Pit No. - Drum No.)	Cabrera Liquid Scintillation Vials Drum No. (Pit No. - Drum No.)	Cabrera Animal-Biological Fiber Box (Pit No. - Fiber Box No.)	Cabrera Perched Water from Pits (275 Gal DOT Poly Container (Pit No. - Container No.)	Corresponding Laboratory Sample Composite Number	^{3}H	^{14}C	^{36}Cl	^{63}Ni	^{90}Sr	^{210}Pb	^{226}Ra***	Total Activity in Container, Ci**	Fraction of Cabrera NRC limit 100 Ci total (At. No. 1-83)
S-34-18						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
S-34-19						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
S-34-20						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
S-34-21						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
S-34-22						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
S-34-23						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
S-34-24						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
S-34-25						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
S-34-26						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
S-34-27						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
S-34-28						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
S-34-29						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
S-34-20						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
S-34-31						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
S-34-32						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
S-34-33						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
S-34-34						2.46E-05	1.05E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E-07	3.53E-05	3.53E-07
					BLT-P34-WL-03	171	11.3	0.411	0	0	0	0		
		LSV-34-01				3.88E-06	2.57E-07	9.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-06	4.15E-08
		LSV-34-02				3.88E-06	2.57E-07	9.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-06	4.15E-08
		LSV-34-03				3.88E-06	2.57E-07	9.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-06	4.15E-08
		LSV-34-04				3.88E-06	2.57E-07	9.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-06	4.15E-08
		LSV-34-05				3.88E-06	2.57E-07	9.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-06	4.15E-08
		LSV-34-06				3.88E-06	2.57E-07	9.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-06	4.15E-08
		LSV-34-07				3.88E-06	2.57E-07	9.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-06	4.15E-08
		LSV-34-08				3.88E-06	2.57E-07	9.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-06	4.15E-08
		LSV-34-09				3.88E-06	2.57E-07	9.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-06	4.15E-08
		LSV-34-10				3.88E-06	2.57E-07	9.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.15E-06	4.15E-08
					BLT-P34-WL-02	1.28E+05	2230	48.7	232	0	0	0		
				PW-34-01	275-gallon blue poly tank	1.33E-04	2.32E-06	5.07E-08	2.42E-07	0.00E+00	0.00E+00	0.00E+00	1.36E-04	1.36E-06
					Animal parts, not analyzed; estimate based on average isotopic activity of Pit 34 dry samples	122.88	16.90	0.10	0.92	0.00	0.15	0.45		
			AB-34-1			2.46E-07	3.38E-08	1.90E-10	1.84E-09	0.00E+00	3.08E-10	9.02E-10	2.83E-07	2.83E-09
												Total	**3.57E-03**	

* Composite samples utilize reported laboratory results in all cases except where negative values are reported; negative values are carried as zero
** Container activity based on soil density of 1.6; drum weight 734 lbs; 50 lbs liquid scintillation vials; 275 gallons per poly tank; animal parts equivalent 4 rats each 500 g
*** ^{226}Ra based on Bi-214 progeny; equilibrium assumed

Table 80. Pit 34C - Cabrera Radioactive Inventory Licensed Material
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Cabrera Soil Drum No. (Pit No. - Drum No.)	Cabrera Debris (metal, glass, ceramic, plastics) Drum No. (Pit No. - Drum No.)	Cabrera Liquid Scintillation Vials Drum No. (Pit No. - Drum No.)	Corresponding Laboratory Sample Composite Number	Radionuclide by Composite Sample, pCi/g*							Total Activity in Container, Ci**	Fraction of Cabrera NRC limit 100 Ci total (At. No. 1-83)
				^{3}H	^{14}C	^{36}Cl	^{63}Ni	^{90}Sr	^{210}Pb	^{226}Ra***		
			BLT-P34c-WS-02	5.86	22.8	0	0	0	93.0	117		
	D-34C-1			1.95E-06	7.60E-06	0.00E+00	0.00E+00	0.00E+00	3.10E-05	3.90E-05	7.95E-05	7.95E-07
	D-34C-2			1.95E-06	7.60E-06	0.00E+00	0.00E+00	0.00E+00	3.10E-05	3.90E-05	7.95E-05	7.95E-07
	D-34C-3			1.95E-06	7.60E-06	0.00E+00	0.00E+00	0.00E+00	3.10E-05	3.90E-05	7.95E-05	7.95E-07
	D-34C-4			1.95E-06	7.60E-06	0.00E+00	0.00E+00	0.00E+00	3.10E-05	3.90E-05	7.95E-05	7.95E-07
	D-34C-5			1.95E-06	7.60E-06	0.00E+00	0.00E+00	0.00E+00	3.10E-05	3.90E-05	7.95E-05	7.95E-07
	D-34C-6			1.95E-06	7.60E-06	0.00E+00	0.00E+00	0.00E+00	3.10E-05	3.90E-05	7.95E-05	7.95E-07
	D-34C-7			1.95E-06	7.60E-06	0.00E+00	0.00E+00	0.00E+00	3.10E-05	3.90E-05	7.95E-05	7.95E-07
	D-34C-8			1.95E-06	7.60E-06	0.00E+00	0.00E+00	0.00E+00	3.10E-05	3.90E-05	7.95E-05	7.95E-07
	D-34C-9			1.95E-06	7.60E-06	0.00E+00	0.00E+00	0.00E+00	3.10E-05	3.90E-05	7.95E-05	7.95E-07
	D-34C-10			1.95E-06	7.60E-06	0.00E+00	0.00E+00	0.00E+00	3.10E-05	3.90E-05	7.95E-05	7.95E-07
			BLT-P34c-WS-01	4.68	9.82	0	0	0	41.8	49.5		
S-34C-1				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-2				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-3				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-4				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-5				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-6				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-7				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-8				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-9				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-10				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-11				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-12				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-13				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-14				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-15				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-16				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-17				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-18				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-19				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-20				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-21				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-22				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-23				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-24				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07
S-34C-25				1.56E-06	3.27E-06	0.00E+00	0.00E+00	0.00E+00	1.39E-05	1.65E-05	3.53E-05	3.53E-07

Table 80. Pit 34C - Cabrera Radioactive Inventory Licensed Material
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Cabrera Soil Drum No. (Pit No. - Drum No.)	Cabrera Debris (metal, glass, ceramic, plastics) Drum No. (Pit No. - Drum No.)	Cabrera Liquid Scintillation Vials Drum No. (Pit No. - Drum No.)	Corresponding Laboratory Sample Composite Number	Radionuclide by Composite Sample, pCi/g*							Total Activity in Container, Ci**	Fraction of Cabrera NRC limit 100 Ci total (At. No. 1-83)
				^{3}H	^{14}C	^{36}Cl	^{63}Ni	^{90}Sr	^{210}Pb	^{226}Ra***		
			BLT-P34c-WL-03	14.4	65.0	0.121	0	0	0	0.135		
		LSV-34C-01		3.27E-07	1.48E-06	2.75E-09	0.00E+00	0.00E+00	0.00E+00	3.06E-09	1.81E-06	1.81E-08
		LSV-34C-02		3.27E-07	1.48E-06	2.75E-09	0.00E+00	0.00E+00	0.00E+00	3.06E-09	1.81E-06	1.81E-08
		LSV-34C-03		3.27E-07	1.48E-06	2.75E-09	0.00E+00	0.00E+00	0.00E+00	3.06E-09	1.81E-06	1.81E-08
		LSV-34C-04		3.27E-07	1.48E-06	2.75E-09	0.00E+00	0.00E+00	0.00E+00	3.06E-09	1.81E-06	1.81E-08
		LSV-34C-05		3.27E-07	1.48E-06	2.75E-09	0.00E+00	0.00E+00	0.00E+00	3.06E-09	1.81E-06	1.81E-08
		LSV-34C-06		3.27E-07	1.48E-06	2.75E-09	0.00E+00	0.00E+00	0.00E+00	3.06E-09	1.81E-06	1.81E-08
		LSV-34C-07		3.27E-07	1.48E-06	2.75E-09	0.00E+00	0.00E+00	0.00E+00	3.06E-09	1.81E-06	1.81E-08
										Total	**1.69E-03**	

* Composite samples utilize reported laboratory results in all cases except where negative values are reported; negative values are carried as zero
** Container activity based on soil density of 1.6; drum weight 734 lbs; 50 lbs liquid scintillation vials
*** ^{226}Ra based on Bi-214 progeny; equilibrium assumed

Table 81. Miscellaneous Wastes - Cabrera Radioactive Inventory Licensed Material
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Cabrera Dry Active Waste Drum No.	Cabrera Containers with Sharps	Cabrera Sealed Sources	Cabrera Barrels with Waste Liquid/Sludge	Corresponding Laboratory Sample Composite Number	Radionuclide by Composite Sample, pCi/g*							Total Activity in Container, Ci**	Fraction of Cabrera NRC limit 100 Ci total (At. No. 1-83)
					^{3}H	^{14}C	^{36}Cl	^{63}Ni	^{90}Sr	^{210}Pb	^{226}Ra***		
				DAW is potentially contaminated PPE not analyzed; estimate based on average isotopic activity all pit dry samples	32.60	30.35	0.03	2.64	0.08	9.59	11.65		
DAW-1					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-2					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-3					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-4					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-5					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-6					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-7					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-8					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-9					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-10					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-11					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-12					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-13					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-14					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-15					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-16					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-17					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-18					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-19					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-20					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-21					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-22					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
DAW-23					2.96E-07	2.76E-07	2.46E-10	2.40E-08	6.90E-10	8.71E-08	1.06E-07	7.89E-07	7.89E-09
				Not sampled; estimate based on average isotopic activity all pit dry samples	32.60	30.35	0.03	2.64	0.08	9.59	11.65		
	Sharps-1				7.40E-08	6.89E-08	6.14E-11	5.99E-09	1.73E-10	2.18E-08	2.64E-08	1.97E-07	1.97E-09

Table 81. Miscellaneous Wastes - Cabrera Radioactive Inventory Licensed Material
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

Cabrera Dry Active Waste Drum No.	Cabrera Containers with Sharps	Cabrera Sealed Sources	Cabrera Barrels with Waste Liquid/Sludge	Corresponding Laboratory Sample Composite Number	Radionuclide by Composite Sample, pCi/g*							Total Activity in Container, Ci**	Fraction of Cabrera NRC limit 100 Ci total (At. No. 1-83)
					^{3}H	^{14}C	^{36}Cl	^{63}Ni	^{90}Sr	^{210}Pb	^{226}Ra***		
				Sources	-	-	-	-	-	-	-		
		Radium sources****		SS-34-02, 03	-	-	-	-	-	-	1.25E+10	1.25E-02	1.25E-04
		Electron Capture		SS-34-01	-	-	-	2.00E+09	-			2.00E-03	2.00E-05
				BLT-COMP-WL-01	0	611	10.4	32.3	0	132	0		
			BL-1		0.00E+00	1.27E-04	2.17E-06	6.72E-06	0.00E+00	2.75E-05	0.00E+00	1.64E-04	1.64E-06
			BL-2		0.00E+00	1.27E-04	2.17E-06	6.72E-06	0.00E+00	2.75E-05	0.00E+00	1.64E-04	1.64E-06
											Total	**1.48E-02**	

* Composite samples utilize reported laboratory results in all cases except where negative values are reported; negative values are carried as zero

** Container activity based on drum weight 20 lbs DAW, 5 lbs sharps,

*** ^{226}Ra based on Bi-214 progeny; equilibrium assumed

**** ^{226}Ra source activities estimated based on NaI spectral measurements and MicroShield distance dose rate calculations, pCi estimate of activity

Table 82. Total Curies - Cabrera Radioactive Inventory Licensed Material
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

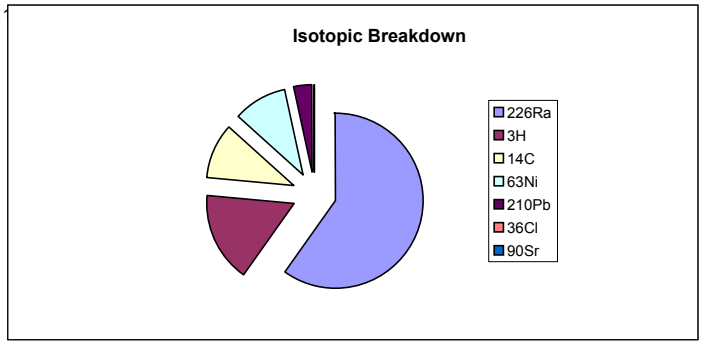
Total Activity Held Under Cabrera NRC License at Beltsville (Curies)	Fraction of Cabrera NRC License
2.24E-02	2.24E-04

Provide radioisotope breakdown

Isotope	Total curies	Fraction of total curies in storage	Total Activity disposed of in pits sampled, mCi
^{3}H	3.74E-03	0.16720	28.46
^{14}C	2.35E-03	0.10471	48
^{36}Cl	5.10E-06	0.00023	-
^{63}Ni	2.19E-03	0.09792	7.65
^{90}Sr	1.02E-07	0.0000046	-
^{210}Pb	7.61E-04	0.03399	0.13
^{226}Ra	1.33E-02	0.59595	
total	2.24E-02		

	226Ra	0.595946
	3H	0.167197
	14C	0.104714
17	63Ni	0.097925
10	210Pb	0.033985
0.03	36Cl	0.000228
10	90Sr	4.56E-06
3		
60		

Pit	^{3}H	^{14}C	^{36}Cl	^{63}Ni	^{90}Sr	^{210}Pb	^{226}Ra	Sum
1	2.37E-07	3.11E-06	0.00E+00	0.00E+00	0.00E+00	4.29E-05	1.72E-05	6.34E-05
14	0.00E+00	2.92E-04	0.00E+00	0.00E+00	8.62E-08	0.00E+00	5.93E-06	2.98E-04
26	5.14E-04	1.24E-03	7.32E-08	1.60E-04	0.00E+00	0.00E+00	6.76E-06	1.92E-03
34	3.16E-03	3.79E-04	6.74E-07	1.86E-05	0.00E+00	3.08E-06	1.16E-05	3.57E-03
34C	6.08E-05	1.68E-04	1.92E-08	0.00E+00	0.00E+00	6.58E-04	8.02E-04	1.69E-03
Misc	6.88E-06	2.61E-04	4.34E-06	2.01E-03	1.60E-08	5.70E-05	1.25E-02	1.48E-02
								2.239E-02
Sum	3.74E-03	2.35E-03	5.10E-06	2.19E-03	1.02E-07	7.61E-04	1.33E-02	2.24E-02



3.74	6.34E-02
2.35	0.298
5.10E-03	1.92
2.19	3.57
1.02E-04	1.69
0.761	14.8
1.33E+01	2.234E+01
22.346202	

Table 83. Summary of Excavated Wastes from all Pits
Low Level Radioisotope Burial Site - Characterization Survey
Beltsville Agricultural Research Center (BARC) - Beltsville, Maryland

	Soil Drums	Debris Drums	Fiber Boxes - Bones	Liquid Scintillation Vials - Drums	Dry Active Waste - Drums	Bulked Liquids	Groundwater - 3 tanks @ 275 gallons, as 55-gallon drums	Sources - 2 Ra-226, 1 Ni-63
Pit 1	40	2						
Pit 14	39		4					
Pit 26	19	16		7				
Pit 34	34	30		10				
Pit 34C	25	10		7				
Misc.					23	2	15	3
Total	**157**	**58**	**4**	**24**	**23**	**2**	**15**	**3**

APPENDICES

A. Laboratory Analytical Report and Electronic Data Deliverables (provided on CD)
B. Instrumentation QA/QC
C. Site Photographs
D. Results of Geophysical Surveys
E. Gamma Walkover Survey Data (provided on CD)
F. Daily/Weekly Field Reports
G. Shipping Manifests

APPENDIX A

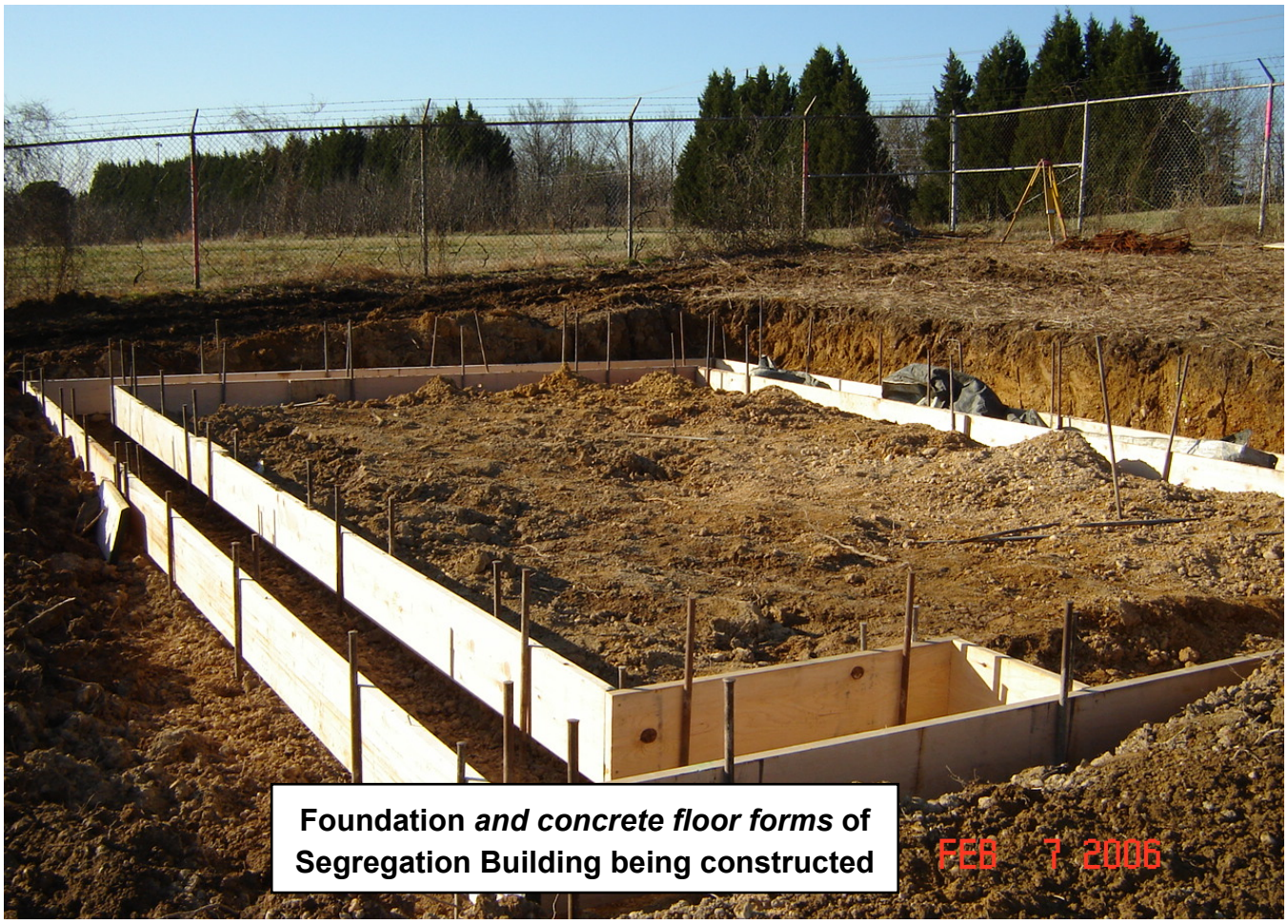
Laboratory Analytical Report and Electronic Data Deliverables (provided on CD)

APPENDIX B

Instrumentation QA/QC

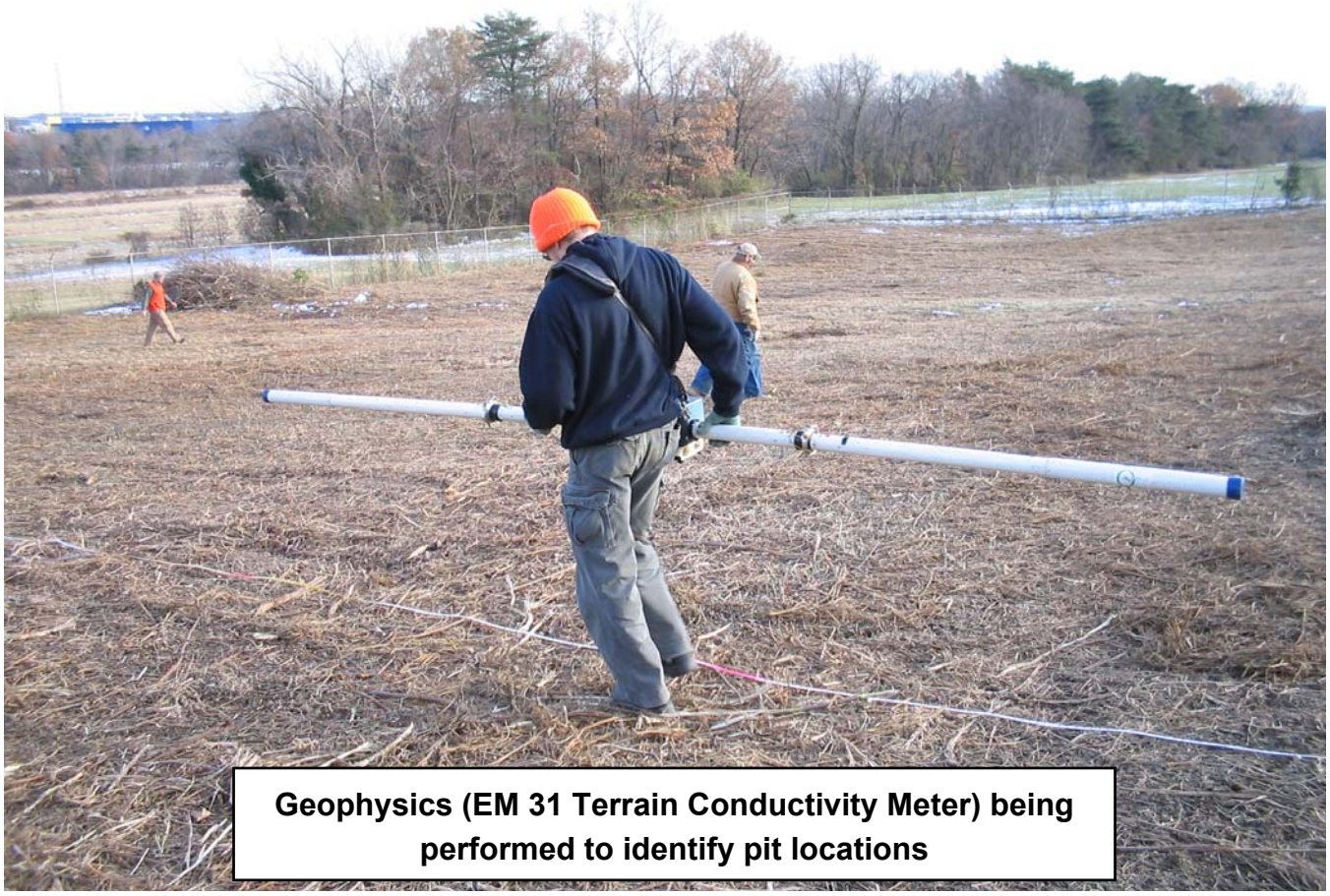
APPENDIX C

Site Photographs



Foundation *and concrete floor forms* of Segregation Building being constructed

Segregation Building's concrete floor being poured and smoothed with floater



Geophysics (EM 31 Terrain Conductivity Meter) being performed to identify pit locations

(From left to right) Supply Conex, Office Trailer and Laboratory Conex

Caution tape identifying location of "hot" rocks discovered on the surface

Worker rest area and supply storage carport located in the north field

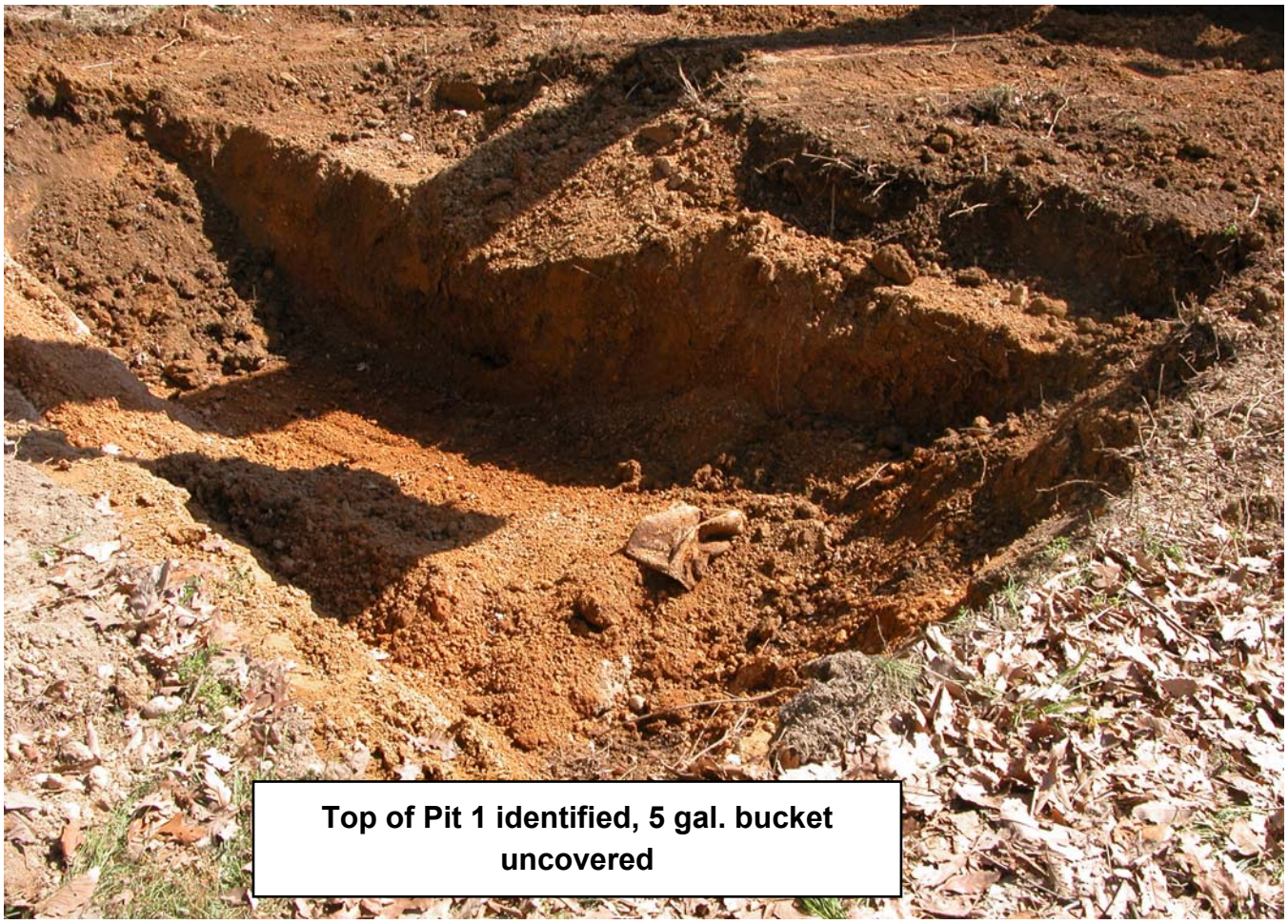
Silt fence constructed down grade and to the east of the pit excavations

Waste Segregation Building and temporary drum storage canopy

Sampling of Monitoring Wells 9 and 10

Top soil removed from Pit 1 (Worker Break area & Supply Storage Car Port in background)

Spoil piles from Pit 1 surveyed for radiological contaminants



Top of Pit 1 identified, 5 gal. bucket uncovered

Manual excavation and sorting of Pit 1 debris

Gas can with painted Radiological symbol and 'Danger' uncovered in Pit 1

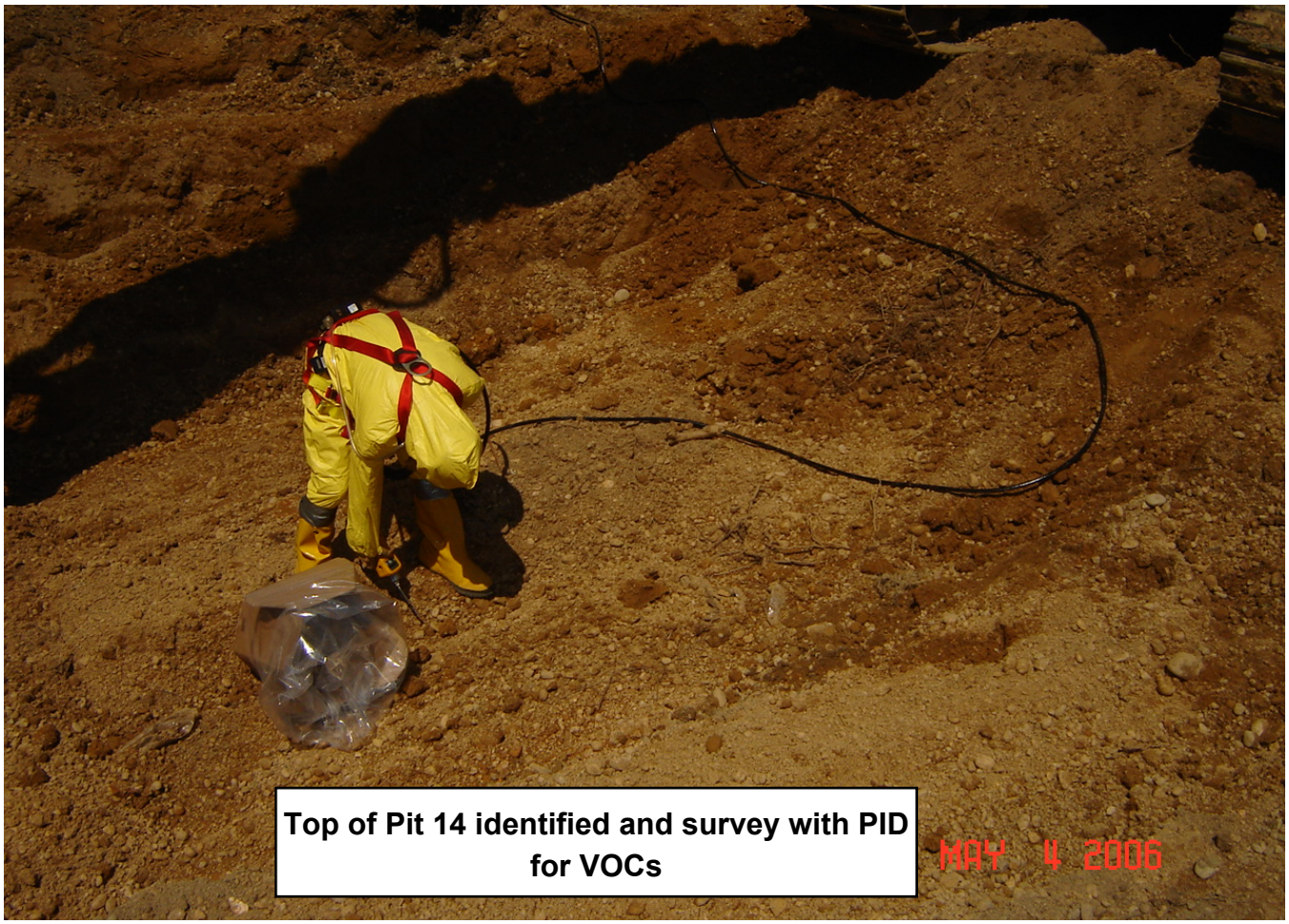
Pit 1 debris consisted primarily of pieces of plastic, small plastic vials and tubes.

Bottom of Pit 1 identified by white sand and ash mixture

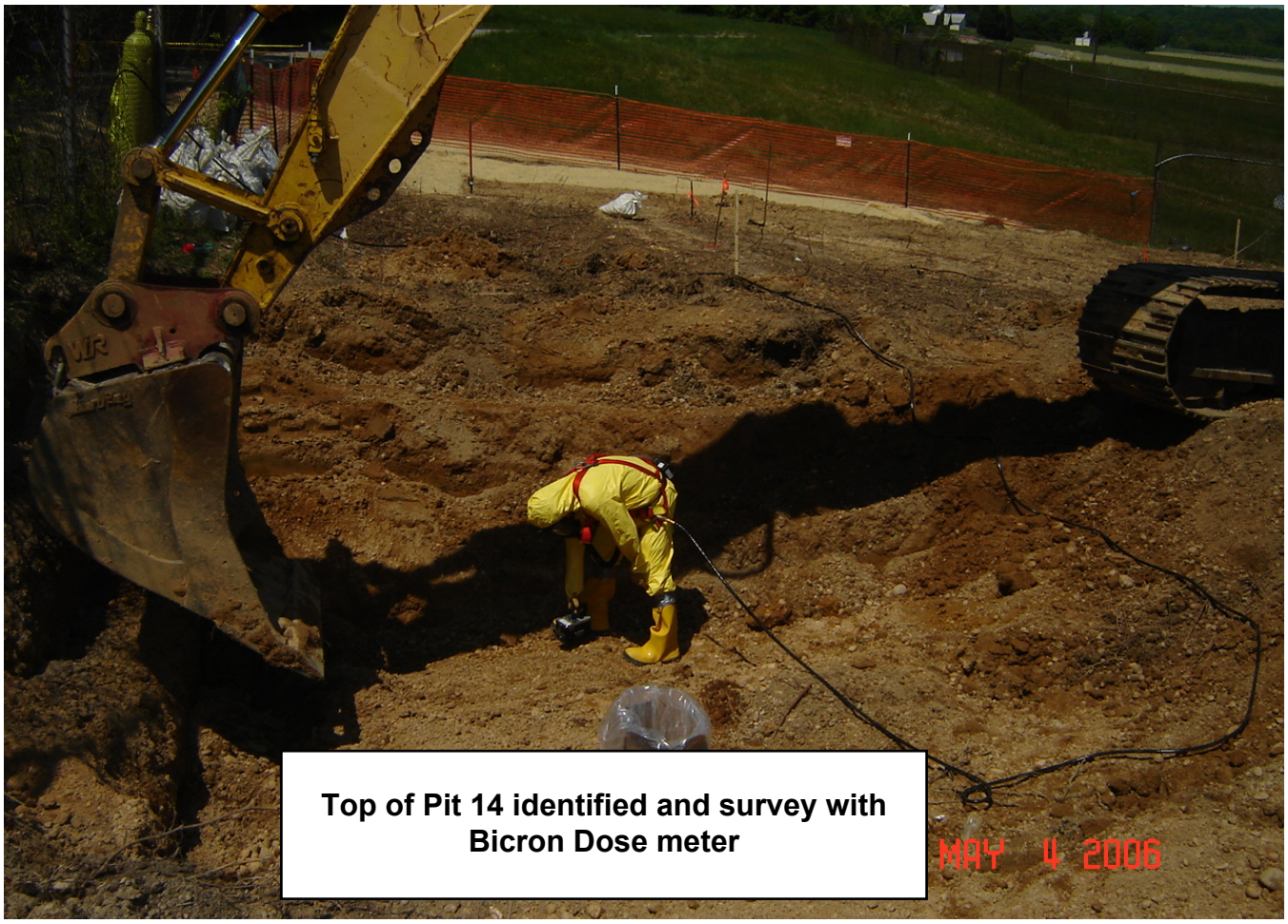
Bottom of Pit 1 with all debris removed

Drums of Soil and unsorted Debris labeled, and prepared to be transported to the Waste Segregation building

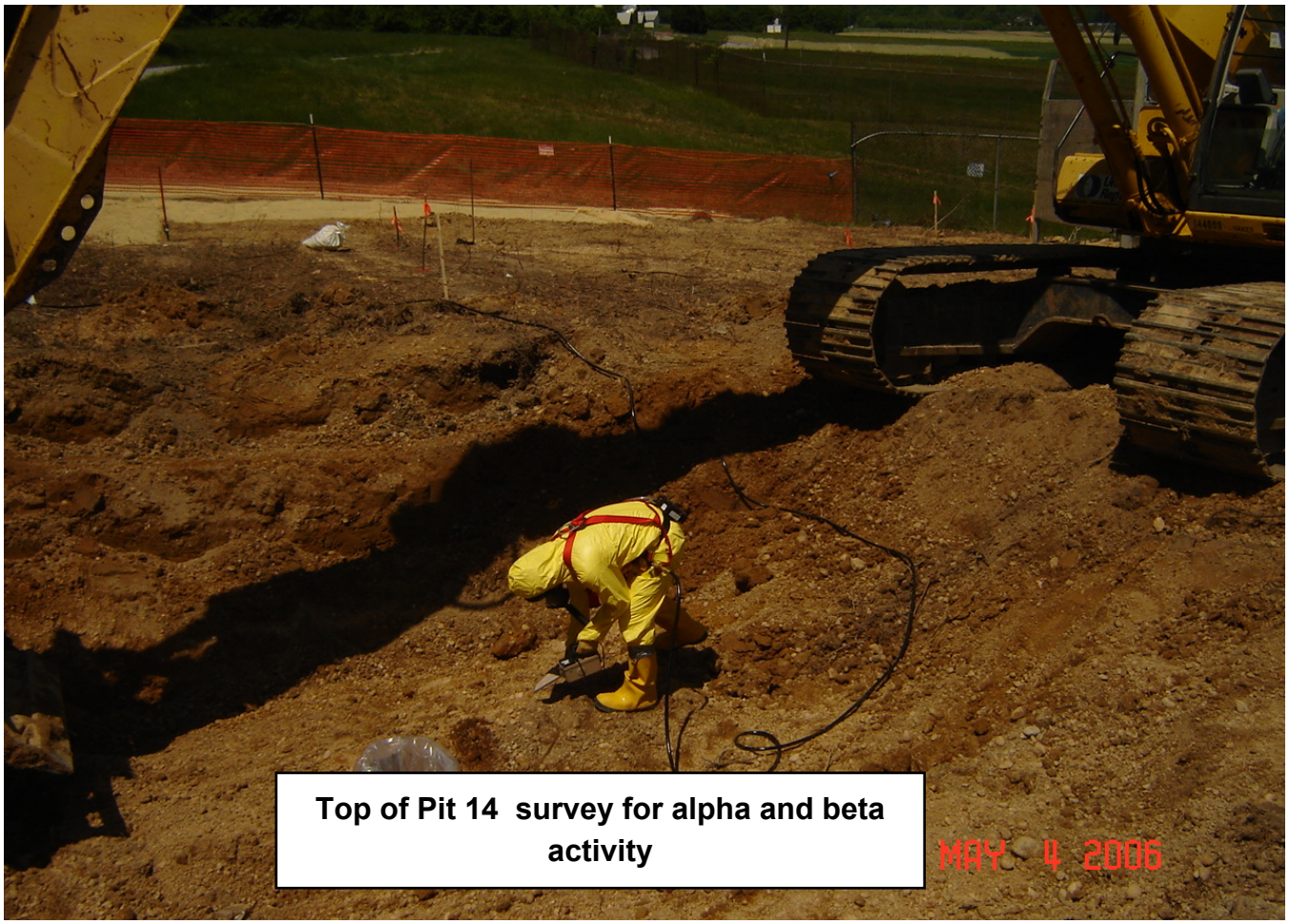
Pit 14 identified by geophysics and confirmed by site walk



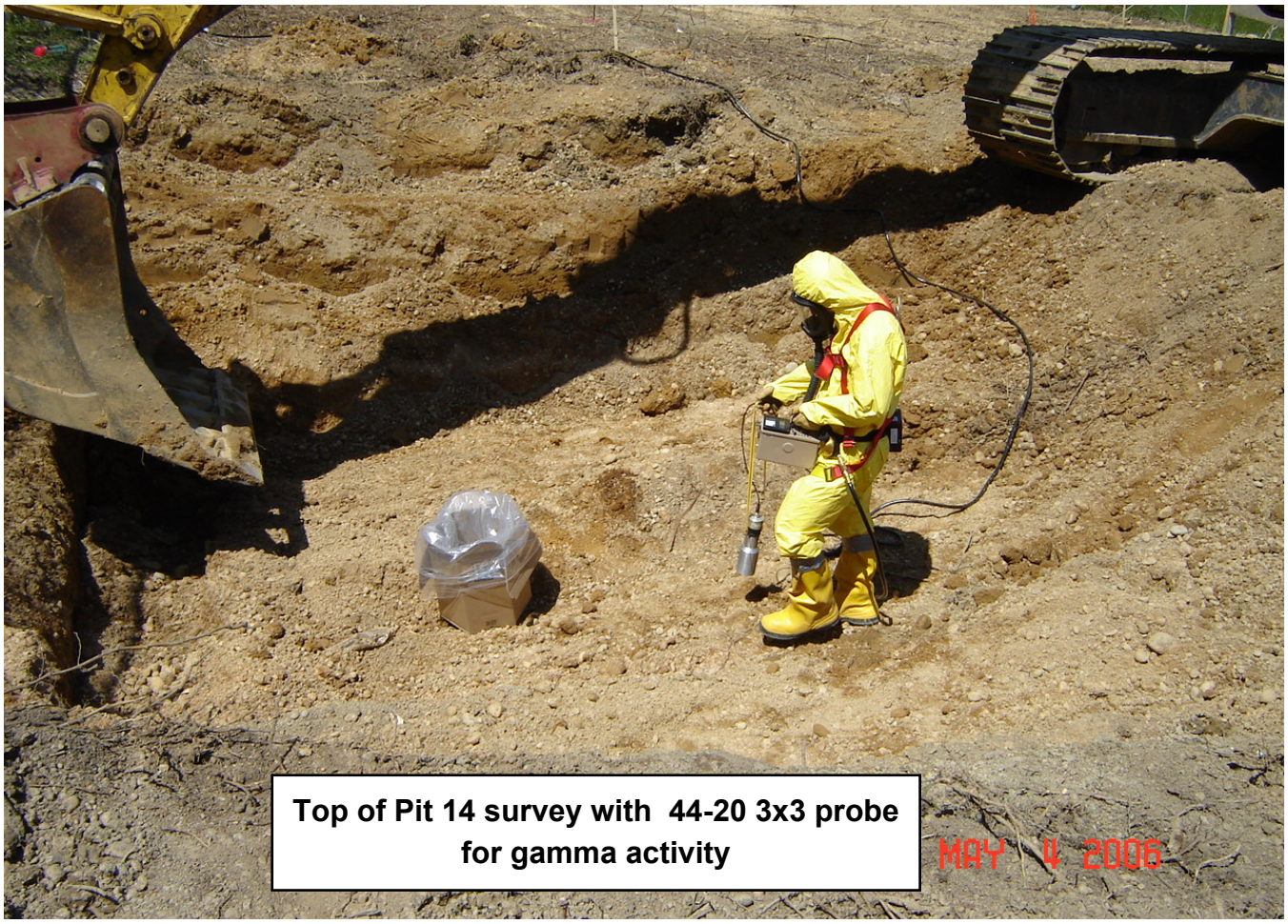
Top of Pit 14 identified and survey with PID for VOCs



Top of Pit 14 identified and survey with Bicron Dose meter



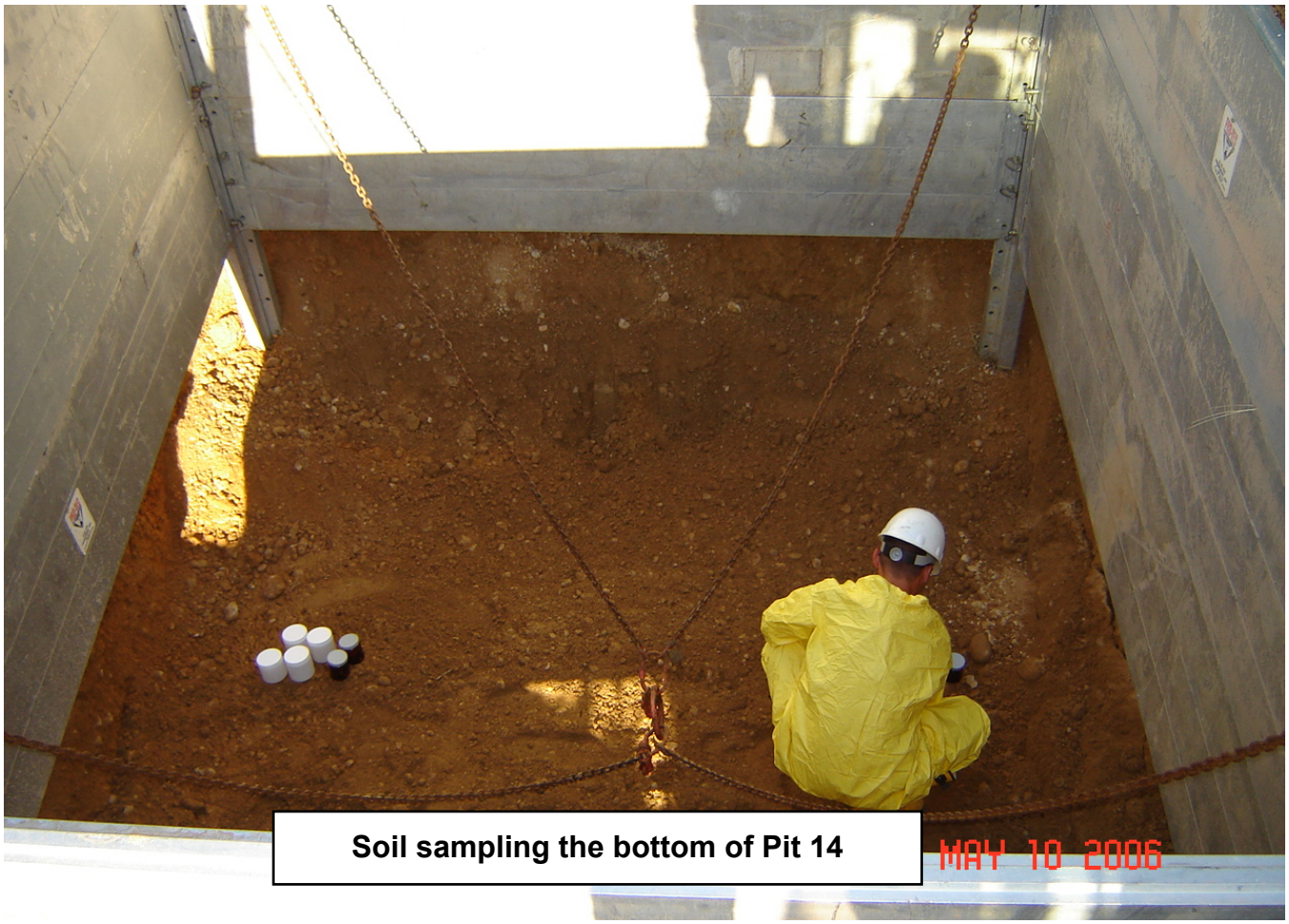
Top of Pit 14 survey for alpha and beta activity



Top of Pit 14 survey with 44-20 3x3 probe for gamma activity

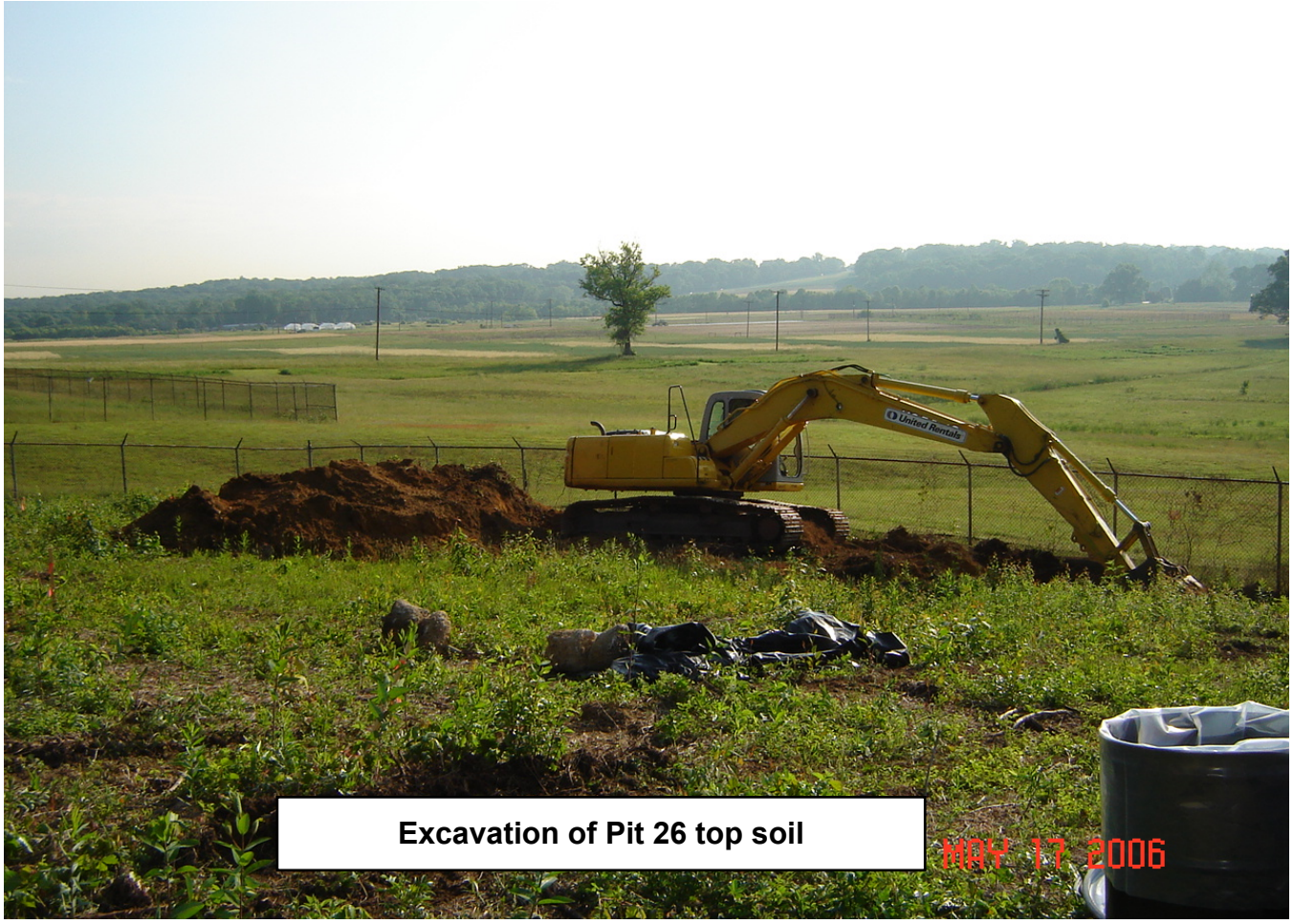
Bones and other organic debris located in Pit 14 placed in a BioBox with double lining

Pit 14 excavation and sorting of organic debris from soil



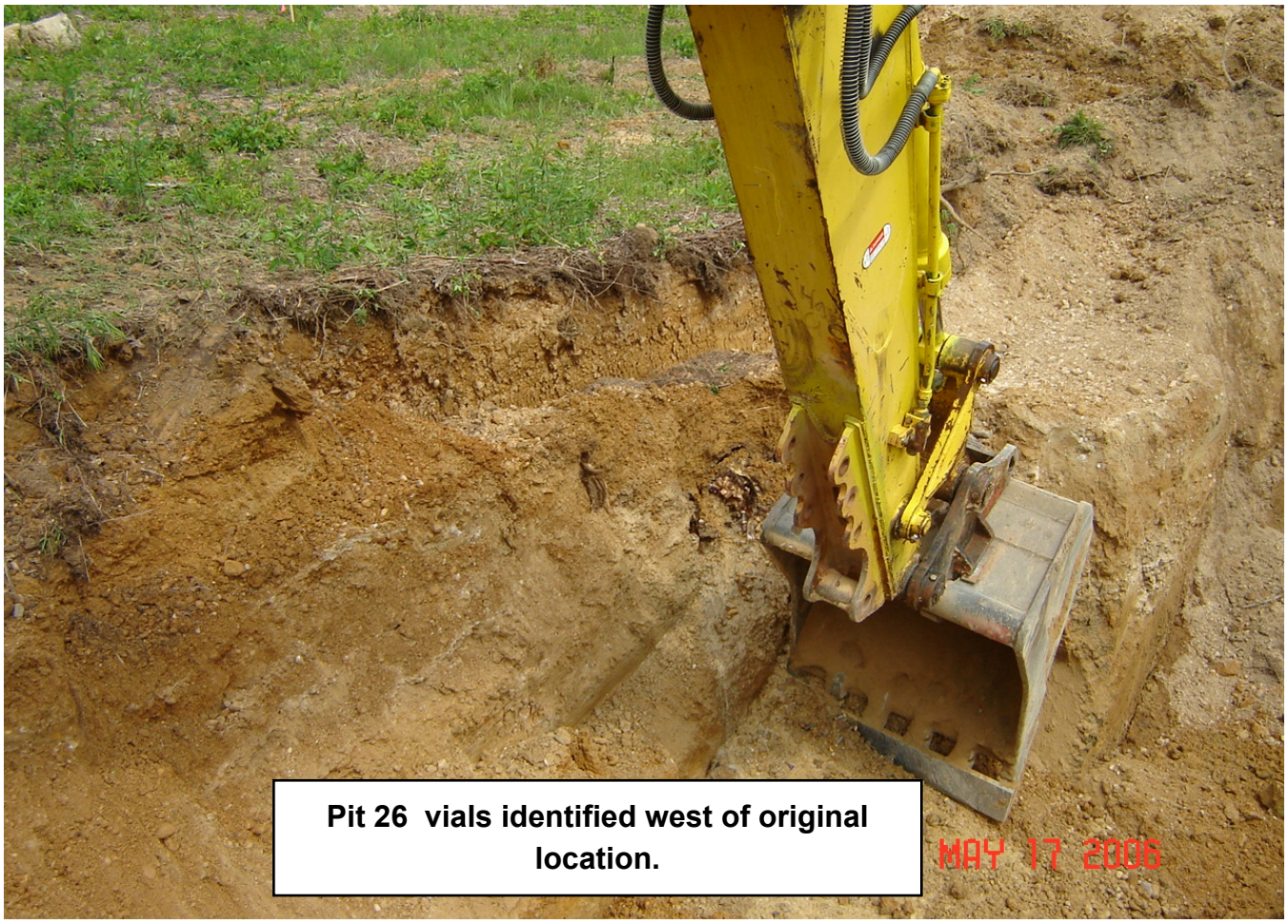
Soil sampling the bottom of Pit 14

Pit 14 filled in with clean dirt



Excavation of Pit 26 top soil

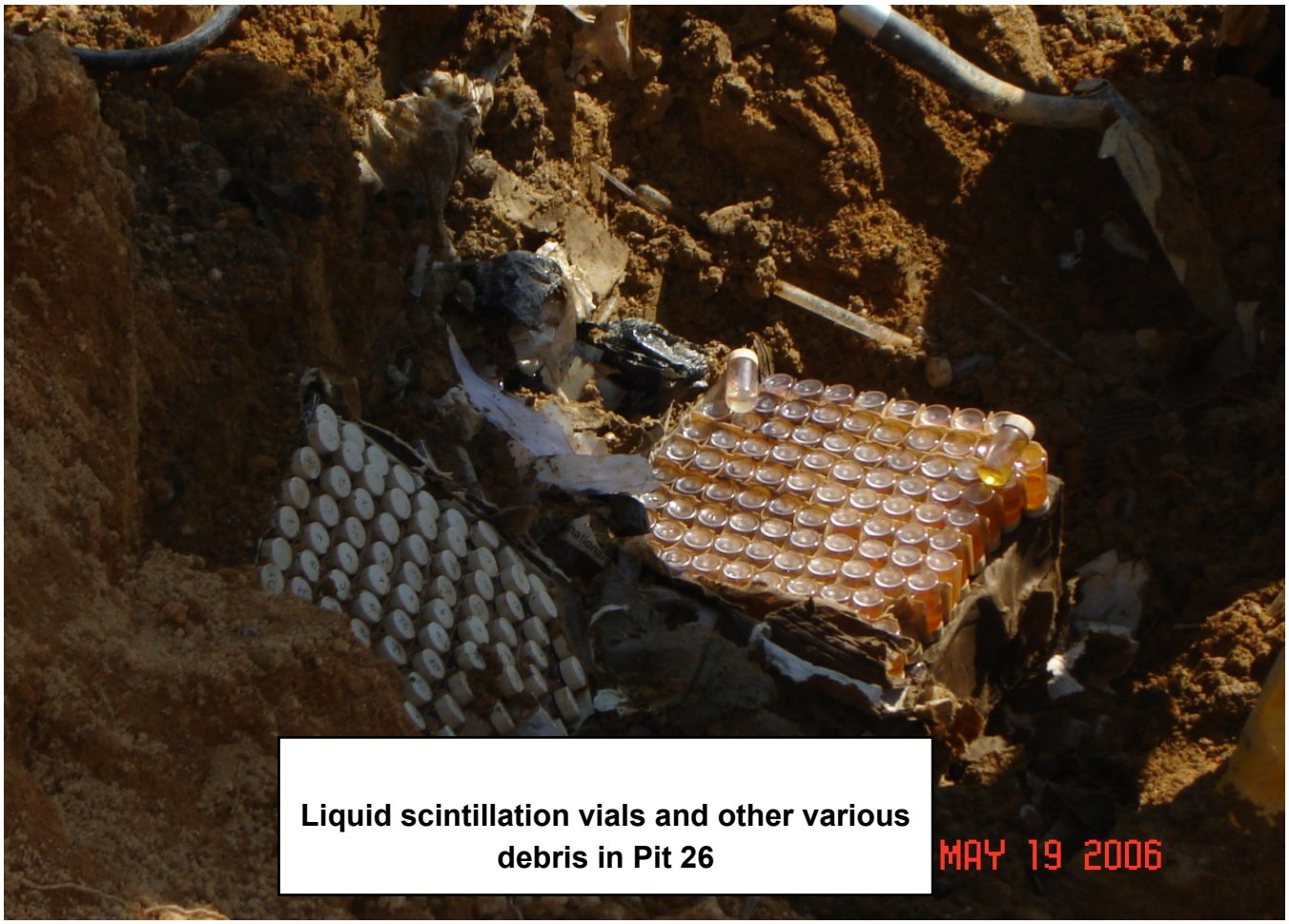
Excavation of Pit 26. No debris identified in initial location.



Pit 26 vials identified west of original location.

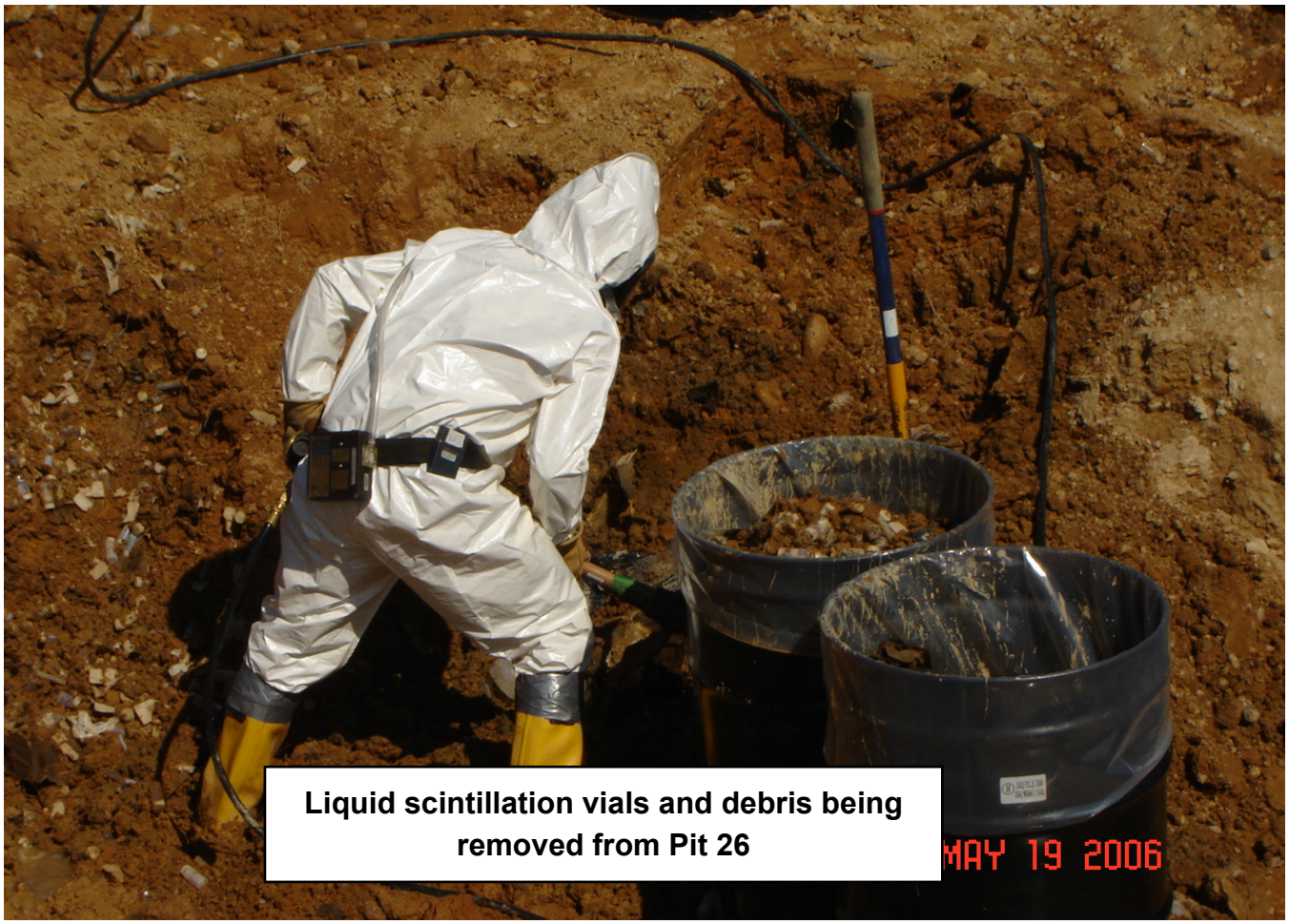
PID used to identify organic VOCs in liquid that was infiltrating Pit 26

Topsoil of Pit 26 being removed and stepped back for manual excavation of debris



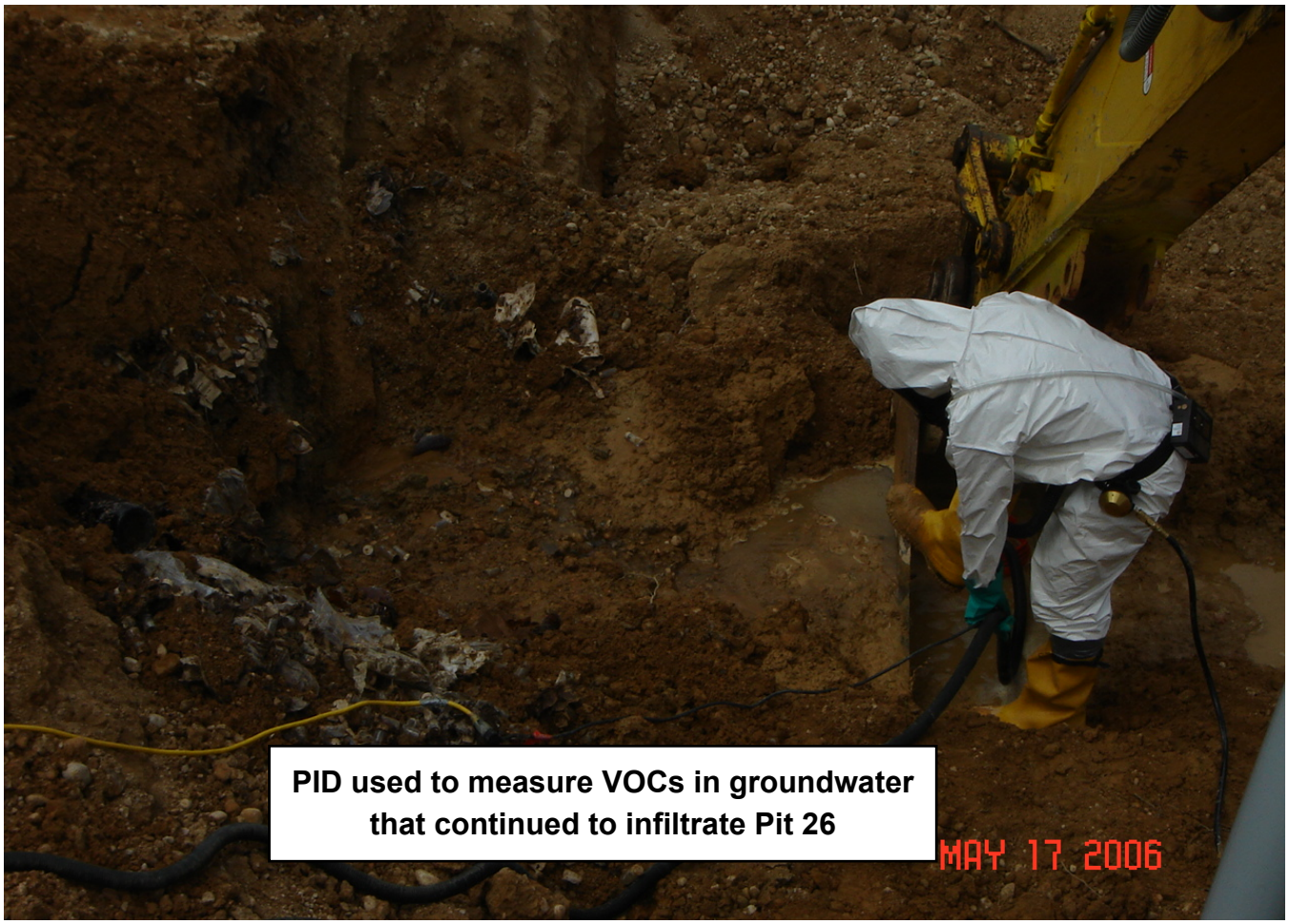
Liquid scintillation vials and other various debris in Pit 26

5 gallon drum of liquid scintillation vials being removed from Pit 26



Liquid scintillation vials and debris being removed from Pit 26

Excavation of Pit 26 debris



PID used to measure VOCs in groundwater that continued to infiltrate Pit 26

One gallon jugs containing liquid extracted from Pit 26.

Various debris (vials, tubes, needles, and plastic) extracted from Pit 26

Labeled 55 gallon drums with *debris* to be transported to the Segregation Building

APPENDIX D

Results of Geophysical Surveys

EARTH RESOURCES TECHNOLOGY, INC.

January 6, 2006

Carl Young
Cabrera Services, Inc.
103 E. Mount Royal Ave. Ste. 2B
Baltimore MD 21202

RE: Results of Geophysical Surveys, U.S. Department of Agriculture Research Facility, Beltsville, Maryland.

I. Purpose and Scope of Investigation

This report discusses geophysical investigations carried out by Earth Resources Technology, Inc., at the U.S. Department of Agriculture Research Facility, Beltsville, Maryland, for Cabrera Services, Inc., in December of 2005.

The purpose of the geophysical investigations was to characterize the subsurface in two fields enclosed by fences where radioactive materials were suspected to have been buried. The areas are referred to as "North Field" and "South Field." These fields are shown in Figure 1. The North Field is where the majority of materials were suspected to have been buried, so it was investigated more thoroughly than the south field, where only a reconnaissance investigation was carried out.

The geophysical instruments used to characterize the site were a Geometrics G-858 Magnetometer, Geonics EM31, and a GSSI SIR-3000 Ground Penetrating Radar (GPR). The magnetometer detects ferrous metals. The EM31 detects changes in ground conductivity as well as the presence of ferrous and non-ferrous metals, although it is not as sensitive as the magnetometer. Results from these two instruments are displayed as contour maps of the site. The GPR collects images of the subsurface in the form of profiles that can be interpreted individually or combined to form an amplitude map of the subsurface.

II. Field Methods and Equipment

Survey Grid

A grid was laid out at the North Field. The grid's origin [100,100] is 5' to the north and 5' to the east of the southwest corner of the fence. The X-axis increases to the east, and the Y-axis increases to the north. Grid marks were placed every 10 feet on the ground, and flags with grid coordinates were placed in the ground every 50 feet.

The reconnaissance of the South Field proceeded without a grid, but used the poles of the fences as reference. However, the maps of the South Field in this report show a coordinate system with [0,0] at the southwest corner of the fence.

Magnetic Survey

A Geometrics Portable Cesium Magnetometer, Model G-858, was used for the magnetic survey. Using self-oscillating split-beam Cesium vapor (non-radioactive Cs-133), this magnetometer measures the earth's total geomagnetic field (magnetic flux density) at a particular location in units of nannoteslas (nT) with an

8106 Stayton Drive, Suite B ♦ Jessup, MD 20794 ♦ Tel: (240) 554-0161 Fax: (301) 604-0205 ♦ Email: ert@ertcorp.net

accuracy of ±1.0 nT. It collects a maximum of 10 magnetic readings per second. The total field consists of three components: the main field of the earth, the external field caused by the sun and moon, and local variations caused by objects at the site. The main field and external field remain relatively constant over the period of time of a field investigation. Local variations are attributable to anomalies near the surface such as buried ferrous metal objects or above-ground objects containing ferrous metal.

Magnetic data were collected along and between grid lines in the North Field with 5' separation between transects. Magnetic data were collected along 5 transects in the east-west direction and along 5 transects along the north-south direction in the South Field.

Electromagnetic Survey

The Geonics EM31 was used for the electromagnetic survey. The EM31 measures the changes in the ground conductivity using a patented electromagnetic inductive technique that makes the measurements without electrodes or ground contact. The EM31 has two analog meters that display the quadrature-phase (conductivity) and in-phase components of the electromagnetic field. The unit of conductivity used is millisiemens per meter (mS/m). Conductivity changes are used to infer geological variations, or groundwater contamination. In-phase measurements are the ratio of the induced secondary magnetic field to the primary magnetic field in parts per thousand (ppt). The in-phase component is especially useful for searching for buried metal drums, pipes, and other ferrous and non-ferrous metallic debris. The effective depth of exploration of the equipment is about twenty feet.

Electromagnetic data were collected along and between grid lines in the North Field with 5' separation between transects, forming a uniform grid. Electromagnetic data were collected along 5 transects in the east-west direction and along 4 transects in the north-south direction in the South Field. (An instrument error caused one north-south transect to not be recorded. The consequences of this are minimal because comparison of the Magnetic and Electromagnetic data show that the magnetometer was more sensitive to objects at this site.)

Ground Penetrating Radar Survey

The SIR-3000 Ground Penetrating Radar unit, manufactured by Geophysical Survey Systems, Inc. (GSSI), was used to conduct the GPR survey. The device radiates a polarized electromagnetic wave from a transmitter antenna into the earth and receives at a receiving antenna the reflection of the wave from subsurface interfaces at which changes in the electrical properties (dielectric permittivity and electrical conductivity) of the subsurface materials occur. Dielectric permittivity controls wave speed; and conductivity determines the signal attenuation. Radar reflections occur when the radio waves encounter a change in the velocity or attenuation. The greater the change in properties the more signal is reflected. These properties may be controlled by water in the material, hence by the porosity and quantity of dissolved solids in the water. Also, metallic objects usually exhibit strong subsurface reflection character due to their high electrical impedance or contrast versus surrounding soil or fill. Depth of penetration of the radar signal is inversely proportional to the conductivity of the soil. As a result, electrically resistive earth materials such as coarse-grained, unsaturated sediments allow a deeper radar penetration than the conductive finer-grained soils such as clay and silt. Similarly, reinforced concrete and shallow groundwater are conductive and thus attenuate the radar signals. The 400 MHz antenna was used for this survey. The odometer was set up such that ten radar readings would be acquired every foot. The average velocity of the radar is estimated around 0.1 m (0.328 ft) per nanosecond (ns). The time range selected was 80 ns and such a time range would allow a penetration depth of about 12 feet. The GPR data were recorded digitally in a portable computer for instant display and subsequent processing.

The collection of the GPR data was performed by pulling the antenna along and between grid lines in both the X and Y directions in the North Field. GPR data were collected along 5 transects in the east-west direction and along 5 transects along the north-south direction in the South Field.

III. Data Reduction and Processing

Magnetic Data Processing

Data from the G-858 were downloaded to a laptop using MagMap2000 software where they were spatially corrected (to fit site features) and exported to Surfer format. Dropouts, or zero readings, are caused by magnetic field lines passing through the sensor at angles outside of its cone of sensitivity, and these were removed using MagMap2000. Griding of the data was accomplished using the method of kriging.

Electromagnetic Data Processing

The data were downloaded from the EM31 Datalogger to a PC where they were placed directly into a Surfer data sheet. The data were gridded using the method of kriging.

Ground Penetrating Radar Data Processing

The data were collected onto a flash card in the SIR-3000 unit and downloaded to a PC. The data were time-zero corrected and gains were applied to all files using Radan software distributed by GSSI. All files were converted to bitmaps using Rad2bmp, also distributed by GSSI. The bitmaps were converted to GIF files using Adobe Photoshop in order to save memory. The GIF files were imported into Surfer for final display.

The vertical axis of GPR profiles is in time, rather than depth. Because a radar wave must travel from the transmitter through the subsurface medium to the target and back through the medium to the receiver, it is said to have a "two-way travel time." The units are nanoseconds (ns). The data were collected such that the records are 80 ns long, which was subsequently cropped to approximately 71.4 ns after the "time-zero" correction was applied. However, nannoseconds are often not a useful unit for presentation of the data, so a conversion is made to depth by using a dielectric constant of the radar wave of 8.44. All vertical axes have been converted from time to depth in feet, but one must remember that these depths are not precise, and may be over- or underestimates, particularly at depth.

The GPR profiles acquired at the North Field were combined together digitally to produce an amplitude map. Strong signal amplitudes are caused by the radar wave reflecting off of objects with high dielectric contrasts relative to the surrounding medium. On profiles, strong amplitude is represented by either black (positive) or white (negative), as opposed to weak amplitude (near zero) represented by gray. The absolute value of the amplitudes averaged over a range of time (approximately equivalent to a range of depth) may be combined into a map and colored so that relatively strong amplitudes appear as bright spots while weak amplitudes appear as gray areas. This is a powerful way of displaying large amounts of GPR data which would otherwise be displayed as a series of many profiles.

IV. Results and Interpretation

North Field

The magnetic contour map of the North Field is shown in Figure 2, and it is displayed at a 200 nT contour interval. Readings above background (approximately 52,600 nT) are shown as shades of red, while readings below background are shown as shades of blue. It shows many anomalies. The fence causes low readings all around the edge of the map. The most intense anomaly (**A**) is centered at [195,160], and it is over 3000 nT

above the background. The intensity is comparable to that of a typical underground storage tank, although of course it could be caused by any type of ferrous metal. Other anomalies (**B**, **C, D**) of over 1000 nT above background exist to the east of this anomaly, and may be related to it. Other anomalies (**E, F, G**) exist at [125,115], at [210,125], and at [195,100]. The EM31 recorded disturbances in these areas as well (see below). The northern half of the map shows many anomalies of small lateral extent ranging in magnitude from 200 to over 2000 nT above background. Some of these form linear patterns that are parallel with the fences. Sawed-off metallic fence posts were observed in the ground in certain areas while data was being collected, but not enough to explain all of the anomalies observed. One very intense low (**H**) at [155,290] is most likely caused by the fence.

The electromagnetic contour maps of the North Field are shown in Figures 3 and 4. Figure 3 shows quadrature (conductivity) readings displayed at a 5 mS/m contour interval. Figure 4 shows inphase readings displayed at a 2 ppt contour interval. The quadrature map shows one dipole (high next to low) anomaly centered at about [120,115] one low centered at about [210,125], and one other low centered at [195,105]. There is also some weak disturbance in the area around [200,165]. All of these anomalies correspond to magnetic anomalies. The inphase map shows anomalies in the four locations just mentioned on the quadrature map, with one additional small anomaly at [155,245].

Plot 1 shows selected GPR profiles collected at the North Field. The profiles are shown with their grid coordinates along the top axis. The plot also shows two maps: One shows the amplitude map derived from all of the GPR data, and the other shows the same map but with magnetic contours overlain.

The amplitude map shows many bright spots corresponding to areas with high amplitudes, which may indicate areas of disturbed soil, fill, contamination, or buried objects. A dark area along the northern edge of the map represents a small data gap where a brush pile existed. The character of the reflections creating high amplitudes is similar in general, but variable in detail. For example, the amplitude high at [135,190] at the intersection of profiles D-D' and I-I' looks quite different from the amplitude high at [120,120] visible on E-E'. Most are similar in general character to those marked as "chaotic reflections" on profiles I-I' and D-D'.

Some of the amplitude highs, essentially all of them north of the Y=200 line, correlate very well with shallow depressions in the ground, but most others do not.

It is significant that there is *not* a one-to-one correlation between high amplitudes and magnetic or electromagnetic anomalies. Some amplitude anomalies do correlate with magnetic anomalies, such as those labeled **B**, **C**, **D**, **E**, and **F** in Figure 2. On the other hand, almost none of the small magnetic anomalies in the north half of the field correlate to amplitude anomalies.

<u>South Field</u>

The magnetic contour map of the South Field is shown in Figure 5, and it is displayed at a 200 nT contour interval. Readings above background (approximately 52,600 nT) are shown as shades of red, while readings below background are shown as shades of blue. It shows no significant anomalies. The black dots show the locations of data points, which are shown on this map to indicate gaps in data where contour lines may be misleading or entirely false.

The electromagnetic contour maps of the South Field are shown in Figures 6 and 7. Figure 6 shows quadrature (conductivity) readings displayed at a 5 mS/m contour interval. Figure 7 shows inphase readings displayed at a 2 ppt contour interval. Neither map shows significant anomalies. The black dots show the locations of data points, which are shown on this map to indicate gaps in data where contour lines may be misleading or entirely false.

Plot 2 shows all GPR profiles collected at the South Field. The profiles are shown with their grid coordinates along the top axis. The map shows the locations of the lines, which correspond exactly with the magnetic and electromagnetic transects.

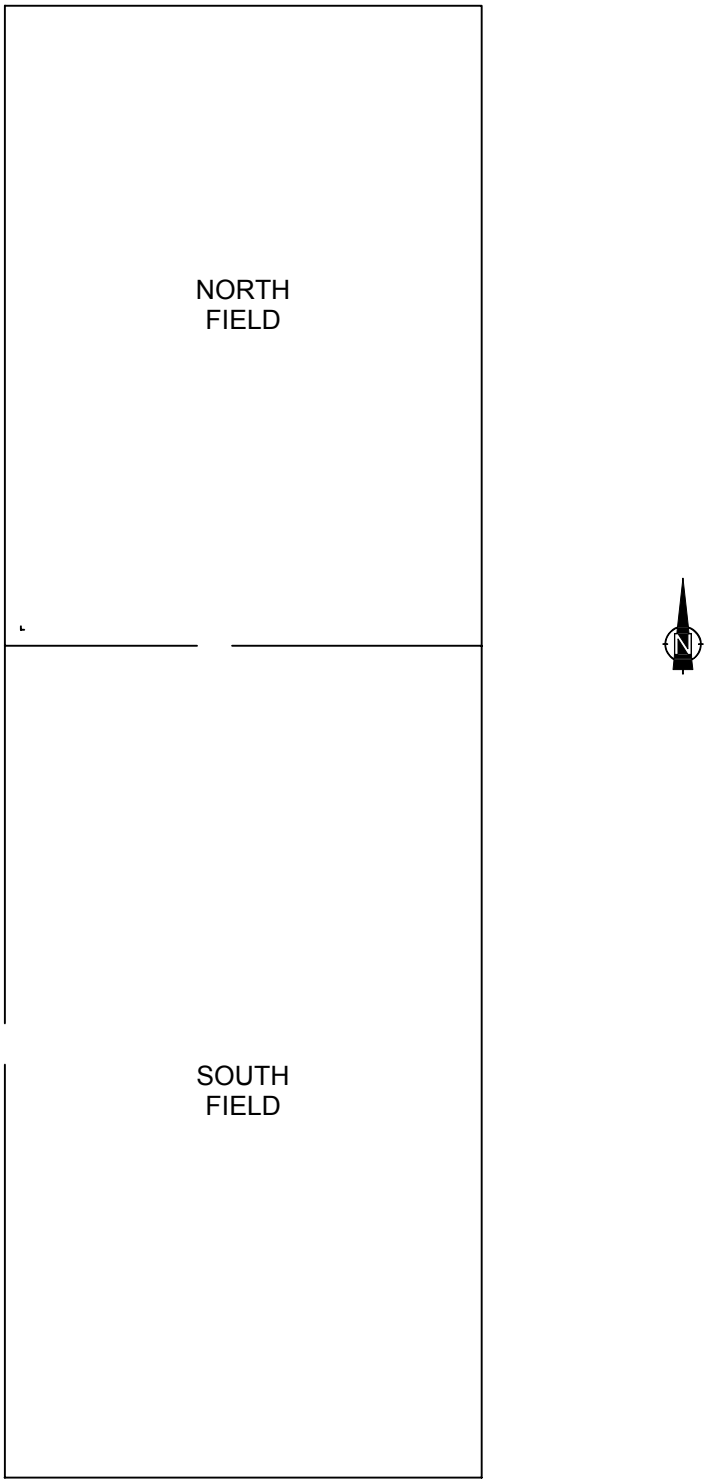
The profiles show no significant correlation with magnetic or electromagnetic data. The only significant features are some "trough reflectors," on profiles P-P' and Q-Q', which may indicate the bottom surface of some fill. There are other scattered chaotic reflectors as seen on many profiles in the North Field.

Conclusion

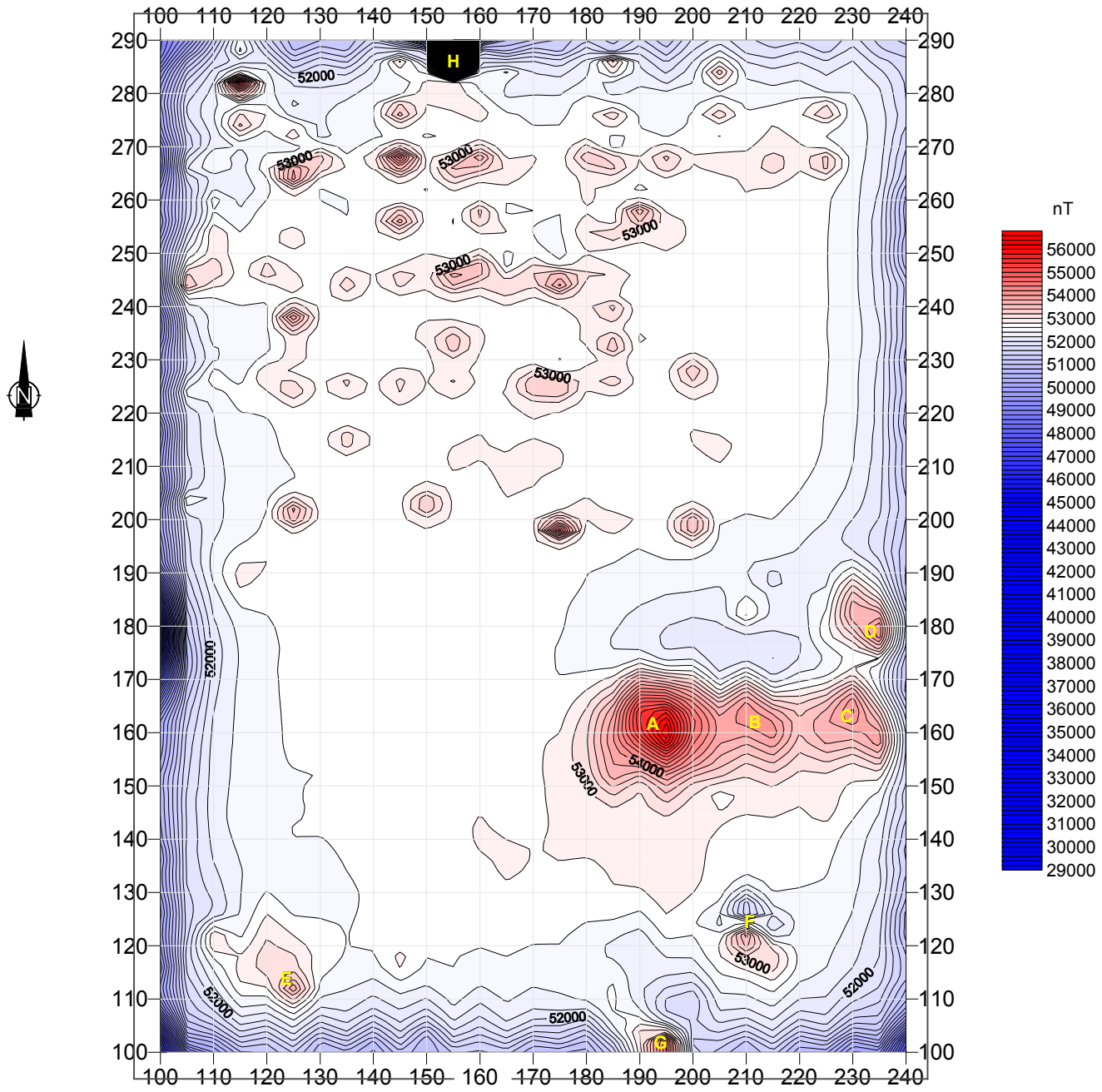
The field procedures and interpretative methodologies used in this project are consistent with standard, recognized practices in similar geophysical investigations. The correlation of geophysical responses with probable subsurface features is based on the past result of similar surveys although it is possible that some variation could exist at this site. This warranty is in lieu of all other warranties either implied or expressed. **ERT** assumes no responsibility for interpretations made by others based on work performed by or recommendations made by **ERT.**

Sincerely,
Earth Resources Technology, Inc.

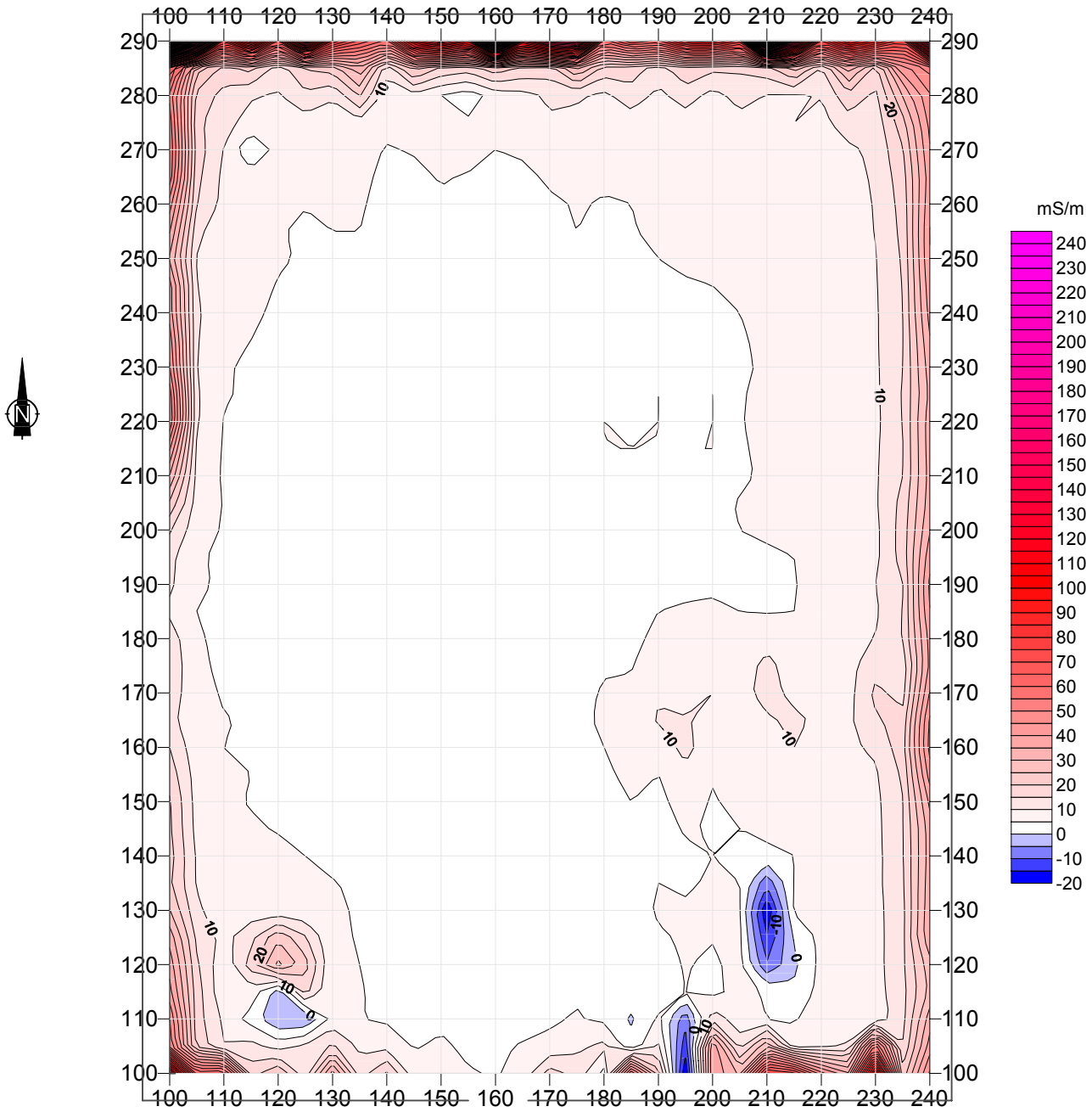
James L. Stuby, M.S., P.G.
Project Geophysicist



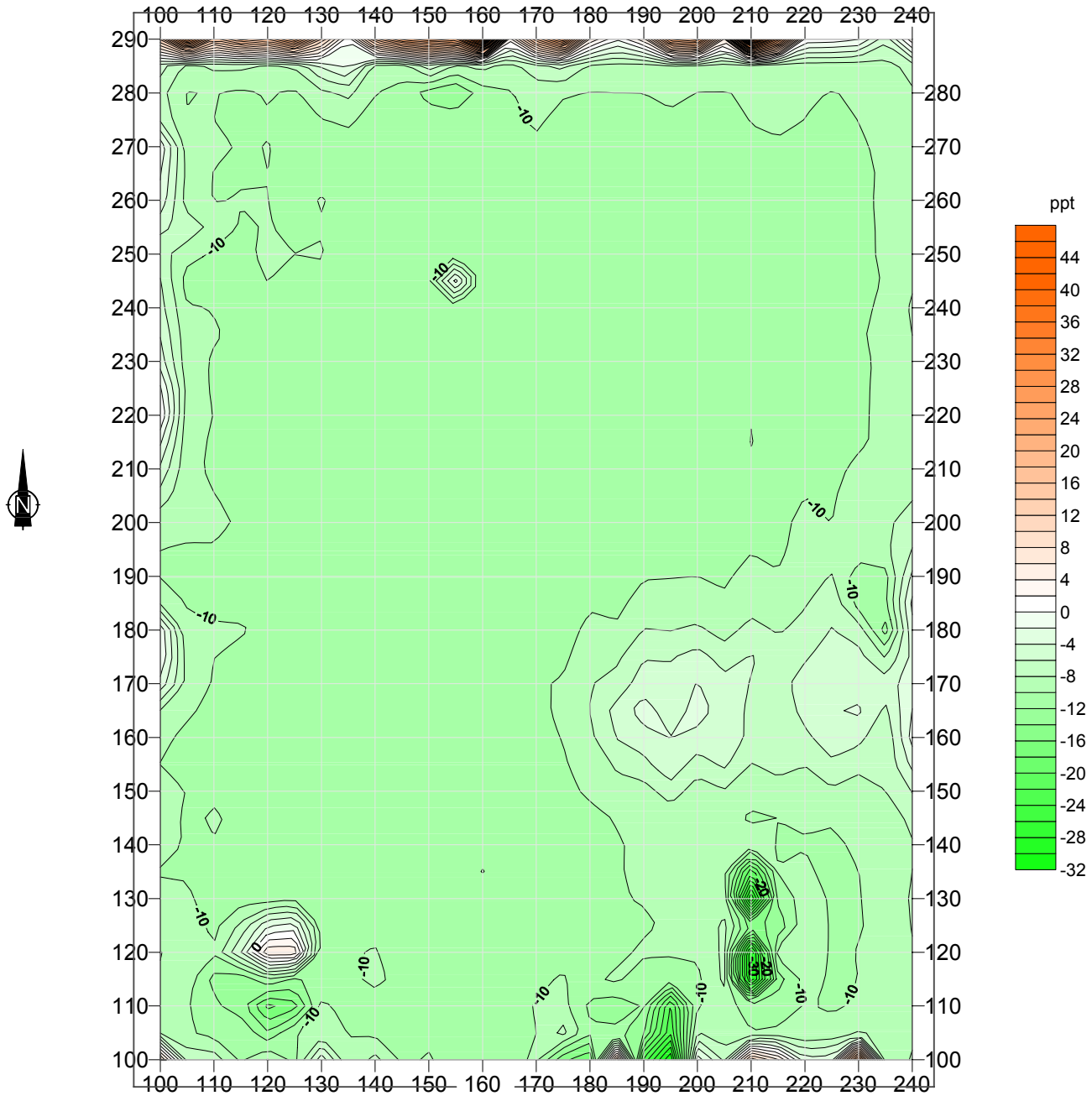
EARTH RESOURCES TECHNOLOGY	SITE MAP NORTH AND SOUTH FIELDS USDA LLRBS CHARACTERIZATION SURVEY BELTSVILLE, MARYLAND	FIGURE 1 December 9, 2005 SCALE: 1" = 60'



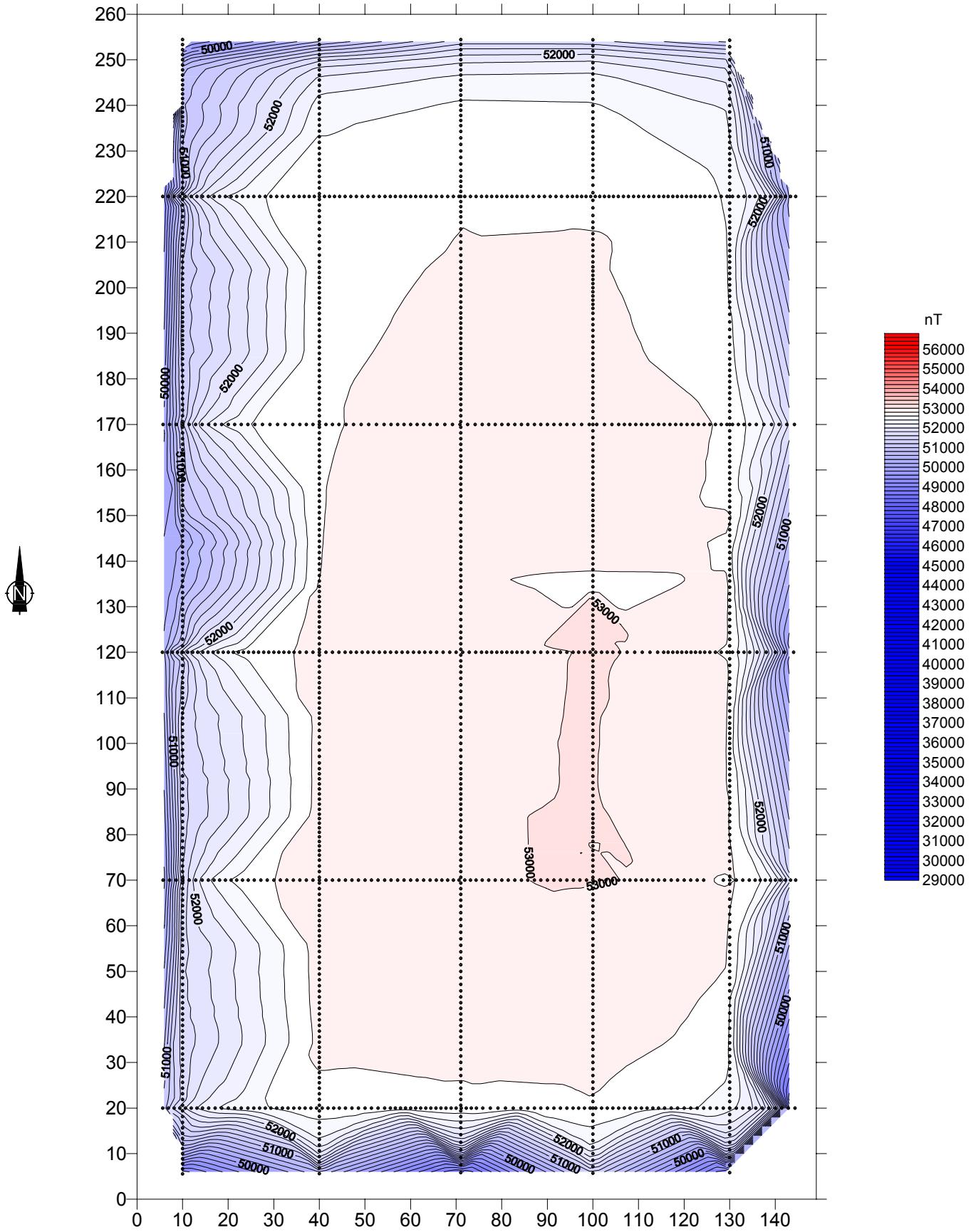
EARTH RESOURCES TECHNOLOGY	MAGNETIC FLUX DENSITY CONTOUR MAP NORTH FIELD USDA LLRBS CHARACTERIZATION SURVEY BELTSVILLE, MARYLAND	FIGURE 2 December 9, 2005 SCALE: 1" = 30'



EARTH RESOURCES TECHNOLOGY	QUADRATURE (CONDUCTIVITY) CONTOUR MAP NORTH FIELD USDA LLRBS CHARACTERIZATION SURVEY BELTSVILLE, MARYLAND	FIGURE 3 December 9, 2005 SCALE: 1" = 30'



EARTH RESOURCES TECHNOLOGY	INPHASE (EM31) CONTOUR MAP NORTH FIELD USDA LLRBS CHARACTERIZATION SURVEY BELTSVILLE, MARYLAND	FIGURE 4 December 9, 2005 SCALE: 1" = 30'



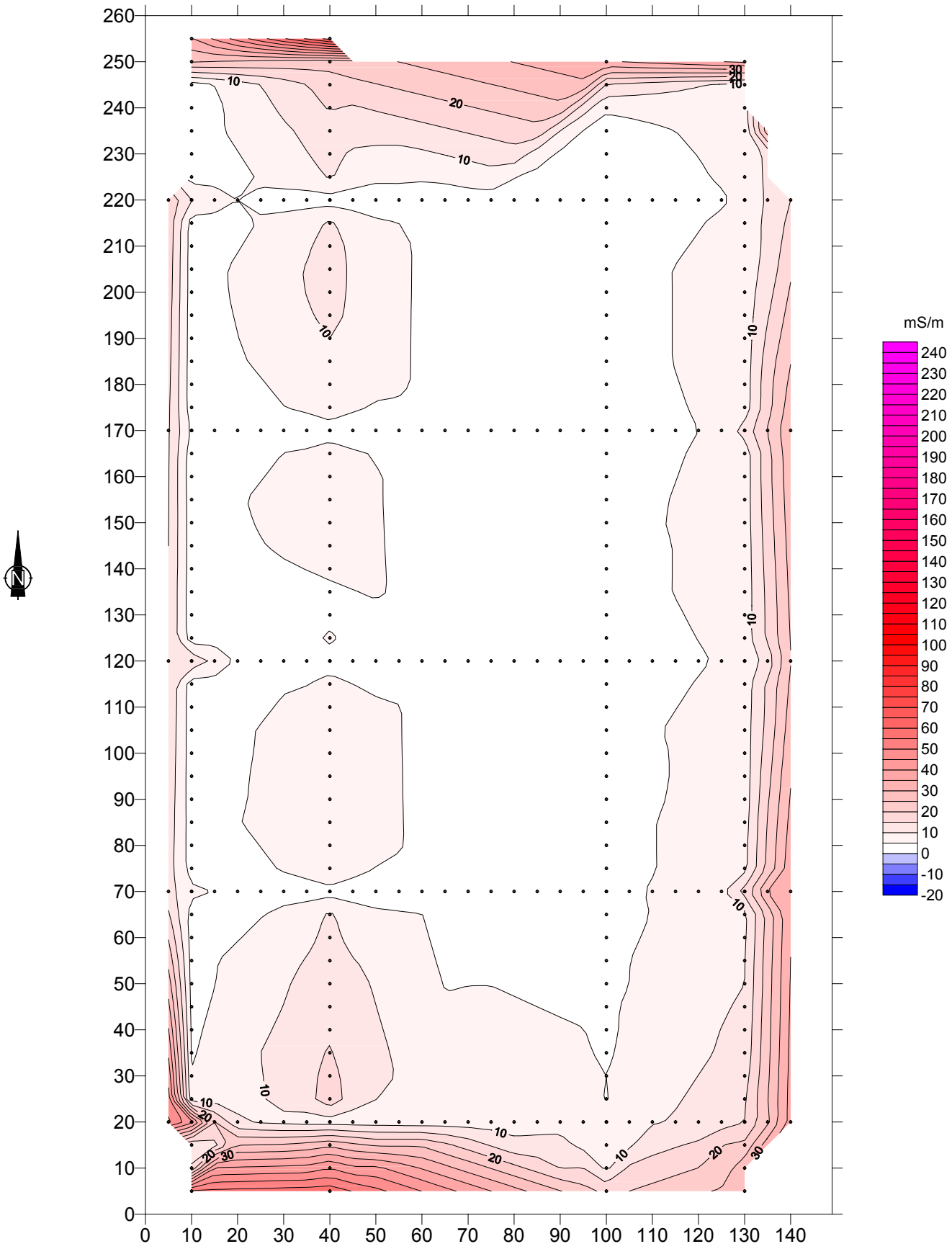
EARTH RESOURCES TECHNOLOGY

MAGNETIC FLUX DENSITY CONTOUR MAP
SOUTH FIELD
USDA LLRBS CHARACTERIZATION SURVEY
BELTSVILLE, MARYLAND

FIGURE 5

December 9, 2005

SCALE: 1" = 30'



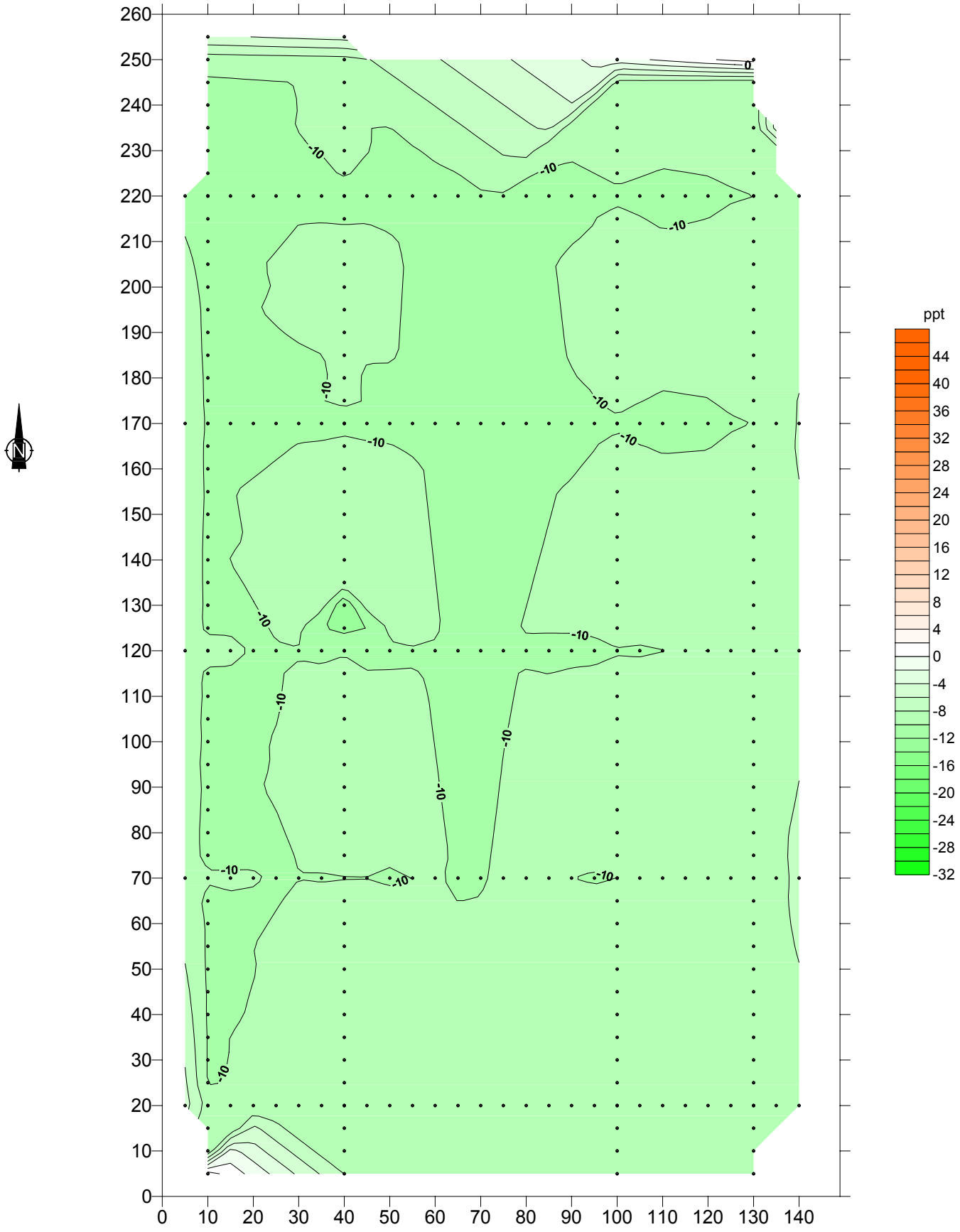
EARTH RESOURCES TECHNOLOGY

QUADRATURE (CONDUCTIVITY) CONTOUR MAP
SOUTH FIELD
USDA LLRBS CHARACTERIZATION SURVEY
BELTSVILLE, MARYLAND

FIGURE 6

December 9, 2005

SCALE: 1" = 30'



EARTH RESOURCES TECHNOLOGY

INPHASE CONTOUR MAP
SOUTH FIELD
USDA LLRBS CHARACTERIZATION SURVEY
BELTSVILLE, MARYLAND

FIGURE 7

December 9, 2005

SCALE: 1" = 30'

APPENDIX E

Gamma Walkover Survey Data (provided on CD)

APPENDIX F

Daily/Weekly Field Reports

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

DAILY PROJECT REPORT

1. SITE INFORMATION:

PROJECT NAME: ***UNITED STATES DEPARTMENT OF AGRICULTURE***
BELTSVILLE (MD) AGRICULTURAL RESEARCH CENTER
LOW LEVEL RADIOISOTOPE BURIAL SITE, CHARACTERIZATION OF PIT 1

DATE: NOVEMBER 28, 2005 REPORT #: 001

CONTRACT #: *DAAA09-02-D-0024/002* CABRERA PROJECT #: *06-3070.01 / 2.0*

SITE MANAGER: *Mark Mihalo*

2. WEATHER (http://www.noaa.gov for 24 hour history):

Temperature Range: _____ °f Wind Speed Range (mph) / Direction: _____
Precipitation Type: _____ Amount: _____ " Weather Delays: ☐ No ☐ Yes If yes, hours: _____

3. QUALITY CONTROL:

Definable Feature of Work	Start Date	Completion Date
Clear & Grub North & South Boundary Areas		
Perform Gamma Walk-over & GPR Survey		
Install Permanent Building Foundation		
Install Gravel Roadbase		
Install Office Trailer & Storage Container		
Excavation of Pit # 1		
Pit # 1 Material Segregation & Packaging		
Pit # 1 Material Disposal		
Backfill Pit # 1		
Site Restoration		

EMPLOYEES				SUBCONTRACTORS				CABRERA EQUIPMENT ON SITE	
Classification	Name	Company	Hours	Classification	Name	Company	Hours	Item	Quantity
Project Manager	Kim Nelson	Cabrera	0					Lap Top Computer	1
Site Manager	Mark Mihalo	Cabrera	8					2-way radios	4
Health & Safety	Jeff Kapp	Cabrera	8						
Health Physicist Tech	Joe Voegtli	Cabrera	0						
Equipment Operator	Vince Barber	Cabrera	6						
HP / Tech Lead	Hank Siegrist	Cabrera	0						
					total hours		**0**		
					total hours		**0**		
					total hours		**0**		
				VISITORS			X	**RENTED EQUIPMENT ON SITE**	
				Project Manager	Karen Zhang	USDA		5 kW generator	0
								John Deere brush cutter	0
								Stihl weed eater	0

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

4. SUMMARY OF WORK PERFORMED TODAY:

Mobilized Mark Mihalo, Vince Barber, and Jeff Kapp to project site.

5. CHANGED CONDITIONS: (Record any site conditions that occurred that may have an impact on cost, schedule, quality or regulatory concerns at the site that were not part of the current scope of work)

6. HEALTH & SAFETY:

WERE THERE ANY ACCIDENTS ON SITE TODAY ? ☐ YES ☐ NO
DESCRIPTION:

WERE THERE ANY NEAR MISSES ON SITE TODAY ? ☐ YES ☐ NO
DESCRIPTION:

WERE THERE ANY HEALTH OR SAFETY ISSUES / OBSERVATIONS: ☐ YES ☐ NO
DESCRIPTION:

RECOMMENDATION(S) FOR HEALTH OR SAFETY ISSUES / OBSERVATIONS:

7. ATTACHMENTS INCLUDED WITH THIS DAILY REPORT:

☐ Cabrera Services Inc Tailgate Safety Sign-in Sheet

☐

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

DAILY PROJECT REPORT

1. SITE INFORMATION:

PROJECT NAME: ***UNITED STATES DEPARTMENT OF AGRICULTURE***
BELTSVILLE (MD) AGRICULTURAL RESEARCH CENTER
LOW LEVEL RADIOISOTOPE BURIAL SITE, CHARACTERIZATION OF PIT 1

DATE: DECEMBER 02, 2005 REPORT #: 005

CONTRACT #: *DAAA09-02-D-0024/002* CABRERA PROJECT #: *06-3070.01 / 2.0*

SITE MANAGER: *Mark Mihalo*

2. WEATHER (http://www.noaa.gov for 24 hour history):

Temperature Range: _____ °f Wind Speed Range (mph) / Direction: _____
Precipitation Type: _____ Amount: _____ " Weather Delays: ☐ No ☐ Yes If yes, hours: _____

3. QUALITY CONTROL:

Definable Feature of Work	Start Date	Completion Date
Clear & Grub North & South Boundary Areas	30 NOV 05	
Perform Gamma Walk-over & GPR Survey		
Install Permanent Building Foundation		
Install Gravel Roadbase		
Install Office Trailer & Storage Container		
Excavation of Pit # 1		
Pit # 1 Material Segregation & Packaging		
Pit # 1 Material Disposal		
Backfill Pit # 1		
Site Restoration		

EMPLOYEES				SUBCONTRACTORS				CABRERA EQUIPMENT ON SITE	
Classification	Name	Company	Hours	Classification	Name	Company	Hours	Item	Quantity
Project Manager	Kim Nelson	Cabrera	0					Lap Top Computer	1
Site Manager	Mark Mihalo	Cabrera	8					2-way radios	4
Health & Safety	Jeff Kapp	Cabrera	8						
Health Physicist Tech	Joe Voegtli	Cabrera	0						
Equipment Operator	Vince Barber	Cabrera	8						
HP / Tech Lead	Hank Siegrist	Cabrera	0						
					total hours		**0**		
					total hours		**0**		
					total hours		**0**		
				VISITORS			X	**RENTED EQUIPMENT ON SITE**	
				Project Manager	Karen Zhang	USDA		5 kW generator	1
								John Deere brush cutter	1
								Stihl weed eater	2

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

4. SUMMARY OF WORK PERFORMED TODAY:

Continued to cut brush & trees in the south end of the LLRBS. Brush remains to be piled in one location after cutting in the north end is complete.

5. CHANGED CONDITIONS: (Record any site conditions that occurred that may have an impact on cost, schedule, quality or regulatory concerns at the site that were not part of the current scope of work)

None

6. HEALTH & SAFETY:

WERE THERE ANY ACCIDENTS ON SITE TODAY ? ☐ YES ☒ NO
DESCRIPTION:

WERE THERE ANY NEAR MISSES ON SITE TODAY ? ☐ YES ☒ NO
DESCRIPTION:

WERE THERE ANY HEALTH OR SAFETY ISSUES / OBSERVATIONS: ☐ YES ☒ NO
DESCRIPTION:

RECOMMENDATION(S) FOR HEALTH OR SAFETY ISSUES / OBSERVATIONS: **None**

7. ATTACHMENTS INCLUDED WITH THIS DAILY REPORT:

☒ Cabrera Services Inc Tailgate Safety Sign-in Sheet

☐

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

DAILY PROJECT REPORT

1. SITE INFORMATION:

PROJECT NAME: ***UNITED STATES DEPARTMENT OF AGRICULTURE***
BELTSVILLE (MD) AGRICULTURAL RESEARCH CENTER
LOW LEVEL RADIOISOTOPE BURIAL SITE, CHARACTERIZATION OF PIT 1

DATE: DECEMBER 05 , 2005 REPORT #: 006

CONTRACT #: *DAAA09-02-D-0024/002* CABRERA PROJECT #: *06-3070.01 / 2.0*

SITE MANAGER: *Mark Mihalo*

2. WEATHER (http://www.noaa.gov for 24 hour history):

Temperature Range: 37-32 °f Wind Speed Range (mph) / Direction: 0-5 / NW
Precipitation Type: snow Amount: 1 " Weather Delays: ☒ No ☐ Yes If yes, hours: _____

3. QUALITY CONTROL:

Definable Feature of Work	Start Date	Completion Date
Clear & Grub North & South Boundary Areas	30 NOV 05	
Perform Gamma Walk-over & GPR Survey		
Install Permanent Building Foundation		
Install Gravel Roadbase		
Install Office Trailer & Storage Container		
Excavation of Pit # 1		
Pit # 1 Material Segregation & Packaging		
Pit # 1 Material Disposal		
Backfill Pit # 1		
Site Restoration		

EMPLOYEES				SUBCONTRACTORS				CABRERA EQUIPMENT ON SITE	
Classification	Name	Company	Hours	Classification	Name	Company	Hours	Item	Quantity
Project Manager	Kim Nelson	Cabrera	0					Lap Top Computer	1
Site Manager	Mark Mihalo	Cabrera	8					2-way radios	4
Health & Safety	Jeff Kapp	Cabrera	8						
Health Physicist Tech	Joe Voegtli	Cabrera	8						
Equipment Operator	Vince Barber	Cabrera	8						
HP / Tech Lead	Hank Siegrist	Cabrera	0						
					total hours		**0**		
					total hours		**0**		
					total hours		**0**		
				VISITORS			X	**RENTED EQUIPMENT ON SITE**	
				Project Manager	Karen Zhang	USDA		5 kW generator	1
								John Deere brush cutter	1
								Stihl weed eater	2

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

4. SUMMARY OF WORK PERFORMED TODAY:

Began to cut brush & trees in the north end of the LLRBS. Clearing is approximately 90% complete, however, snow began to fall toward the end of the workday and is expected to accumulate 4" by tomorrow. Accumulated snow will hinder the completion of brush cutting in the north end of the LLRBS. Joe Voegtli is now onsite and will be the dedicated Radiological Safety Technician for the project.

5. CHANGED CONDITIONS: (Record any site conditions that occurred that may have an impact on cost, schedule, quality or regulatory concerns at the site that were not part of the current scope of work)

None

6. HEALTH & SAFETY:

WERE THERE ANY ACCIDENTS ON SITE TODAY ? ☐ YES ☒ NO
DESCRIPTION:

WERE THERE ANY NEAR MISSES ON SITE TODAY ? ☐ YES ☒ NO
DESCRIPTION:

WERE THERE ANY HEALTH OR SAFETY ISSUES / OBSERVATIONS: ☐ YES ☒ NO
DESCRIPTION:

RECOMMENDATION(S) FOR HEALTH OR SAFETY ISSUES / OBSERVATIONS: **None**

7. ATTACHMENTS INCLUDED WITH THIS DAILY REPORT:

☒ Cabrera Services Inc Tailgate Safety Sign-in Sheet

☐

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

DAILY PROJECT REPORT

1. SITE INFORMATION:

PROJECT NAME: ***UNITED STATES DEPARTMENT OF AGRICULTURE***
BELTSVILLE (MD) AGRICULTURAL RESEARCH CENTER
LOW LEVEL RADIOISOTOPE BURIAL SITE, CHARACTERIZATION OF PIT 1

DATE: DECEMBER 06 , 2005 REPORT #: 007

CONTRACT #: *DAAA09-02-D-0024/002* CABRERA PROJECT #: *06-3070.01 / 2.0*

SITE MANAGER: *Mark Mihalo*

2. WEATHER (http://www.noaa.gov for 24 hour history):

Temperature Range: 30-37 °f Wind Speed Range (mph) / Direction: 0-5 / W
Precipitation Type: None Amount: 0 " Weather Delays: ☐ No ☒ Yes If yes, hours: 5

3. QUALITY CONTROL:

Definable Feature of Work	Start Date	Completion Date
Clear & Grub North & South Boundary Areas	30 NOV 05	
Perform Gamma Walk-over & GPR Survey		
Install Permanent Building Foundation		
Install Gravel Roadbase		
Install Office Trailer & Storage Container		
Excavation of Pit # 1		
Pit # 1 Material Segregation & Packaging		
Pit # 1 Material Disposal		
Backfill Pit # 1		
Site Restoration		

EMPLOYEES				SUBCONTRACTORS				CABRERA EQUIPMENT ON SITE	
Classification	Name	Company	Hours	Classification	Name	Company	Hours	Item	Quantity
Project Manager	Kim Nelson	Cabrera	0					Lap Top Computer	1
Site Manager	Mark Mihalo	Cabrera	8					2-way radios	4
Health & Safety	Jeff Kapp	Cabrera	8						
Health Physicist Tech	Joe Voegtli	Cabrera	8						
Equipment Operator	Vince Barber	Cabrera	8						
HP / Tech Lead	Hank Siegrist	Cabrera	0						
					total hours		**0**		
					total hours		**0**		
					total hours		**0**		
				VISITORS			X	**RENTED EQUIPMENT ON SITE**	
				Project Manager	Karen Zhang	USDA		5 kW generator	1
								John Deere brush cutter	1
								Stihl weed eater	2

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

4. SUMMARY OF WORK PERFORMED TODAY:

Clearing is approximately 90% complete, however, snowfall accumulated approximately 3" prevented the completion of brush cutting in the north end of the LLRBS. Continued cutting trees in the north end of the LLRBS using a chain saw. Joe Voegtli received his site ID badge today and is working on calibrating the rad instruments that are on site.

5. CHANGED CONDITIONS: (Record any site conditions that occurred that may have an impact on cost, schedule, quality or regulatory concerns at the site that were not part of the current scope of work)

None

6. HEALTH & SAFETY:

WERE THERE ANY ACCIDENTS ON SITE TODAY ? ☐ YES ☒ NO
DESCRIPTION:

WERE THERE ANY NEAR MISSES ON SITE TODAY ? ☐ YES ☒ NO
DESCRIPTION:

WERE THERE ANY HEALTH OR SAFETY ISSUES / OBSERVATIONS: ☐ YES ☒ NO
DESCRIPTION:

RECOMMENDATION(S) FOR HEALTH OR SAFETY ISSUES / OBSERVATIONS: **None**

7. ATTACHMENTS INCLUDED WITH THIS DAILY REPORT:

☒ Cabrera Services Inc Tailgate Safety Sign-in Sheet

☐

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

DAILY PROJECT REPORT

1. SITE INFORMATION:

PROJECT NAME: ***UNITED STATES DEPARTMENT OF AGRICULTURE***
BELTSVILLE (MD) AGRICULTURAL RESEARCH CENTER
LOW LEVEL RADIOISOTOPE BURIAL SITE, CHARACTERIZATION OF PIT 1

DATE: DECEMBER 07 , 2005 REPORT #: 008

CONTRACT #: *DAAA09-02-D-0024/002* CABRERA PROJECT #: *06-3070.01 / 2.0*

SITE MANAGER: *Mark Mihalo*

2. WEATHER (http://www.noaa.gov for 24 hour history):

Temperature Range: 30-35 °f Wind Speed Range (mph) / Direction: 0-3 / W
Precipitation Type: None Amount: 0 " Weather Delays: ☒ No ☐ Yes If yes, hours: _____

3. QUALITY CONTROL:

Definable Feature of Work	Start Date	Completion Date
Clear & Grub North & South Boundary Areas	30 NOV 05	
Perform Gamma Walk-over & GPR Survey		
Install Permanent Building Foundation		
Install Gravel Roadbase		
Install Office Trailer & Storage Container		
Excavation of Pit # 1		
Pit # 1 Material Segregation & Packaging		
Pit # 1 Material Disposal		
Backfill Pit # 1		
Site Restoration		

EMPLOYEES				SUBCONTRACTORS				CABRERA EQUIPMENT ON SITE	
Classification	Name	Company	Hours	Classification	Name	Company	Hours	Item	Quantity
Project Manager	Kim Nelson	Cabrera	0					Lap Top Computer	1
Site Manager	Mark Mihalo	Cabrera	8					2-way radios	4
Health & Safety	Jeff Kapp	Cabrera	8						
Health Physicist Tech	Joe Voegtli	Cabrera	8						
Equipment Operator	Vince Barber	Cabrera	8						
HP / Tech Lead	Hank Siegrist	Cabrera	0						
					total hours		**0**		
					total hours		**0**		
					total hours		**0**		
				VISITORS			X	**RENTED EQUIPMENT ON SITE**	
				Project Manager	Karen Zhang	USDA		5 kW generator	1
								John Deere brush cutter	1
								Stihl weed eater	2

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

4. SUMMARY OF WORK PERFORMED TODAY:

Continued and completed clearing the north and south field of brush and trees. Trees were piled in each field until they are sampled. An access was cut through the chain link fence between the two fields for equipment access. Continued to calibrate and check radiological instruments for use on the project. Met with JR Electronics about installing electricity to the project site.

5. CHANGED CONDITIONS: (Record any site conditions that occurred that may have an impact on cost, schedule, quality or regulatory concerns at the site that were not part of the current scope of work)

None

6. HEALTH & SAFETY:

WERE THERE ANY ACCIDENTS ON SITE TODAY ? ☐ YES ☒ NO
DESCRIPTION:

WERE THERE ANY NEAR MISSES ON SITE TODAY ? ☐ YES ☒ NO
DESCRIPTION:

WERE THERE ANY HEALTH OR SAFETY ISSUES / OBSERVATIONS: ☐ YES ☒ NO
DESCRIPTION:

RECOMMENDATION(S) FOR HEALTH OR SAFETY ISSUES / OBSERVATIONS: **None**

7. ATTACHMENTS INCLUDED WITH THIS DAILY REPORT:

☒ Cabrera Services Inc Tailgate Safety Sign-in Sheet

☐

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

DAILY PROJECT REPORT

1. SITE INFORMATION:

PROJECT NAME: ***UNITED STATES DEPARTMENT OF AGRICULTURE***
BELTSVILLE (MD) AGRICULTURAL RESEARCH CENTER
LOW LEVEL RADIOISOTOPE BURIAL SITE, CHARACTERIZATION OF PIT 1

DATE: DECEMBER 08 , 2005 REPORT #: 009

CONTRACT #: *DAAA09-02-D-0024/002* CABRERA PROJECT #: *06-3070.01 / 2.0*

SITE MANAGER: *Mark Mihalo*

2. WEATHER (http://www.noaa.gov for 24 hour history):

Temperature Range: 27-34 °f Wind Speed Range (mph) / Direction: 0-7 / W
Precipitation Type: None Amount: 0 " Weather Delays: ☒ No ☐ Yes If yes, hours: _____

3. QUALITY CONTROL:

Definable Feature of Work	Start Date	Completion Date
Clear & Grub North & South Boundary Areas	30 NOV 05	07 DEC 05
Perform Gamma Walk-over & GPR Survey	08 DEC 05	
Install Permanent Building Foundation		
Install Gravel Roadbase		
Install Office Trailer & Storage Container		
Excavation of Pit # 1		
Pit # 1 Material Segregation & Packaging		
Pit # 1 Material Disposal		
Backfill Pit # 1		
Site Restoration		

EMPLOYEES				SUBCONTRACTORS				CABRERA EQUIPMENT ON SITE	
Classification	Name	Company	Hours	Classification	Name	Company	Hours	Item	Quantity
Project Manager	Kim Nelson	Cabrera	0	Technician	James Stuby	ERT	8	Lap Top Computer	1
Site Manager	Mark Mihalo	Cabrera	8	Technician	Mike Crowe	ERT	8	2-way radios	4
Health & Safety	Jeff Kapp	Cabrera	8						
Health Physicist Tech	Joe Voegtli	Cabrera	8						
Equipment Operator	Vince Barber	Cabrera	8						
Scientist	Carl Young	Cabrera	8						
HP / Tech Lead	Hank Siegrist	Cabrera	0						
					total hours		**16**		
					total hours		**0**		
					total hours		**0**		
				VISITORS			X	**RENTED EQUIPMENT ON SITE**	
				Project Manager	Karen Zhang	USDA		5 kW generator	1
								John Deere brush cutter	1
								Stihl weed eater	2

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

4. SUMMARY OF WORK PERFORMED TODAY:

Met with ERT to begin the geophysical survey of both north & south fields of the LLRBS. Survey was not completed by the end of the day, however is scheduled to be completed tomorrow. Received the rubber tire back-hoe for placing gravel next week.

5. CHANGED CONDITIONS: (Record any site conditions that occurred that may have an impact on cost, schedule, quality or regulatory concerns at the site that were not part of the current scope of work)

None

6. HEALTH & SAFETY:

WERE THERE ANY ACCIDENTS ON SITE TODAY ? ☐ YES ☒ NO
DESCRIPTION:

WERE THERE ANY NEAR MISSES ON SITE TODAY ? ☐ YES ☒ NO
DESCRIPTION:

WERE THERE ANY HEALTH OR SAFETY ISSUES / OBSERVATIONS: ☐ YES ☒ NO
DESCRIPTION:

RECOMMENDATION(S) FOR HEALTH OR SAFETY ISSUES / OBSERVATIONS: **None**

7. ATTACHMENTS INCLUDED WITH THIS DAILY REPORT:

☒ Cabrera Services Inc Tailgate Safety Sign-in Sheet

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CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

DAILY PROJECT REPORT

1. SITE INFORMATION:

PROJECT NAME: ***UNITED STATES DEPARTMENT OF AGRICULTURE***
BELTSVILLE (MD) AGRICULTURAL RESEARCH CENTER
LOW LEVEL RADIOISOTOPE BURIAL SITE, CHARACTERIZATION OF PIT 1

DATE: DECEMBER 09 , 2005 REPORT #: 010

CONTRACT #: *DAAA09-02-D-0024/002* CABRERA PROJECT #: *06-3070.01 / 2.0*

SITE MANAGER: *Mark Mihalo*

2. WEATHER (http://www.noaa.gov for 24 hour history):

Temperature Range: 30-35 °f Wind Speed Range (mph) / Direction: 0-5 / NW
Precipitation Type: Snow Amount: 2 " Weather Delays: ☒ No ☐ Yes If yes, hours: _____

3. QUALITY CONTROL:

Definable Feature of Work	Start Date	Completion Date
Clear & Grub North & South Boundary Areas	30 NOV 05	07 DEC 05
Perform Gamma Walk-over & GPR Survey	08 DEC 05	
Install Permanent Building Foundation		
Install Gravel Roadbase		
Install Office Trailer & Storage Container		
Excavation of Pit # 1		
Pit # 1 Material Segregation & Packaging		
Pit # 1 Material Disposal		
Backfill Pit # 1		
Site Restoration		

EMPLOYEES				SUBCONTRACTORS				CABRERA EQUIPMENT ON SITE	
Classification	Name	Company	Hours	Classification	Name	Company	Hours	Item	Quantity
Project Manager	Kim Nelson	Cabrera	0	Technician	James Stuby	ERT	3	Lap Top Computer	1
Site Manager	Mark Mihalo	Cabrera	8					2-way radios	4
Health & Safety	Jeff Kapp	Cabrera	8						
Health Physicist Tech	Joe Voegtli	Cabrera	0						
Equipment Operator	Vince Barber	Cabrera	8						
HP / Tech Lead	Hank Siegrist	Cabrera	0						
					total hours		**3**		
					total hours		**0**		
					total hours		**0**		
				VISITORS			X	**RENTED EQUIPMENT ON SITE**	
				Project Manager	Karen Zhang	USDA		5 kW generator	off rent
								John Deere brush cutter	off rent
								Stihl weed eater	off rent
								JCB 210 back-hoe	1
								portable toilet	1

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

4. SUMMARY OF WORK PERFORMED TODAY:

Met with ERT today and completed the geophysical survey of the north & south fields. The contractor who was supposed to construct the car port cancelled work today and rescheduled their work for next week.

5. CHANGED CONDITIONS: (Record any site conditions that occurred that may have an impact on cost, schedule, quality or regulatory concerns at the site that were not part of the current scope of work)

None

6. HEALTH & SAFETY:

WERE THERE ANY ACCIDENTS ON SITE TODAY ? ☐ YES ☒ NO
DESCRIPTION:

WERE THERE ANY NEAR MISSES ON SITE TODAY ? ☐ YES ☒ NO
DESCRIPTION:

WERE THERE ANY HEALTH OR SAFETY ISSUES / OBSERVATIONS: ☐ YES ☒ NO
DESCRIPTION:

RECOMMENDATION(S) FOR HEALTH OR SAFETY ISSUES / OBSERVATIONS: **None**

7. ATTACHMENTS INCLUDED WITH THIS DAILY REPORT:

☒ Cabrera Services Inc Tailgate Safety Sign-in Sheet

☐

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

DAILY PROJECT REPORT

1. SITE INFORMATION:

PROJECT NAME: ***UNITED STATES DEPARTMENT OF AGRICULTURE***
BELTSVILLE (MD) AGRICULTURAL RESEARCH CENTER
LOW LEVEL RADIOISOTOPE BURIAL SITE, CHARACTERIZATION OF PIT 1

DATE: DECEMBER 12 , 2005 REPORT #: 011

CONTRACT #: *DAAA09-02-D-0024/002* CABRERA PROJECT #: *06-3070.01 / 2.0*

SITE MANAGER: *Mark Mihalo*

2. WEATHER (http://www.noaa.gov for 24 hour history):

Temperature Range: 29-36 °f Wind Speed Range (mph) / Direction: 0-5 / NW
Precipitation Type: None Amount: 0 " Weather Delays: ☒ No ☐ Yes If yes, hours: _____

3. QUALITY CONTROL:

Definable Feature of Work	Start Date	Completion Date
Clear & Grub North & South Boundary Areas	30 NOV 05	07 DEC 05
Perform Gamma Walk-over & GPR Survey	08 DEC 05	
Install Permanent Building Foundation		
Install Gravel Roadbase	12 DEC 05	
Install Office Trailer & Storage Container		
Excavation of Pit # 1		
Pit # 1 Material Segregation & Packaging		
Pit # 1 Material Disposal		
Backfill Pit # 1		
Site Restoration		

EMPLOYEES				SUBCONTRACTORS				CABRERA EQUIPMENT ON SITE	
Classification	Name	Company	Hours	Classification	Name	Company	Hours	Item	Quantity
Project Manager	Kim Nelson	Cabrera	0					Lap Top Computer	1
Site Manager	Mark Mihalo	Cabrera	8					2-way radios	4
Health & Safety	Jeff Kapp	Cabrera	8						
Health Physicist Tech	Joe Voegtli	Cabrera	0						
Equipment Operator	Vince Barber	Cabrera	0						
HP / Tech Lead	Hank Siegrist	Cabrera	0						
					total hours		**0**		
					total hours		**0**		
					total hours		**0**		
				VISITORS			X	**RENTED EQUIPMENT ON SITE**	
				Project Manager	Karen Zhang	USDA		5 kW generator	1
								John Deere brush cutter	1
								Stihl weed eater	2

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

4. SUMMARY OF WORK PERFORMED TODAY:

Began to place geotextile fabric in the south field support area in preparation for placing gravel roadbase.

5. CHANGED CONDITIONS: (Record any site conditions that occurred that may have an impact on cost, schedule, quality or regulatory concerns at the site that were not part of the current scope of work)

None

6. HEALTH & SAFETY:

WERE THERE ANY ACCIDENTS ON SITE TODAY ? ☐ YES ☒ NO
DESCRIPTION:

WERE THERE ANY NEAR MISSES ON SITE TODAY ? ☐ YES ☒ NO
DESCRIPTION:

WERE THERE ANY HEALTH OR SAFETY ISSUES / OBSERVATIONS: ☐ YES ☒ NO
DESCRIPTION:

RECOMMENDATION(S) FOR HEALTH OR SAFETY ISSUES / OBSERVATIONS: **None**

7. ATTACHMENTS INCLUDED WITH THIS DAILY REPORT:

☒ Cabrera Services Inc Tailgate Safety Sign-in Sheet

☐

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

DAILY PROJECT REPORT

1. SITE INFORMATION:

PROJECT NAME: ***UNITED STATES DEPARTMENT OF AGRICULTURE***
BELTSVILLE (MD) AGRICULTURAL RESEARCH CENTER
LOW LEVEL RADIOISOTOPE BURIAL SITE, CHARACTERIZATION OF PIT 1

DATE: DECEMBER 13 , 2005 REPORT #: 012

CONTRACT #: *DAAA09-02-D-0024/002* CABRERA PROJECT #: *06-3070.01 / 2.0*

SITE MANAGER: *Mark Mihalo*

2. WEATHER (http://www.noaa.gov for 24 hour history):

Temperature Range: 24-36 °f Wind Speed Range (mph) / Direction: 3-5 / NW
Precipitation Type: None Amount: 0 " Weather Delays: ☒ No ☐ Yes If yes, hours: _____

3. QUALITY CONTROL:

Definable Feature of Work	Start Date	Completion Date
Clear & Grub North & South Boundary Areas	30 NOV 05	07 DEC 05
Perform Gamma Walk-over & GPR Survey	08 DEC 05	
Install Permanent Building Foundation		
Install Gravel Roadbase	12 DEC 05	
Install Office Trailer & Storage Container		
Excavation of Pit # 1		
Pit # 1 Material Segregation & Packaging		
Pit # 1 Material Disposal		
Backfill Pit # 1		
Site Restoration		

EMPLOYEES				SUBCONTRACTORS				CABRERA EQUIPMENT ON SITE	
Classification	Name	Company	Hours	Classification	Name	Company	Hours	Item	Quantity
Project Manager	Kim Nelson	Cabrera	0	Technician	Antonio Trejo	GPC	2	Lap Top Computer	1
Site Manager	Mark Mihalo	Cabrera	8	Technician	Jose Martinez	GPC	2	2-way radios	4
Health & Safety	Jeff Kapp	Cabrera	8						
Health Physicist Tech	Joe Voegtli	Cabrera	0						
Equipment Operator	Vince Barber	Cabrera	0						
HP / Tech Lead	Hank Siegrist	Cabrera	0						
					total hours		**4**		
					total hours		**0**		
					total hours		**0**		
				VISITORS			X	**RENTED EQUIPMENT ON SITE**	
				Project Manager	Karen Zhang	USDA		JCB back-hoe	1

CABRERA SERVICES
RADIOLOGICAL · ENVIRONMENTAL · REMEDIATION

4. SUMMARY OF WORK PERFORMED TODAY:

Received and completed construction of the 'car port' cover that will be placed over the open pit excavation in the north burial field. Received 67.31 tons of CR-6 gravel for placement as a roadway into the south field. Due to muddy conditions, the rubber-tire back-hoe was inadequate to spread the gravel road base, therefore, Cabrera stopped receiving material and called the back-hoe off rent in preparation for acquiring a small dozer. Work will continue receiving and placing gravel at a later date.

United Rental picked up the 2 weed eaters, generator, brush hog, and pick-up truck today. The back-hoe was called off rent today and will be picked up at a later date.

5. CHANGED CONDITIONS: (Record any site conditions that occurred that may have an impact on cost, schedule, quality or regulatory concerns at the site that were not part of the current scope of work)

None

6. HEALTH & SAFETY:

WERE THERE ANY ACCIDENTS ON SITE TODAY ? ☐ YES ☒ NO
DESCRIPTION:

WERE THERE ANY NEAR MISSES ON SITE TODAY ? ☐ YES ☒ NO
DESCRIPTION:

WERE THERE ANY HEALTH OR SAFETY ISSUES / OBSERVATIONS: ☐ YES ☒ NO
DESCRIPTION:

RECOMMENDATION(S) FOR HEALTH OR SAFETY ISSUES / OBSERVATIONS: **None**

7. ATTACHMENTS INCLUDED WITH THIS DAILY REPORT:

☒ Cabrera Services Inc Tailgate Safety Sign-in Sheet

☐

Date: 4/3/06

Arrival weather conditions: ~50F, overcast skies, wind SE ~15mph, Potential afternoon T-Storms.

Arrival Site Conditions: Waste segregation Bldg. ~90% complete with Pat Bradner, the building contractor, needing to complete the installation of Overhead door. Overhead door is currently assembled with track system temporarily attached to ceiling structures by chain supports and lifting mechanism not installed due to missing components. Cabrera personnel to complete the securement of the building to the concrete slab by grouting interior and exterior areas of all four walls.

Cabrera personnel onsite @ 0700: Joe V., Vince B., Security unlocked Cherry Hill Road gate for Abbey Drum delivery

0900: After surveying site conditions & developing supply list Cabrera Personnel offsite to supply job. Spoke to Bob dover about the need for a 20yd Roll-off

1030: Cabrera personnel return to jobsite

1100: Meet Abbey Drums @ Cherry Hill Rd gate. Delivers 60 steel open head recon drums w/o 100 liners. Spoke to Gary @ Abbey drums and he confirms they forgot to load the liners and he will have them delivered on 4/4/06 by 1100 hrs. Joe V. Accepts delivery of drums with liner delivery guarantee noted on ticket. Stored 58 drums under green carport in north fence area w/no disruption of vehicle traffic or customer activities along access road. Secured north fence access gate.

1200: Cabrera personnel offsite for lunch

1230: Cabrera personnel return from lunch and begin building preps for grouting. Afternoon showers start and ~20mins. later. Spoke to Bob Dover about having new employee Dave ??? deliver epoxy paint to jobsite.

~1330: Cabrera personnel Bob & Dave onsite for brief introductions and epoxy paint delivery. Held site briefing.

~1430: Cabrera personnel Bob & Dave offsite w/Joe & Vince continuing Bldg preps for Grouting.

1630: All cabrera personnel offsite, no site activities to occur overnight, South fence, conex and Cherry Hill Road Gate are secured by Joe V.

Departing Weather Conditions: ~70F, Mostly Cloudy skies, Winds south ~20mph, Severe T-storm warning for early evening.

Materials Onsite: One port -a-pot supplied by Bio-clean restrooms under PO#06-370
One 20' Conex storage container supplied by Williams Scottsman under PO#06-428

* (complete inventory of contents of Conex to be supplied at later date)

One three sided 18'x21' metal car port supplied by Georgia Portable Buildings under PO#06-366

60 Steel Recon open head drums from Abbey Drums under PO#??????

* 58 drums stored under green car port in north fence area, two used for non-potable water storage

26 bags of Sakrete concret, 5 bags of Grout stored inside Waste Seg. Bldg and purchased under PO#06-340

Intended for Cabrera Personnel Only, Photos to follow
Date: 4/4/06

Arrival weather conditions: ~45F, mostly cloudy, wind WNW ~10mph

Arrival Site Conditions: Site conditions unchanged as of 4/3/06

Expected Site Activities: Pat Brenard scheduled to complete overhead door installation w/Cabrera personnel performing grouting of Bldg., Williams Scottsman to deliver second Conex to be used as LSC lab, Abbey Drums to deliver liners missing from 4/3 delivery.

Cabrera personnel onsite @ 0700: Joe V., Vince B., Security unlocked Cherry Hill Road gate for deliveries to the site w/understanding that Cabrera Personnel to secure lock at end of day, Cabrera begins prep & grouting of Waste segregation Bldg, filled one 55 gal. drum with non-potable water, this drum labeled as non-potable water an not given any type of tracking number

1200: Cabrera personnel offsite for lunch

1230: Cabrera personnel return from lunch, Continue grouting activities

1430: Joe V. accepts delivery of 20' conex from William Scottsman. The second Conex is placed south west corner of South Fence area.

1515: Pat Bradner & crew onsite to complete Overhead Door installation. Cabrera personnel stop grouting activites with ~75% complete.

1630: Overhead door installation complete and accepted by Joe V. Pat Bradner accepts Cabrera check from Joe V. Access Gates, Conex, & Cherry Hill Road gate secured, no site activities to occur overnight. All Cabrera personnel & subcontractors offsite

Departing Weather Conditions: ~60F, Cloudy skies, Winds West ~10mph

Materials Onsite: One port -a-pot supplied by Bio-clean restrooms under PO#06-370
Two 20' Conex storage container supplied by Williams Scottsman under
PO#06-428
* (complete inventory of contents of Conex to be supplied at later date)

One three sided 18'x21' metal car port supplied by Georgia Portable Buildings
under PO#06-366
60 Steel Recon open head drums from Abbey Drums under PO#??????
* 58 drums stored under green car port in north fence area, two used for

non-potable water storage

6 bags of Sakrete concret, **3** bags of Grout stored inside Waste Seg. Bldg and

purchased under PO#06-340

One 55gal drum filled with 60% non-potable water stored outside of waste

segregation bldg.

Intended for Cabrera Personnel Only, Photos to follow

Date: 4/5/06

Arrival weather conditions: ~34F, wintery mix, wind WNW ~10mph

Arrival Site Conditions: Site conditions unchanged as of 4/4/06

Expected Site Activities: Cabrera personnel to complete grouting of Bldg.& begin prepping floor for epoxy paint, Redmonds Rolloff service to deliver 20 yd trash container, Abbey Drums to deliver liners missing from 4/3 delivery.

Cabrera personnel onsite @ 0700: Joe V., Vince B., Security unlocked Cherry Hill Road gate for deliveries to the site w/understanding that Cabrera Personnel to secure lock at end of day, Site activiites suspended until weather conditions improve

0800: Bob Dover onsite for field briefing and discuss personnel assigned to project. Delivered check for Redmonds Rolloff service.

0900: Bob offsite, Joe & Vince begin prepping floor for epoxy paint

1030: Redmonds delivers trash container

1100: Cabrera personnel offsite for early lunch & supply job, locate local Roberts Oxygen.

1230: Cabrera personnel return from lunch, Weather conditions improve so Cabrera personnel continue grouting activities

1400: Joe V. accepts delivery of 100 drum liners from Abbey Drums

1530: Grouting activities are complet and waste segregation bldg nearing completion, Access Gates, Conex, & Cherry Hill Road gate secured, no site activities to occur overnight. All Cabrera personnel offsite

Departing Weather Conditions: ~55F, Mostly cloudy skies, Winds West ~10mph

Materials Onsite: One port -a-pot supplied by Bio-clean restrooms under PO#06-370
Two 20' Conex storage container supplied by Williams Scottsman under
PO#06-428
* (complete inventory of contents of Conex to be supplied at later date)
One three sided 18'x21' metal car port supplied by Georgia Portable Buildings
under PO#06-366

60 Steel Recon open head drums from Abbey Drums under PO#??????

* 58 drums stored under green car port in north fence area, two used for non-potable water storage

One 55gal drum filled with 60% non-potable water stored outside of waste segregation bldg.

One 20yd trash container has been added to site inventory

Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: April 17, 2006, Monday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Vince Barber, Dave Kately, Joe McGinley, Landen Collins, Hank Siegrist, Larry Pawlus
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) ~50F, lite rain, wind 12mph NE

Planned Activities: Mobilization activities to include LSC installation, QC instruments, build trench box, receive materials, Provide non-Cabrera personnel with RAD & Site hazard awareness training

Tailgate Topics: proper lifting techniques, slips, trips, & falls, site layout

Daily Summary

0700 JV onsite , while VB is at Baltimore office waiting for DK & JM to load his truck with Packard Tricarb liquid scintillation counter (LSC) for transport to site. VB will also bring other items received at the office for use at the site.

~0900 VB, JM, & DK arrive onsite, held informal tailgate w/site tour, offloaded truck and decided not to offload LSC until weather conditions improve. DK & JM inventory coolers and boxes received to the site

0915 BD arrives onsite, JV & VB inform him of both planned & ongoing activities, he is made aware of site conditions.

~0945 BD offsite to supply job, JM & DK are directed on how to build trench box and instructed to begin construction of trench box, JV & VB empty coolers & inventory

1100 trench box construction is going slow, VB instucts JM & DK on how to correctly construct box,

1145 rain begins to fall harder BD returns to site w/ supplies and informs JV that he needs someone to p/u a table from Staples in Laurel due to being unable to put in his vehicle. JV sends JM with BD in Cabrera truck to p/u table. DK offsite for lunch

~1230 BD, JM, DK return to site. Rain has stopped, overcast skies, DK & JM are directed to return to trench box construction, BD offsite to meet HS & LP at Amtrak station

1345 notice that DK & JM are having troubles with trench box construction & are instructed to stop, LC arrives onsite from traveling in from NY, JV gives him informal safety instructions w/site tour

1400 JM is sent offsite for supplies, Remaining Cabrera personnel offload LSC from truck for install in LAB conex, LC & DK are instructed on how to secure LSC in place

1500 BD, LP, HS arrive onsite for Rad safety & hazard awarness training for non-Cabrera personnel, HS & BD proceed to Bldg 46 to setup for training. LP inspects LAB

1515 JV unlocks Bldg 46 for the training

1530 End of Day, site is secured w/ all personnel offsite

Deliveries: rad instruments from EH office, instruments from Pine inventory

Materials Inventory:

United Rentals: Kobelco SK210 excavator w /24" & a 48" grading bucket(s/n YQ07U0843) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes lates gloves, 5 packs of gren nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 60 steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves

Inventory in progress

RAD material onsite: Sealed sources, LS standards

End of Day Site Conditions: (weather, security, unusual) 60F, Partly cloudy, wind 10mph west, midday thunderstorms

Next day activities: Complete construction of Trench Box, continue Mob activities

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Daily Report
Beltsville-LLRBS
Wate Pits Characterization
Project #06-3070.01

Date: 4/18/06, Tuesday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Vince Barber, Dave Kately, Joe McGinley, Landen Collins, Hank Siegrist, Larry Pawlus
Cabrera subcontractors Onsite: Danny Dodd of Permafix
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) ~50F, wind 10mph North, Partly Cloudy

Planned Activities: QC RAD instruments, Set-up of Pit #1 for characterization activities, Assemble air supply, BKGD data

Tailgate Topics: traffic awareness, securing tools, heavy equipment awareness

Daily Summary

0700 All Cabrera Personnel onsite, tailgate meeting held, HS, LP begin QC instruments & LAB setup, LP begins LSC QC & familiarization

~0830 Danny Dodd of Permafix onsite, JV gives him Site Tour & HS awareness, BD conducts an onsite meeting with DD, JV, VB, & HS on pit characterization activities.

~0900 Site visit from Whitney of MAYBE she is informed that we have all necessary components of trench box, BD offsite

1000 JM sent offsite for supplies, LC & DK directed to construct trench box, missing RAD instruments for GWS, JV calls Chuck in EH to overnight needed materials, awaiting supplies from various suppliers

1030 trench box construction not going as planned, VB corrects mistakes, JM back onsite & is instructed to install second LV-1 for background purposes.

1200 Cabrera breaks for lunch, Trench box 50% complete, LV-1 are continuously blowing fuses, Possible voltage fluctuations from generator, Cabrera personnel return to previous activities at 1245

1400 Trench box is fully constructed and is moved into position for use, VB QC's air supply from Pine Environmental and notice missing parts, Pine agrees to overnight the parts needed

1530 End of Day, site is secured w/ all personnel offsite

Deliveries: Rental instruments, parts, RAD equipment to be inventoried at a later time

Materials Inventory:

United Rentals: Kobelco SK210 excavator w /24" & a 48" grading bucket(s/n YQ07U0843) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes lates gloves, 5 packs of gren nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 60 steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves

Inventory in progress

RAD material onsite: Sealed sources, LS standards

End of Day Site Conditions: (weather, security, unusual) 70F, Wind 5mph SW, clear skies

Next day activities: Pit #1 location & preps

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Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 4/19/06, Wednesday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Vince Barber, Dave Kately, Joe McGinley, Landen Collins, Hank Siegrist, Larry Pawlus
Cabrera subcontractors Onsite: Danny Dodd of permafix
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 52F, scattered clouds, wind 8mph NW

Planned Activities: GWS & BWS of pit #1, finish pit #1 set-up, locate edges of Pit #1

Tailgate Topics: Instrument familiarization, Air monitoring instruction

Daily Summary

0700 Cabrera personnel onsite except for DK due to family emergency

0730 LC & JM directed to remove drums from green carport & place along western portion of chain link fence of pit area , move oxygen bottles to the pit area, roll back chain link fence and install a control zone for workers to enter pit area. LP & HS prep LAB equipment

1000 VB, JV, LC, JM move green carport to pit area, potential uses of this carport is to store materials and provide some shade to workers entering pit. LP informs JV of operating issues with LSC, JV schedules a Perkin Elmer tech to the jobsite to repair LSC will not be able to be onsite until Friday morning, still awaiting supplies that were ordered

1200 Lunch, carport is successfully moved to pit area, pit is staged for locating pit edges, Pine Environmental sent the wrong part to fix air supply, unable to perform BWS due to not having proper GPS unit, need TSCE & not the TSC1 to connect to four banger, will direct LC & JM to perform a manual walkover and record their readings into field notebook

1300 DD & BD offsite to locate a part to fix air supply, Grainger doesn't carry the part we need, contingency to build air supply from Home depot if the proper part doesn't arrive from Pine tomorrow. DK calls JV and informs him of status of family emergency & informs JV that he will be onsite tomorrow

1400 Walkovers complete and we discuss the options of being able at least scratch the surface of the pit without supplied air to locate the edges of the pit. Discuss the matter

with USDA personnel & BD and decide to locate the northern edge as well as the western edge

1500 Jon Jensen & Dave of Entech onsite to view pit location activities, non-Cabrera personnel are kept upwind from the work area

1600 Overall the pit consists of compacted soil with the western edge and northern edge marked by a layer of stone found at `3.5' depth, noticed some dark soil on what may be the edges of the pit, may need to adapt excavating activity from placing a trench box in the hole to benching of holes, may lead to a larger hole, but we fear that this pit is not going to be very well defined. 3' soil covering the top of pit removed and we see no evidence of debris or other waste matter indicating a waste pit, Cabrera secures hole with orange fencing and place machines along north & western areas where chain link was removed to act as another barrier to keep people from climbing into the pit area.

1700 End of Day, site is secured w/ all personnel offsite

Deliveries: Rad instruments, rental equipment, 2 bottles of propane (UN1075), 1 bottle of P10 gas (UN1956)

Materials Inventory:

United Rentals: Kobelco SK210 excavator w /24" & a 48" grading bucket(s/n YQ07U0843) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes lates gloves, 5 packs of gren nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 60 steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves

Inventory in progress

RAD material onsite: Sealed sources, LS standards

End of Day Site Conditions: (weather, security, unusual) 75F, wind 15mph NW, Partly cloudy

Next day activities: Pit #1 characterization

Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 4/20/06, Thursday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Vince Barber, Dave Kately, Joe McGinley, Landen Collins, Hank Siegrist, Larry Pawlus
Cabrera subcontractors Onsite: Danny Dodd of Permafix
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 55F, calm wind, Partly cloudy

Planned Activities: Complete supply air installation, start pit characterization activities, perform housekeeping

Tailgate Topics: Proper use of supply air, trench awareness, heat stress

Daily Summary

0700 Cabrera Personnel onsite except for DK, LC & JM setup pit area for characterization activities, VB goes offsite to Home Depot to purchase air supply lines returns at 0930 with the needed materials, air supplied install

1000 continue pit location, we will stop once debris is located and we will invite USDA personnel to the site to watch characterization activities. North wall of pit consists of four strata of soil 0-1' depth Topsoil, 1'-2' Rich brown soil, 2-3' rock, 3'-5' red/brown clay

1130 at about 5.5' depth we spot some ceramic & glass debris on pit edges, we have gone to benching and have established an area approximately six foot long by about 3' wide that consists of debris, very minimal debris. on top of the pit area there is some fine white sand as well as some dark (black) spots of soil, pit activities suspended so that USDA personnel can view characterization activities scheduled @ 1400

1200 LUNCH, status of DK is still unkown, also Pine Environmental has sent the wrong part again, Kim from Pine says they will have the correct part overnighted to us

1300 Cabrera begins to prep for characterization activities & establish a viewing area upwind from the pit

1400 USDA personnel onsite and we begin characterization activities, LC/JM enters the pit, DD is to be emergency response person inside the pit fences. Debris is very minimal, segregation activities occurring inside the pit, most debris is broken glass jars with grey like clay material inside, discover a military style Gas can with rad symbol and a hole in the side of can, LC is beginning to show signs of overheating, remove all personnel from pit and to cool down. Periodic readings from PID and RAD instruments indicate nothing of concern,

1430 LC/JM enter the pit area , characterization activities restarted, currently have three drums filled with aprox. 98% soil w/5% debris. Some metal debris being found, overall debris is minimal. Pit depth at about 8', LC is showing signs of overheating agin and he is removed from the pit, activities halted, USDA safety personnel questions our benching technique and requests that we add an additional bench to the pit walls, VB/JV agree to the request, DD agrees to replace LC in Pit w/JV becoming emergency response, LC directed to sit in the trailer and is monitored for any adverse health conditions

1500 additional benching is complete and DD/JM enter pit to continue characterization activities, minimal debris consisting of glass, metal & some ceramics, white sand, some black soil, most soil looks to be of redish brown color, characterization activites halted at 1630 w/ no major debris found and not much to raise interest, no hits on PID, but had an elevated reading on piece of metal of about 100ur/hr, this piece of metal was containerized with other debris, six drums of soil, one drum of debris

1800 Pit area secured with machines & orange fencing, then the chain link fence is attached to the machines, drums are secure, site secured and all personnel offsite, no contact w/DK

End of Day, site is secured w/ all personnel offsite

Deliveries: n/a

Materials Inventory:

United Rentals: Kobelco SK210 excavator w /24" & a 48" grading bucket(s/n YQ07U0843) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes lates gloves, 5 packs of gren nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 60 steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 6 drums of contaminated soil form Pit#1, one partial debris drum

End of Day Site Conditions: (weather, security, unusual) 80F, winds 3mph N, mostly cloudy

Next day activities: Pit #1 characterization & securing site for inclement weather

Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 4/21/06, Friday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel: Vince Barber, Dave Kately, Joe McGinley, Landen Collins, Hank Siegrist, Larry Pawlus
Cabrera subcontractors Onsite: Danny Dodd of Perma-fix
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 60F, Overcast, Winds 10mph SE

Planned Activities: button up jobsite for impending storms, Perkin Elmer onsite to fix LSC

Tailgate Topics: Electrical hazards

Daily Summary

0700 Cabrera Personnel onsite, DK doesn't report to jobsite

0800 The pit appears to be about 75% remediated and DD agrees to not needing to be here for remaining characterization of this pit, HS also feels no need to remain thru the weekend and will instruct LP on RAD instruments & familiarize w/ spreadsheets before he leaves, JV calls DK and leaves a voicemail on cellphone

0900 JV makes contact with DK, DK's family emergency will keep him away from jobsite & JV directs him to report to the office on Monday because of lack of RAD training and no dosimetry for him

1100 JM sent to the office with timesheets & expense reports,

1430 Technician from Perkin Elmer contacts JV and explains he will be out in about 2hrs, JV asks him to reschedule for Monday early morning

1530 End of Day, site is secured w/ all personnel offsite

Deliveries: n/a

Materials Inventory:

United Rentals: Kobelco SK210 excavator w /24" & a 48" grading bucket(s/n YQ07U0843) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers

Materials Inventory (cont.):

Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes lates gloves, 5 packs of gren nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 60 steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 6 drums of contaminated soil form Pit#1, one partial debris drum

End of Day Site Conditions: (weather, security, unusual) 65F, light rain, wind 15mph E

Next day activities: Pit#1 Characterization for 4/24/06

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Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 4/22/06, Saturday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel : Vince Barber, Dave Kately, Joe McGinley, Landen Collins, Hank Siegrist, Larry Pawlus
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 60F, Overcast, Winds 5mph SE

Planned Activities: QC Water Management of Pit#1

Tailgate Topics: n/a

Daily Summary

0700 JV is onsite for water management activities, overnight rains have left about 6" of water on the tarps, no water appears to have broken thru the barriers, triple layers of poly Sump pump seems not operating, further inspection shows that the generator is not working

08000 Generator is out of fuel, JV uses portable generator to pump water from pit, BD onsite, JV gives him Site signs

0930 JV speaks to United Rentals Repair and they will have a tech come to inspect the generator, JV waits for contact from Tech, JV offsite for diesel

1000 JV speaks to Tech and he describes how to get generator working, Generator starts, BD leaves site for the day, JV continues to ferry diesel into generator ~40 gal.

1100 End of Day, site is secured w/ all personnel offsite

Deliveries: n/a

Materials Inventory:

United Rentals: Kobelco SK210 excavator w /24" & a 48" grading bucket(s/n YQ07U0843) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport

Materials Inventory (cont):

Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes lates gloves, 5 packs of gren nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 60 steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 6 drums of contaminated soil form Pit#1, one partial debris drum

End of Day Site Conditions: (weather, security, unusual) 67F, light rain, Winds 5mph E

Next day activities: Pit #1 Characterization

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Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 4/25/06, Tuesday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel: Vince Barber, Joe McGinley, Landen Collins, Larry Pawlus
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 58F, Overcast, Winds 5mph SW

Planned Activities: Complete Pit#1 characterization

Tailgate Topics: Heat Stress, Insects

Daily Summary

0700 Cabrera Personnel onsite

0800 open Pit#1 for characterization activities, pull back fences, remove tarps, place air monitoring, hook up air supply, QC RAD instruments

~0930 receive replacement excavator from United, perform incoming survey on new equipment

1100 pit#1 characterization underway and could be completed by 1300hrs. USDA personnel would like to see the pit before we start further sampling, Very minimal debris or waste items found, feel that we have reached the bottom of the pit, soils are consitent with previous observations, red-brown clay like soils, some stones, with a mixture of fine white sand, PID readings are consistently reading 0ppm, with no RAD readings exceeding BKGD levels

1200 lunch, LC/JM offsite for lunch

1400 USDA personnel onsite(JJ,KZ) and inspect pit from roadside viewing area, question the ability to perform a Marssim survey on the pit floors & Walls, also would like for us to fluff the soils some more & continue contaerizing a few more soil drums to ensure a thorough investigation of the pit area due to the minimal amount of debris that was located

1630 Characterization of PIT#1 is complete & will have USDA personnel give approval for backfilling of the pti tomorrow. Some discussion has occurred about opening a second pit, everyone is aware of the need to make a quick decision so as not to demb equipment and not be able to get it back due to being a busy time of the year for equipment rentals

1800 End of Day, site is secured w/ all personnel offsite

Deliveries: n/a

GEL Samples: n/a

Materials Inventory:

United Rentals: Kobelco SK210 excavator w /24" & a 48" grading bucket(s/n YQ07U0843) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes lates gloves, 5 packs of gren nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 60 steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 15 drums of contaminated soil form Pit#1, one partial debris drum

End of Day Site Conditions: (weather, security, unusual) 70F, winds 5mph NE, partly cloudy

Next day activities: Backfill Pit#1 & secure site

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Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 4/26/06, Wednesday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel: Vince Barber, Joe McGinley, Landen Collins
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 45F,Winds 15mph NE, Scattered clouds

Planned Activities: Sample & Backfill Pit#1

Tailgate Topics: Hard hat safety

Daily Summary

0700 Cabrera Personnel onsite except for JM due to having some other office duties to perform

0800 open Pit#1 for characterization activities, pull back fences, remove tarps, place air monitoring, hook up air supply, QC RAD instruments

~0930 perform GWS & BWS of pit floors and walls, USDA personnel approve of pit backfilling plan (JJ,KZ), some difficulties in getting GW equipment to work properly

1100 Collect soil samples from pit area & soil drums which have been collected under the direction of Bob Dover

1200 offsite for lunch

1300 continue soil sample collections & moving of drums to south field, begin backfilling pit

`1500 HS onsite to perform an audit of the site, wants all soil drums secured in south field area by end of business tomorrow, overall pleased with the site conditions, understands that due to second pit characterization that drums will be stored outside segregation bldg under a carport until all pit characterization activites are completed and Cabrera demobs from site

1700 End of Day, site is secured w/ all personnel offsite, BD to transport GEL coolers to FED-EX facility

Deliveries: n/a

GEL Samples: BLT-PO1-WS-02 thru 06, BLT-PO1-SO-01 thru 06, BLT-PO1-SO-061, BLT-PO1-WL-02

Materials Inventory:

United Rentals: Kobelco SK210 excavator w /24" & a 48" grading bucket(s/n YQ07U0843) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes lates gloves, 5 packs of gren nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 60 steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums

End of Day Site Conditions: (weather, security, unusual) 60F, winds 15mph S, mostly cloudy

Next day activities: complete backfill Pit#1 & Collect groundwater & soil samples from reference area

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Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 4/27/06, Thursday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Vince Barber, Joe McGinley, Landen Collins
Cabrera subcontractors Onsite: George
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 45F, Scattered clouds, winds 10mph NW

Planned Activities: Reference area sampling event, backfilling of Pit #1, moving soil drums to secured area

Tailgate Topics: Drill rig awareness, pinch points

Daily Summary

0700 Cabrera personnel onsite, awaiting Vironex, LC & JM begin moving drums to storage area in south field

~0830 Vironex arrives onsite, discuss sampling plan, performed incoming RAD survey on drill rig, driller sets up and begins sampling event @ 9am, perform another GWS of pit floor due to corrupted data on files, collect soil samples from pit floor

1000 JM offsite to perform other office duties

12000 Lunch, moving of soil drums is going slow, JV replaces BD with the driller

1530 End of Day, site is secured w/ all personnel offsite

Deliveries: n/a

GEL Samples: BLT-PO1-SO-05e thru f, BLT-REF-SO-01 thru 06, BLT-REF-WL-01 thru 02
Materials Inventory:

United Rentals: Kobelco SK210 excavator w /24" & a 48" grading bucket(s/n YQ07U0843) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport

Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes lates gloves, 5 packs of gren nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-
Materials Inventory (cont):

point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 60 steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums

End of Day Site Conditions: (weather, security, unusual) 70F, Mostly Cloudy, winds 5mph S

Next day activities: complete backfill of pit#1, plac soil drums under carport, collect groundwater & soil samples from pit #1

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Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 4/28/06, Friday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel: Vince Barber, Joe McGinley, Landen Collins
Cabrera subcontractors Onsite: George
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 55F, mostly cloudy, winds 10mph N

Planned Activities: MW Sampling, Covering Soil drums, finish reference area Well

Tailgate Topics: pinch points, equipment awareness, RAD controls

Daily Summary

0700 Cabrera personnel onsite, Pit #1 Temporary well sampling point established, JV is watching sampler, LC & JM directed to move & cover Pit #1 soil drums, build a temp fence on NW corner of Pit area to consist of wire mesh fence overlayed with orange safety fence with RAD rope weavings., RAd signs posted every 25'.

0800 Started drilling PO1 MW, collected no soil cores between 0-12', no PID readings @ hole, Bicron 8ur/hr, had refusal @ 32', Driller feels that refusal may be caused by a boulder, due to collecting enough cores to fulfill soil sampling requirements JV directs driller to move drill rig to the south about 1' and used smaller diameter rods to pass anomally that caused the refusal at 32', so as to collect only water samples.

0900 drill rig moved into new location and begins push for groundwater, unlike ref pit we hit no perch water @ 12' depth. PID = 0ppm, bicorn = 7ur/hr

0930 driller hits refusal @61', We have GW but discover that we have no filters for GW sampling, also missing a few bottles for the sampling event, George heads offsite to p/u some filters & extra bottles from his office, BD & JM start soil sampling while driller is offsite.

1000 Soil drums are in place and covered for weather, JM covers MW sampling, driller returns with needed supplies & starts sampling, LC continues with housekeeping duties in securing site & weekly survey's

1200 filters are clogged, JV directs JM to purge filters with distilled water and try to reuse, awaiting word from GEL about the possibility of them being able to filter bottles

1330 JV is informed by GEL that they could filter remaining samples at the lab for a $25 fee per bottle, JM had already completed collection of filtered samples, all sampling completed by 1430

1630 all sample coolers are packed and iced for shipment to GEL, BD delivers coolers to Fed-Ex facility

1700 End of Day, site is secured w/ all personnel offsite not to return until after the weekend

Deliveries: n/a

GEL Samples: BLT-PO1-TW-01u &f, BLT-PO1-TW-02u, BLT-PO1-TW-06j, BLT-PO1-SO-05c thru f

Materials Inventory:

United Rentals: Kobelco SK210 excavator w /24" & a 48" grading bucket(s/n YQ07U0843) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes lates gloves, 5 packs of gren nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 60 steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums

End of Day Site Conditions: (weather, security, unusual) 65F, Clear, light breeze South

Next day activities: Complete securing the site, restock for second pit

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Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 5/1/06, Monday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel: Vince Barber, Joe McGinley, Landen Collins
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: weather, security, unusual) 47F, scattered clouds, winds 6mph N

Planned Activities: MW Sampling, restock job for 2nd Pit, GWS

Tailgate Topics: Poisonous plants

Daily Summary

0700 Cabrera personnel onsite, started the day by performing weekly survey's. We performed an inventory of materials onsite so as to begun restocking the jobsite for the second pit characterization. The inventory is noted below.

We were also able to perform a GWS in the north field, as well as the south field. The meter used for the GWS was a 2x2 NaI attached to a Trimble GPS backpack.
During the north field GWS we discovered points with readings that exceeded ~500,000 gcpm and dose rates greater than 100 ur/hr on contact. We marked these four points with pin flags & bounded the area with caution tape attached to fence posts.

Pin Flag #	Bicron ur/hr (contact)	3x3 cpm	44-9 ur/hr	43-93 cpm
1	120	802421	335	7050
2	150	427778	220	4788
3	160	525498	248	3178
4	300	761011	516	41409

This area is called the caution area by field personnel. The caution area within the boundaries of the north field. The caution area has a length approximately 80% of the East-West diameter of the north field and a width of about ~40'.

Although, the caution area is located within a radiologically controlled area we

implemented additional controls of having to wear an electronic dosimeter, as well as foot protection be worn when entering this area. Also moved LV1 station #2 to a location near this area to perform air monitoring for the next several days. The LV1 data will help us determine if the hotspots are really indicating a presence of Radon gas.

1530 End of Day, site is secured w/ all personnel offsite not to return until after the weekend

Deliveries: n/a

GEL Samples: n/a

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes latex gloves, 5 packs of green nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 12 55gal steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10' x 12' aluminum trench box
Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums

End of Day Site Conditions: (weather, security, unusual) 70F, partly cloudy, 1winds 16mph ENE

Next day activities: Restock for second pit, Locate second pit

Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 5/3/06, Wednesday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel: Vince Barber, Joe McGinley, Landen Collins, Larry Pawlus, Greg Bright, Hank Siegrest
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions:(weather, security, unusual) 62F, mostly cloudy, winds 10mph N

Planned Activities: Pit #2 location

Tailgate Topics: Heat Stress

Daily Summary

0700 Cabrera personnel onsite, started the day by meeting with USDA personnel to determine pit #2 location. Jack Patterson gave us a hand drawn map that marked locations of fence posts and pit markers before they were removed. We were able to determine the presumed location of Pit #2. We made USDA personnel aware of the fact that the soil in this location shows very little signs of any significant waste being buried there. The soil seems to be compacted and there are no depressions in this area.

We began to set the area up for pit locating activities by moving oxygen bottles into place, placing tools and needed PPE inside the green carport. @~1030am we started to remove the topsoil to locate the top of the pit. It appears Pit #2 is smaller in size than originally planned and we decided that benching would be better than placing a trench box into the hole. Excavation operations are centered around a small depression that falls within the boundaries of the cut off fence posts. Soil is removed from the existing fence line, west to east manner. It looks as if Pit #2 is going to be smaller in size than originally planned.

The soils seem to be similar to Pit #1 soils with a white gravel layer appearing at about 8' down. The top Pit #2 is about 6-7' below surface grade. It appears that the pit is marked surrounded by gravel fill and lined with plastic. The pit contains remains from an animal which are being removed and placed into hex boxes. There are no signs of liquids or other solid material other than bones.

There were no indications of either a chemical hazard or radiological as readings with all instruments indicating bkgd levels or a non-detect. An LV1 was placed near the hole

during this operation and is referred to as Station #1. Also, field staff has adopted calling this Pit #14.

I want to note that before we broke any ground for this pit location that we performed a dose rate survey and found no readings above bkgd. Once we completed topsoil removal, we also performed another dose rate survey and found similar results. Radiological controls for the caution area are still in effect.

1700 End of Day, site is secured w/ all personnel offsite

Deliveries: Abbey drums-3 steel salvage drums, 50 recons, 5 DOT buckets for sharps

GEL Samples: n/a

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes latex gloves, 5 packs of green nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 12 55gal steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10' x 12' aluminum trench box
Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums, one fiber box Pit #14, 4xDrums of Soil from Pi#14

End of Day Site Conditions: (weather, security, unusual) 75F, scattered clouds, winds 10mph NW

Next day activities: Pit #14 characterization

Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 5/4/06, Thursday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel: Vince Barber, Joe McGinley, Landen Collins, Larry Pawlus, Greg Bright, Hank Sieges
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 56F, mostly cloudy, winds 6mph NE

Planned Activities: Pit #14 characterization

Tailgate Topics: Heat Stress, pinch points

Daily Summary

0700 Cabrera personnel onsite, started the day by opening & moving drums into place for Pit #14 characterization activities. We will perform the pit characterization outside of the pit by removing material with the bucket and then segregating from the bucket into either drums or hex boxes.

The only true signs of any biological contamination, besides the bones, appears to be the plastic that lines the pit. the plastic is covered with a reddish brown substance presumably blood. Anyone working near this plastic is given green nitriles to handle the plastic. We have also encountered very minimal debris other than bones. We have discovered a 35 gallon trash can lid, and a few pieces of terracotta pipe.

The soils seem to be similar to Pit #1 soils in that they are reddish brown claylike soil with a white gravel layer appearing at about 3' below grade. This stone layer is aprox. 6-8"in width and seems to be more consistent as a natural layer rather than something placed to mark pit locations. The stones are small to medium in size. There were no indications of either a chemical hazard or radiological as readings with all instruments indicating bkgd levels or a non-detect. An LV1 was placed near the hole during this operation and is referred to as Station #1. A tritium bubbler is also running during the characterization activities.

Performed a radiological discovery inside the caution area and have found the cause of the hotspots. Almost at the surface were various stone, most likely shale, that contained natural radioactivity. We placed these stones inside bags and placed them inside the waste segregation building. We used an Inspector 1000 to ID the radioactivity, as natural

uranium. The Radiological controls for the caution area are still in effect, until we can perform another GWS.

1700 End of Day, site is secured w/ all personnel offsite

Deliveries: n/a

GEL Samples: n/a

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes latex gloves, 5 packs of green nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 50x55gal steel recon drums, 3x steel salvage drums, 5xDOT buckets
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10' x 12' aluminum trench box
Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums from Pit #1, three fiber box Pit #14, 24 Drums of Soil from Pi#14

End of Day Site Conditions: (weather, security, unusual) 80F, scattered clouds, winds 6mph S

Next day activities: Pit #14 characterization

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Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 5/5/06, Friday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel: Vince Barber, Joe McGinley, Landen Collins, Larry Pawlus, Greg Bright, Hank Siegrest
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 65F, mostly cloudy, wind 10mph NW

Planned Activities: Pit #14 characterization

Tailgate Topics: Heat Stress, pinch points

Daily Summary

0700 Cabrera personnel onsite, started the day by opening & moving drums into place for pit characterization activities. We will perform similar processes to characterize the pit as we have in earlier characterization efforts. The excavator bucket will move the soils so as segregating can occur from the bucket into either drums or hex boxes.

It must be noted that deficiencies in our air monitoring QC have been noted and corrective actions are to assign a single person to be responsible for monitoring all three stations, and for their placement in the field.

We were able to complete characterization activities early enough today so as to place remaining drums within the boundaries of the South field, right alongside the temporary structure containing the Pit #1 soils. Soil drums from Pit #14 are labeled as soil, Pit #14, drum ###, with date and time of collection. There is plenty of space between the drums to allow us to open them safely on Monday for composite sampling activities. Fiber boxes are placed inside waste segregation building preventing damage from weather.

Pit #14 was covered with two layers of poly to prevent water from coming into contact with the pit soils. Sand bags are used to keep the poly tight to the ground.

There were no indications of either a chemical or radiological hazards during characterization activities as readings with all instruments indicated bkgd levels or a non-detect. An LV1 was placed near the hole during this operation and is referred to as Station #1. A tritium bubbler was also running during the characterization activities.

1730 End of Day, site is secured w/ all personnel offsite not to return until after the weekend

Deliveries: n/a

GEL Samples: n/a

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes latex gloves, 5 packs of green nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 50x55gal steel recon drums, 3x steel salvage drums, 5xDOT buckets
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10' x 12' aluminum trench box
Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums from Pit #1, 5 fiber box Pit #14, 39 Drums of Soil from Pi#14

End of Day Site Conditions: (weather, security, unusual) 75F, overcast, winds calm

Next day activities: Pit #14 sampling

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Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 5/8/06, Monday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Vince Barber, Greg Bright, Joe McGinley, Landen Collins
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 58F, light rain, winds 8mph N

Planned Activities: Labeling of drums, GWS, sampling activities

Tailgate Topics: Proper air monitoring

Daily Summary

Cabrera personnel onsite @ 7am. As weather conditions permitted we were able to take 4 composite samples of the 39 soil drums collected from Pit#14. These samples were sent out to GEL in two coolers under COC# 005. We also collected a rinsate composite sample ID# BLT-P14-SO-06l also shipped under COC# 005 with three trip blanks ID as BLT-P14-WL-01. The rinsate was an acculmulation of water used to clean the sampling tools after each composite sample was collected.

Sample Id#	Composites of Drum's	Sample By
BLT-P14-WS-01	2,10,12,14,18,23,28,29,33, 39	LC, JV
BLT-P14-WS-02	3,8,9,16,19,22,24,27,32,36	LC,JV
BLT-P14-WS-03	1,4,6,7,15,21,25,31,35,38	LC,JV
BLT-P14-WS-04	5,1,13,17,20,26,30,34,37	LC,JV

We also performed weekly surveys on the lab convex, waste segregation building, office trailer, and the supply conex. GB was our lab support personnel for the day. All surveys results had no detectable readings.

The debris drum from Pit #14 and five fiber boxes are now located inside the waste segregation building. The fiber boxes are labeled as 1 thru 5, bones, pit#14 w/ time & date. The debris drum is labeled as Drum #40, debris, Pit#14 w/time & date. The debris drum contains plastic contaminated w/blood, as well as some terracotta pipe and a trash can lid. There was no readings on the PID or RAD instruments that indicate anything above big or chemical hazards on any of the soil drums, boxes, and debris drums.

Spoke to Cheryl Jones of GEL about sample results for BLT-PO1-WS-01, which is the first composite sample taken in pit #1. Results should be e-mailed to us as of COB today. Also, we discussed the need for more volume of sample for the waste characterization soils from both pits. Gel will overnight the needed sample containers, 2 I liter poly containers per sample, and we will collect on 5/9/06. I also asked her if we could send our three smears counted the other day to her for a QC of our LSC, she sees no problem with being able to count those smears for us. These samples will be labeled BLT-P14-LSC-01 thru 03.

Ordered a YSI from Pine environmental for the monitoring well sampling event. The flow thru cell and YSI will be overnighted to us and be able to accomplish this sampling on 5/9 or 5/10.

There were no visitors or deliveries to the site today. **1530** End of Day, site is secured w/ all personnel offsite.

Deliveries: n/a

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes latex gloves, 5 packs of green nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 12 55gal steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10' x 12' aluminum trench box
Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums, 39 drums of contaminated soil from Pit# 14, one debris drum from Pit# 14 located inside waste segregation building, five fiber boxes containing bones removed from pit#14

End of Day Site Conditions: (weather, security, unusual) 55F, light rain, winds 13mph

N

Next day activities: Sampling, GWS

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Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 5/9/06, Tuesday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Vince Barber, Greg Bright, Joe McGinley, Landen Collins
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 51F, overcast, winds10mph NE

Planned Activities: GW sampling, Pit sampling, Additional sampling

Tailgate Topics: Pinch points

Daily Summary

0700 Cabrera personnel onsite, We need to take some extra samples for Atterburg & grain size test for the drum composites from both pits. We also collected some GPS locations of fence posts and other anomalies to add to our GPS map. Other samples collected today was one gallon zip lock bag of bones composite from all fiber boxes inside waste segregation building, 3 one gallon bags of Vegetation.

1530 End of Day, site is secured w/ all personnel offsite

Deliveries: Multiparameter YSI from Pine, and three coolers containing sample containers from GEL

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes latex gloves, 5 packs of green nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 12 55gal steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10' x 12' aluminum trench box

Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums, 39 drums of contaminated soil from Pit# 14, one debris drum from Pit# 14 located inside waste segregation building, five fiber boxes containing bones removed from pit#14

End of Day Site Conditions: (weather, security, unusual) 68F, mostly cloudy, 8mph SW

Next day activities: Site Preps

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Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 5/10/06, Wednesday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Vince Barber, Greg Bright, Joe McGinley, Landen Collins
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 58F, partly cloudy, winds calm

Planned Activities: GW sampling, Pit sampling,

Tailgate Topics: trench box safe**ty**

Daily Summary

0700 Cabrera personnel onsite, We will be placing the trench box into Pit#14 to collect the 10' and 12' depth samples. We had to perform a manual Walkover because of the PDOP issues that occur in this general area. After pit sampling activities were completed, backfilling of the pit began.

We located MW 9 & 10 and attempted to sample the GW. The pump rented from Pine was defective and will be replaced. The pump we had a short in it and caused the circuit breaker to blow.

1530 End of Day, site is secured w/ all personnel offsite

Deliveries: n/a

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes latex gloves, 5 packs of green nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 12 55gal steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o

monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10’ x 12’ aluminum trench box
Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums, 39 drums of contaminated soil from Pit# 14, one debris drum from Pit# 14 located inside waste segregation building, five fiber boxes containing bones removed from pit#14

End of Day Site Conditions: (weather, security, unusual) 75F, winds SSE 10mph, mostly cloudy

Next day activities: Pit sampling, GW monitoring

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Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 5/11/06, Thursday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Vince Barber, Joe McGinley, Landen Collins
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual)50F, light rain, winds 8mph

Planned Activities: GW sampling, Pit sampling, Additional sampling

Tailgate Topics: Rad Instrumentation

Daily Summary

Cabrera personnel onsite
1530 End of Day, site is secured w/ all personnel offsite

Deliveries: n/a

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes lates gloves, 5 packs of gren nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 12 55gal steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10' x 12' aluminum trench box
Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums, 39 drums of contaminated soil from Pit# 14, one debris drum from Pit# 14 located inside waste segregation building, five fiber boxes containing bones removed from pit#14

End of Day Site Conditions: (weather, security, unusual)

Next day activities:

:

Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 5/22/06, Monday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Joe McGinley, Landen Collins,Vince Barber
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 51F, Partly cloudy, wind 15 mph NW

Planned Activities: Pit#26 Characterization

Tailgate Topics: Heavy equipment awarness

Daily Summary

0700 all Cabrera personnel onsite, during characterization activities today we were able to find a wall that had no indications of debris, south wall, which indicates a defined boundary for the pit. The west wall is also showing minimal signs of debris. Both south and west walls are a different type of soil than those previously encountered which further enhances the defined pit theory. The debris is still visible on the north wall and pit floor. Thus, we are assuming that the pit is larger than originally planned.
The debris in the north wall and pit floor is consistent with that found in earlier activities. LSV (bagged & boxed), loose pipettes & other broken glass debris, lab packs with containerized liquid waste, plastic bottles and misc. debris.
Water is still infiltrating the pit. To counter this infiltration, we have built up the pit floor in an effort to dam the water. We laid pallets of wood onto the pit floor to give our entrants a working platform.
Per conversations with USDA personnel we will create an area inside this excavation that can be called a pit. This “pit” will be of a distinct shape and size so as to be able to estimate a volume of waste. We will also use caution in creating this pit to prevent any further infiltration of water into this pit. Drums of waste have been smeared and cleared for storage within the Waste segregation building.
1730 End of Day; site is secured w/ all personnel offsite

Deliveries: n/a

GEL: n/a

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24” & a 48” grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs

Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes latex gloves, 5 packs of green nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 12 55gal steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10' x 12' aluminum trench box
Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums, 39 drums of contaminated soil from Pit# 14, one debris drum from Pit# 14 located inside waste segregation building, five fiber boxes containing bones removed from pit#14, 38 debris drums from pit#26, 6 water drums from pit#26, and 10 wet soil drums from Pit#26

End of Day Site Conditions: (weather, security, unusual) 68F, mostly clouds, wind 12mph NW

Next day activities: Characterization

Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 5/23/06, Tuesday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Joe McGinley, Landen Collins
Cabrera subcontractors Onsite: Danny Dodd of PermaFix
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 47F, Clear, wind 10mph NW

Planned Activities: Complete Pit#26 Characterization, set-up for Waste Segregation

Tailgate Topics: Trench Safety

Daily Summary

0700 all Cabrera personnel onsite, per conversations with USDA personnel on 5/22/06, we removed the remaining soil/debris from Pit #26 to better define the pit boundaries. Pit #26 is now defined by an area ~ 10' squared and to a depth of about 8'. The bottom of this pit lies on top of perch water, and if excavated further could lead to situations for which we aren't suited to handle. USDA personnel has seen pit #26 and is aware of the perch water situation. The volume of waste is equal to earlier pit excavations and the type of waste has been consistent during characterization activities for this pit (LSV & Lab packs). Client reps agree that we have met our goals for characterization activities for this pit and accepted our proposed methods for sampling the pit floor.

The southern wall of this pit shows no debris within the visual plane of the wall which indicates a defined boundary. The western wall shows signs of debris, as does the northern wall, indicating undefined boundary, thus there exists a potential of increasing the size of this pit. It is assumable that the pit floor is actually a layer of soil covering ~2' layer of waste. As with earlier pits, before backfilling begins we will bind our activities with a layer of geotech fabric. We also performed a GWS of this pit area today.

We built an 8'x8' segregation table out of ¾"plywood and 2"x6" boards. We were able to segregate four Pit #26 debris drums into 6 categories of Sharps/Animals, Soil (wet/dry), LS vials, Macro debris(wire, pipe, wood, plastic, metals), DAW (PPE/RCRA M/T containers), & paint waste. We have accumulated two drums of Macro debris. Macro stands for Macro encapsulation. Some interesting items found were an old 125-I standard, a few sample bottles dated from 1957, and sharps.

Two composite samples of the water drums were taken and sent to GEL for tritium analysis. Also sent were three bubler samples and an incoming urine sample for Danny Dodd.

1800 End of Day; site is secured w/ all personnel offsite

Deliveries: Roberts Oxygen, PO#06-628, 10 bottles of breathing air w/a return of 8 m/t's
Abbey Drums, PO# 06-592, 32 recon open head's to complete order of 50

GEL: One cooler sent, COC #008

BLT-P26-WL-01	250ml Amber	3-H only	Composite perch water
BLT-P26-WL-02	250ml Amber	3-H only	Composite perch water
BLT-P26-BA-01	20ml vial	3-H only	Bubbler
BLT-P26-BA-02	20ml vial	3-H only	Bubbler
BLT-P26-BA-03	20ml vial	3-H only	Bubbler
BLT-P26-BA-04	1l plastic		Incoming Urine

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes latex gloves, 5 packs of green nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 12 55gal steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10' x 12' aluminum trench box
Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums, 39 drums of contaminated soil from Pit# 14, one debris drum from Pit# 14 located inside waste segregation building, five fiber boxes containing bones removed from pit#14, 38 debris drums from pit#26, 6 water drums from pit#26, and 10 wet soil drums from Pit#26

End of Day Site Conditions: (weather, security, unusual) 67F, scattered clouds, wind 8mph nw

Next day activities: Segregation, soil sampling, backfill

Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 5/24/06, Wednesday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Joe McGinley, Landen Collins
Cabrera subcontractors Onsite: Danny Dodd of PermaFix
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 52F, Partly cloudy, Calm wind

Planned Activities: Dewatering Pit#26, Pit #26 soil sampling, Waste Segregation

Tailgate Topics: air monitoring inside waste segregation building

Daily Summary

0700 all Cabrera personnel onsite, Started the day by dewatering the pit. We collected a total of 6 more drums which will eventually be composite into DOT 275 gal poly tanks. These drums were secured in south field area. We were unable to collect the soils samples for this pit because we have not yet received the bottle order from GEL. Sampling activities will commence as soon as we have these bottles.
Began segregating wastes ~10am. Cabrera personnel are on supplied air while working inside the Waste Segregation Building. Because of Danny Dodd leaving the site tomorrow we are setting any bottles aside that may contain RCRA liquids, so we can perform a compatibility test on these liquids when he returns the first week of June.
GEL sample containers arrived to Residence INN early afternoon in ~20 coolers. Also received to the Motel were PPE and other materials ordered from Pine Environmental.
1630 End of Day; site is secured w/ all personnel offsite

Deliveries: n/a

GEL: n/a

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes latex gloves, 5 packs of green nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-

point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 12 55gal steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10' x 12' aluminum trench box
Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums, 39 drums of contaminated soil from Pit# 14, one debris drum from Pit# 14 located inside waste segregation building, five fiber boxes containing bones removed from pit#14, 38 debris drums from pit#26, 12 water drums from pit#26, and 10 wet soil drums from Pit#26

End of Day Site Conditions: (weather, security, unusual) 73F, Mostly cloudy, wind 12mph NW

Next day activities: Segregation, soil sampling, backfill

Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 5/25/06, Thursday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Joe McGinley, Landen Collins, Vince Barber
Cabrera subcontractors Onsite: Danny Dodd of PermaFix
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 59F, Overcast, wind 5mph SE

Planned Activities: Backfill Pit#26, Waste Segregation

Tailgate Topics: air monitoring inside waste segregation building

Daily Summary

0700 all Cabrera personnel onsite, Began the day by taking 8 representative samples of the pit floor (refer to the GEL chart for sample ID's). We took two samples from the muck leftover from pumping out the water that had infiltrated the pit, collected three samples inside the defined pit area, 2 samples from the spoil pile of dirt removed from near the bottom of the pit, plus one dup.
Also, we were able to complete the sampling of groundwater from MW's #9 & 10. These wells are located to the north of Pit #1 outside the fenced boundaries, and within three feet of one another.
Parameters used to collect the samples were turbidity less than 100 with remaining parameters falling within 10% of three previous readings. We created ~ 40 gallons of combined surplus water from groundwater sampling activities of these two wells. The water was collected into a 55gal recon drum and secured within the fence of the south field area.
Danny Dodd offsite @10am to return 5/6/06 for further waste segregation activities.
1530 End of Day; site is secured w/all personnel offsite.

Deliveries: n/a

GEL:

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport

Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes latex gloves, 5 packs of green nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 12 55gal steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10' x 12' aluminum trench box
Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums, 39 drums of contaminated soil from Pit# 14, one debris drum from Pit# 14 located inside waste segregation building, five fiber boxes containing bones removed from pit#14, 38 debris drums from pit#26, 12 water drums from pit#26, and 10 wet soil drums from Pit#26

End of Day Site Conditions: (weather, security, unusual) 76F, winds 10mph SE, Mostly cloudy

Next day activities: p/u supplies from Abbey drums, secure site, RAD surveys

Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 5/26/06, Friday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Vince Barber, Joe McGinley
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 66F, winds 6 mph SSW, Overcast

Planned Activities: secure site for long weekend, p/u supplies

Tailgate Topics: electrical safety

Daily Summary

0700 Cabrera personnel onsite Fueled all equipment and secured for the weekend. Went to p/u tanks from Abbey drums and they were not ready for delivery for to the site. Drum lifter was also not delivered to Grainger. Will p/u lifter and tanks on Tuesday of next week. Performed weekly RAD surveys. Also spoke to Phlyssa about staffing needs for the fourth pit. We will have Wade and Beverley Clark onsite 6/5/06 to meet these needs. **~1030** End of Day, site is secured w/ all personnel offsite

Deliveries: n/a

Materials Inventory:

RAD material onsite:

End of Day Site Conditions: (weather, security, unusual) 70F, light rain, winds 7mph SW

Next day activities: p/u tanks from Abbey drums/drum lifter from Grainger, locate pit#34

:

Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 5/30/06, Tuesday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Vince Barber, Landen Collins
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 72F, Partly Cloudy, calm

Planned Activities: Waste segregation, p/u supplies

Tailgate Topics: heat stress

Daily Summary

0700 Cabrera personnel onsite, We segregated five drums of waste. The most unsual items found today were sharps and A/B waste. The sharps were placed inside a pail. A/B waste were in the forms of rats and there seemed to be no biological decay. We p/u 2 poly drums, and three 275 gal water tanks from Abbey.
Personnel inside the waste segregation building wore full face respirators, electronic dosimetry, BZ's, and we had a bubbler in place. Before exiting the building the floor wqas swept and a ten smear radiological survey was performed. Grainger says drum tilt will be delivered tomorrow.
~1630 End of Day, site is secured w/ all personnel offsite

Deliveries: n/a

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes latex gloves, 5 packs of green nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 12 55gal steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10' x 12' aluminum trench box

Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums, 39 drums of contaminated soil from Pit# 14, one debris drum from Pit# 14 located inside waste segregation building, five fiber boxes containing bones removed from pit#14, 38 debris drums from pit#26, 12 water drums from pit#26, and 10 wet soil drums from Pit#26

End of Day Site Conditions: (weather, security, unusual) 90F, Scattered Clouds, 5mph South

Next day activities: p/u drum lifter from Grainger, locate pit#34, waste segregation

Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 5/31/06, Wednesday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Vince Barber, Landen Collins
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 72F, Partly Cloudy, calm

Planned Activities: Waste segregation, p/u supplies

Tailgate Topics: heat stress

Daily Summary

0700 Cabrera personnel onsite, We segregated four drums of waste. Typical waste included LSV, Debris, and soil. Some items found were used source vials fro 1966. Most other items could be considered normal waste in terms of what was expected. Joe McGinley worked on GPS maps and was not onsite for the day.
Personnel inside the waste segregation building wore full face respirators, electronic dosimeter, BZ's, and we had a bubbler in place. Before exiting the building the floor was swept and a ten smear radiological survey was performed. Grainger says drum tilt will be delivered tomorrow.
~1630 End of Day, site is secured w/ all personnel offsite

Deliveries: n/a

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
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Abbey Drums: 12 55gal steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10' x 12' aluminum trench box

Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums, 39 drums of contaminated soil from Pit# 14, one debris drum from Pit# 14 located inside waste segregation building, five fiber boxes containing bones removed from pit#14, 38 debris drums from pit#26, 12 water drums from pit#26, and 10 wet soil drums from Pit#26

End of Day Site Conditions: (weather, security, unusual) 90F, Scattered Clouds, 5mph South

Next day activities: p/u drum lifter from Grainger, locate pit#34, waste segregation

Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 6/1/06, Thursday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Vince Barber, Joe Mcginly, Landen Collins
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 68F, Scattered Clouds, calm

Planned Activities: Waste segregation, p/u supplies

Tailgate Topics: heat stress

Daily Summary

0700 Cabrera personnel onsite, we segregated five drums of waste. No unusual waste items found today. We have segregated waste from all drums from inside the building and have created enough space to move remaining unsegregated drums indoors. Personnel inside the waste segregation building wore full face respirators, electronic dosimeter, BZ's, and we had a bubbler in place. Before exiting the building the floor was swept and a ten smear radiological survey was performed. Grainger says drum tilt will be delivered tomorrow.
~1630 End of Day, site is secured w/ all personnel offsite

Deliveries: n/a

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes latex gloves, 5 packs of green nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 12 55gal steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10' x 12' aluminum trench box

Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums, 39 drums of contaminated soil from Pit# 14, one debris drum from Pit# 14 located inside waste segregation building, five fiber boxes containing bones removed from pit#14, 38 debris drums from pit#26, 12 water drums from pit#26, and 10 wet soil drums from Pit#26

End of Day Site Conditions: (weather, security, unusual) 90F, Scattered Clouds, 5mph South

Next day activities: p/u drum lifter from Grainger, locate pit#34, waste segregation

Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 6/2/06, Friday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Vince Barber, Joe Mcginly, Landen Collins
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 71F, Mostly cloudy, calm

Planned Activities: Waste segregation

Tailgate Topics: Insects & Animals

Daily Summary

0700 Cabrera personnel onsite, we segregated one drum of waste & set up building for next weeks segregation activities. No unusual waste items found today. Held a meeting with USDA personnel over the location of Pit #34.The location agreed upon was bound by pin flags The method of discovery of this pit will be to start the southern most border excavating from an E-W line will slowly proceeding north, a similar operation to Pit#26. We also performed weekly RAD surveys, mopped and disinfected waste segregation building.
Personnel inside the waste segregation building wore full face respirators, electronic dosimeter, BZ's, and we had a bubbler in place. Before exiting the building the floor was swept and a ten smear radiological survey was performed. Grainger says drum tilt will be delivered tomorrow.
~1630 End of Day, site is secured w/ all personnel offsite

Deliveries: Abbey drums delivered 25 recon drums & one case of liners

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes latex gloves, 5 packs of green nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 12 55gal steel drums

Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10’ x 12’ aluminum trench box
Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums, 39 drums of contaminated soil from Pit# 14, one debris drum from Pit# 14 located inside waste segregation building, five fiber boxes containing bones removed from pit#14, 38 debris drums from pit#26, 12 water drums from pit#26, and 10 wet soil drums from Pit#26

End of Day Site Conditions: (weather, security, unusual) 80F, Overcast, 5mph South

Next day activities: waste segregation, set-up for pit #34

Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 6/5/06, Monday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Vince Barber, Joe Mcginly, Landen Collins, Wade Fillingame, Beverle Clarke
Cabrera subcontractors Onsite: n/a
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 60F, Mostly cloudy, Winds 10mph NW
Planned Activities: Waste segregation, Pit # 34 characterization

Tailgate Topics: Snakes

Daily Summary

0700 Cabrera personnel onsite, Beverle Clarke and Wade Fillingame arrived onsite today. Performed a respirator fit test on Beverle. Wade was familiarized with RAD equipment and site procedures. Incoming urine was collected from both. Wade will handle HP duties.
After giving Beverle and Wade their site orientation, we began setting up an area around Pit #34 for characterization activities. We moved the green carport to the south about 20'. It was then restocked with PPE & other supplies. Inventories were also completed today
~1530 End of Day, site is secured w/ all personnel offsite

Deliveries: Recv'd whole body and ring badges for Wade & Beverle, Also, recv'd PPE and resp. from Pine Environmental

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
Carolina Carports: one three sided 18'x21' metal carport
Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes latex gloves, 5 packs of green nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 12 55gal steel drums
Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves

Maybe Bridge & Shoring: 1 10’ x 12’ aluminum trench box
Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums, 39 drums of contaminated soil from Pit# 14, one debris drum from Pit# 14 located inside waste segregation building, five fiber boxes containing bones removed from pit#14, 38 debris drums from pit#26, 12 water drums from pit#26, and 10 wet soil drums from Pit#26

End of Day Site Conditions: (weather, security, unusual) 71F, Mostly cloudy, calm

Next day activities: waste segregation, pit #34 characterization

Daily Report
Beltsville-LLRBS
Project #06-3070.01

Date: 6/6/06, Tuesday

Project Manager: Bob Dover
Site Representative: Joseph Voegtli
Cabrera Personnel Onsite: Vince Barber, Joe Mcginly, Landen Collins, Wade Fillingame, Beverle Clarke
Cabrera subcontractors Onsite: Danny Dodd
Other personnel: n/a

Arrival Site Conditions: (weather, security, unusual) 62F, Mostly cloudy, Winds 7mph NE
Planned Activities: Bulking Liquids, Pit # 34 characterization

Tailgate Topics: Heat Stress

Daily Summary

0700 Cabrera personnel onsite, Danny Dodd has returned to the site and began compatibility tests on liquids found during waste segregation activities. Liquids were then bulked into poly drum. This drum is aprox. 30% full.
Started searching for Pit #34. Locating activities started at the southern most boundary of the proposed location and proceeded in a northerly direction . The pit was found about 20' from this southern boundary line. Top of the pit was aprox 4' below grade and the pit is aprox. 10'x 12' square, as proposed by USDA personnel. Waste contents are mainly DAW w/some lab packs and LSV. Animal/Biological wastes have not been identified in this pit. Pit # 34 is the best defined pit we have characterized to this point. The edges are clearly definable and we have no water infiltration at this time.
~1630 End of Day, site is secured w/ all personnel offsite

Deliveries: n/a

Materials Inventory:

United Rentals: Kobelco SK220 excavator w /24" & a 48" grading bucket(s/n LLU2476) 3531.4 hrs, JD 310E 4WD Backhoe/loader 60-90HP (s/n T0310EX885536) 478hrs, Multi-quip Generator 19-29KVA (s/n DCA25SSIUC) 3285hrs
Williams Scotsman: 32'x8' Mobile Office Trailer, Two 20'x 8' Sealand containers
Roberts Oxygen: 10 bottles of breathing air (UN1002) Delv'd 4/13/06, 2 bottles propane gas (UN1075), 1 bottle P10 gas (UN1956)
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Pine Environmental: Yellow tyvek coveralls 1 case each of 2X, 3X, & 2 cases of XL, 5 boxes latex gloves, 5 packs of green nitriles (11mil), 2 North ½ resp, 2 full face resp, 2 5-point body harnesses, Saranex coveralls 1 case each of 2X, 3X, & 2 cases of XL, 2 ultralyite resp.
Abbey Drums: 12 55gal steel drums

Misc: 1 vinyl carport, 4 rolls of curlex, various hand tools, one desktop computer w/o monitor or printer, flatbed scanner, 3 boxes yellow tyvek, saranex latex gloves
Maybe Bridge & Shoring: 1 10’ x 12’ aluminum trench box
Sample containers: 27x 500ml plastic, 25x 1000ml amber glass, 14x 40ml VOA w/ HCL, 5x 1000ml plastic, 1x 1000ml plastic w/Nitric, 5x 1gallon plastic w/nitric, 2x 250ml glass w/sulphuric, 13 coolers , (*the above list constitutes four sets of water samples*)
24x 500ml plastic widemouth, 26x 250ml ambers, 8 encores

Inventory in progress

RAD material onsite: Sealed sources, LS standards, 14C & 3H Quench Standards, 39 drums of contaminated soil form Pit#1, two debris drums, 39 drums of contaminated soil from Pit# 14, one debris drum from Pit# 14 located inside waste segregation building, five fiber boxes containing bones removed from pit#14, 38 debris drums from pit#26, 12 water drums from pit#26, and 10 wet soil drums from Pit#26, 11 soil drums pit #34

End of Day Site Conditions: (weather, security, unusual) 77F, scattered clouds, winds 15mph ENE

Next day activities: waste segregation, pit #34 characterization

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1

PROJECT SUMMARY
Week Ending 16 DEC 05

- Cleared all brush and trees in both of the north and south fields of the LLRBS area. Debris from the trees that have been trimmed or removed has been piled in the respective fields until laboratory analysis provides information that will determine they can be shredded.

- Completed a geophysical survey of both fields. Computer results and analysis are pending.

- Erected the 'car port' mobile building structure that will be placed over pit #1 during excavation activities.

- Began to place gravel road base at the entrance of the south support field.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
Contract # W52PIJ-05-D-0043 / 0001
Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 23 DEC 05

WORK SUMMARY

- Began to place gravel road base at the entrance of the south support field during the week of 16 Dec, however, work was stopped due to inclement weather. Due to the wet soil conditions and the holiday schedule, no work was performed on site this week.

DIFFICULTIES ENCOUNTERED

- ERT contacted Cabrera Services on 12/22 and stated that some of the data that was collected for the geophysical survey was corrupted and that additional time would be required in the field to recollect some data.

FIELD ACTIVITY FORECAST for WEEK ENDING 30 DEC 05

- ERT has scheduled with Cabrera Services to be at the USDA – BARC LLRBS site Wednesday 12/28 to recollect data.
- A meeting between Cabrera Services and the USDA-BARC Facilities Management personnel is planned in order to discuss and price the possibility of installing electrical service to the LLRBS south field support facilities. No date/time for the meeting has been established.
- No other site activities are scheduled at this time.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
Contract # W52PIJ-05-D-0043 / 0001
Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 30 DEC 05

WORK SUMMARY

- A meeting between Cabrera Services and the USDA-BARC Facilities Management personnel occurred on Tuesday, 27 Dec at 1100 hrs to discuss the possibility of installing electrical service to the LLRBS south field support facilities. USDA-BARC Facilities manager will provide a written cost proposal to Cabrera Services during the first week of January 2006.
- ERT performed a second geophysical survey using ground-penetrating radar on Wednesday, 28 Dec. A second survey was necessary due to the possibility that data was corrupted during the first geophysical survey.
- No other activities were performed on site during this week.

DIFFICULTIES ENCOUNTERED

- None

FIELD ACTIVITY FORECAST for WEEK ENDING 06 JAN 06

- No site activities are scheduled at this time.
- The contractor for placing the concrete foundation for the material segregation building may accelerate their schedule to mobilize during this week.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
Contract # W52PIJ-05-D-0043 / 0001
Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 06 JAN 06

WORK SUMMARY

- Two informal meetings occurred between Cabrera Services (Bob Dover and Mark Mihalo) and USDA personnel (Karen Zhang and John Jensen) on Thursday, 05 Jan at 0830 and 1030 hrs to discuss the status of project workplan reviews and their impact on scheduling field activities.
- No other activities were performed on site during this week.

DIFFICULTIES ENCOUNTERED

- None

FIELD ACTIVITY FORECAST for WEEK ENDING 13 JAN 06

- Perform beta and gamma survey of area where segregation building is planned for construction.
- If building specifications are approved early in the week, then Cabrera will provide Notice to Proceed to cement contractor for building foundation. This would allow cement placement to occur during the week of January 16.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
Contract # W52PIJ-05-D-0043 / 0001
Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 13 JAN 06

WORK SUMMARY

- Completed a beta and gamma walk-over survey of the area where the waste segregation building is to be constructed. No elevated readings were detected. (In addition, the geophysical survey report was received and reviewed, and confirms no anomalies in the area of the waste segregation building).
- No other activities were performed on site during this week.

DIFFICULTIES ENCOUNTERED

- None

FIELD ACTIVITY FORECAST for WEEK ENDING 13 JAN 06

- No activities planned on site until approval for the waste segregation building is received.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
Contract # W52PIJ-05-D-0043 / 0001
Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 20 JAN 06

WORK SUMMARY

- No activities were performed on site during this week. Upon receipt of approval for building construction, Cabrera notified the concrete contractor to begin mobilization. This required a week lead time to order the rebar material for the floor.

DIFFICULTIES ENCOUNTERED

- None

FIELD ACTIVITY FORECAST for WEEK ENDING 27 JAN 06

- Mobilization of concrete contractor and preparation of foundation for material segregation building.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
Contract # W52PIJ-05-D-0043 / 0001
Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 27 JAN 06

WORK SUMMARY

- Cabrera and the concrete contractor met onsite to develop plans for earth-moving work needed prior to construction.

DIFFICULTIES ENCOUNTERED

- None

FIELD ACTIVITY FORECAST for WEEK ENDING 3 FEB 06

- Cabrera will perform final development of the gravel road in preparation for the beginning of concrete foundation work during the week starting February 6.
- Building delivery and construction is currently planned for the two-week window beginning February 13.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
Contract # W52PIJ-05-D-0043 / 0001
Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 3 Feb 06

WORK SUMMARY

- No activities were conducted onsite.
- Cabrera delivered the revised Waste Management Plan.
- Cabrera provided one copy of the Waste Management Plan, Sediment and Erosion Control Plan, and Field Logistics Plan to BARC in hard-copy so they could be submitted to EPA for review.

DIFFICULTIES ENCOUNTERED

- The field schedule for the beginning of intrusive activities may be substantially delayed if EPA approval of workplans is required.

FIELD ACTIVITY FORECAST for WEEK ENDING 10 FEB 06

- The gravel road and concrete foundation for the waste management building will be installed beginning on Monday, February 6.

UPCOMING SCHEDULE

- Building delivery and construction is currently scheduled for the two-week window beginning February 13. Delivery of the building components will occur on short notice, and may occur outside of normal business hours. If this occurs, Cabrera will coordinate the schedule with BARC security personnel.
- A revised field schedule is attached with this report. The field start date for excavation is tentatively scheduled for April 3, assuming that required workplan approvals from the NRC and EPA will take up to eight weeks. If

EPA approval is not required, the field start date may be as early as March 6.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
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Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 10 Feb 06

WORK SUMMARY

- The concrete pad for the waste management building was installed. Pictures were taken of the operation, and will be provided with next week's report.
- The gravel road from the gate to the building was installed.
- Sediment and erosion control measures were installed on and around the disturbed areas.

DIFFICULTIES ENCOUNTERED

- The top two feet of the ground surface in the south field was very wet, and unable to support either the road or the building foundation. Installation of the road and foundation required removal of this top layer, slight relocation of the road from its planned position, and substantial grading to provide an adequate base for both the building and the road. This did not substantially delay this week's efforts, but it may affect future field work involving installation of additional gravel road and driving of heavy equipment across the site.

FIELD ACTIVITY FORECAST for WEEK ENDING 17 FEB 06

- The window provided by the contractor for building delivery is from February 13 to 26. Therefore, the building may arrive during the week starting February 13. If so, construction of the building will be implemented immediately.

UPCOMING SCHEDULE

- Delivery of the building components will occur on short notice, and may occur outside of normal business hours. If this occurs, Cabrera will coordinate the schedule with BARC security personnel.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
Contract # W52PIJ-05-D-0043 / 0001
Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 17 Feb 06

WORK SUMMARY

- The concrete foundation forms, heat blankets, heavy equipment, and other materials associated with the installation of the concrete pad were removed.

DIFFICULTIES ENCOUNTERED

- None. The pad had been covered and was allowed time to cure before Sunday's snow.

FIELD ACTIVITY FORECAST for WEEK ENDING 24 FEB 06

- Cabrera is currently awaiting notification from the transporter for delivery of the building components, which is expected during the week of the 20th.

UPCOMING SCHEDULE

- The contractor for construction of the building cannot be scheduled until the materials are received. Once the materials are received, it may take 2-3 weeks to schedule the construction.
- Delivery of the building components will occur on short notice, and may occur outside of normal business hours. If this occurs, Cabrera will coordinate the schedule with BARC security personnel.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
Contract # W52PIJ-05-D-0043 / 0001
Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 24 Feb 06

WORK SUMMARY

- The building materials were delivered to the site on Wednesday, the 22nd. Cabrera is currently working to schedule construction of the building.
- A conex was received at the site, and field equipment was moved into the conex from the BARC Training Room.
- Bob Dover provided a briefing on the project to the USDA Radiation Safety Committee on Thursday, the 23rd.

DIFFICULTIES ENCOUNTERED

- None.

FIELD ACTIVITY FORECAST for WEEK ENDING 3 MAR 06

- Cabrera will conduct detailed site walkthroughs to ground-truth the geophysical results, document the exact coordinates of Pit 1, and identify the best access road and electrical service routes.

UPCOMING SCHEDULE

- Now that the building components have been received, it may take 2-3 weeks to schedule the construction.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
Contract # W52PIJ-05-D-0043 / 0001
Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 3 Mar 06

WORK SUMMARY

- A site walkthrough was conducted to confirm the boundaries of Pit 1, determine best route of access, and correlate geophysical results with surface features in the excavation area.
- Additional equipment was acquired and added to the conex box onsite.

DIFFICULTIES ENCOUNTERED

- None.

FIELD ACTIVITY FORECAST for WEEK ENDING 10 MAR 06

- Additional field equipment and the liquid scintillation counter will be moved to the site as they are acquired.

UPCOMING SCHEDULE

- The contractor for building construction has indicated that they are not available until late March.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
Contract # W52PIJ-05-D-0043 / 0001
Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 10 Mar 06

WORK SUMMARY

- No site activities were conducted during this week.

DIFFICULTIES ENCOUNTERED

- None.

FIELD ACTIVITY FORECAST for WEEK ENDING 17 MAR 06

- Additional field equipment and the liquid scintillation counter will be moved to the site as they are acquired.

UPCOMING SCHEDULE

- The contractor for building construction has indicated that they are not available until late March. No site activities are planned until building construction is complete.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
Contract # W52PIJ-05-D-0043 / 0001
Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 17 Mar 06

WORK SUMMARY

- No site activities were conducted during this week.

DIFFICULTIES ENCOUNTERED

- None.

FIELD ACTIVITY FORECAST for WEEK ENDING 23 MAR 06

- Additional field equipment and the liquid scintillation counter will be moved to the site as they are acquired.

UPCOMING SCHEDULE

- Building construction has been definitely scheduled for the week of March 27. Construction is expected to take less than one week.
- Verbal approval of the Waste Management Plan has been received from NRC.
- Based on resolution of these final obstacles, Cabrera is currently planning for groundbreaking on Trench #1 to begin on or about April 10.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
Contract # W52PIJ-05-D-0043 / 0001
Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 24 Mar 06

WORK SUMMARY

- No site activities were conducted during this week.

DIFFICULTIES ENCOUNTERED

- None.

FIELD ACTIVITY FORECAST for WEEK ENDING 31 MAR 06

- Building construction will be performed during this week.
- Additional field equipment and the liquid scintillation counter will be moved to the site as they are acquired.

UPCOMING SCHEDULE

- A Kick-off meeting is scheduled for Thursday, April 6, at 9 a.m.
- Cabrera is currently planning for groundbreaking on Trench #1 to begin on or about April 10.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
Contract # W52PIJ-05-D-0043 / 0001
Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 31 Mar 06

WORK SUMMARY

- The Waste Management Building was constructed during this week.
- Arrangements were made for delivery of office trailers, H&S equipment, radiological equipment, drums, and other field materials.

DIFFICULTIES ENCOUNTERED

- None.

FIELD ACTIVITY FORECAST for WEEK ENDING 7 APR 06

- The office trailer, field equipment, liquid scintillation counter, drums, and other field materials will be delivered or moved to the site.
- A field Kick-Off Meeting will be held on Thursday, April 6, at 9 am.

UPCOMING SCHEDULE

- The exact groundbreaking date will be determined based on additional preparations required in the building (electrical hook-ups, HEPA unit, hook-up, etc.). Cabrera is currently planning for groundbreaking on Trench #1 to begin on or about April 11, but possibly as late as April 17.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
Contract # W52PIJ-05-D-0043 / 0001
Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 7 Apr 06

WORK SUMMARY

- Worn on outfitting the Waste Management Building was conducted during the week.
- The field staff continued to receive roll-offs, waste containers, an office trailer, H&S equipment, and radiological equipment during the week.
- Project Management and field staff participated in a kick-off meeting at USDA on Thursday, April 6. The meeting included a site tour to view the facilities and disposal trench area.

DIFFICULTIES ENCOUNTERED

- None.

FIELD ACTIVITY FORECAST for WEEK ENDING 14 APR 06

- The epoxy coating will be applied to the floor of the waste building. Additional field materials will be mobilized to the site.

UPCOMING SCHEDULE

- The current projected field schedule is as follows:
- April 17 - Mobilize field staff and conduct site-specific training (including health and safety).
- April 18 through 22 (estimate) – Excavation on Trench #1.
- April 21 or 22 (estimate) – Sample soil in bottom of trench, then backfill.
- April 24 through May 5 (estimate) – Waste segregation and packaging.
- April 27 through 28 (projected) – Geoprobe soil and groundwater sampling.

Cabrera Services, Inc.
USDA – Beltsville Agricultural Research Center
Low Level Radioisotope Burial Site
Characterization – Pit #1
Contract # W52PIJ-05-D-0043 / 0001
Government Project # AG 2002-001

WEEKLY PROJECT SUMMARY
Week Ending 14 Apr 06

WORK SUMMARY

- The field staff continued to receive roll-offs, waste containers, an office trailer, H&S equipment, and radiological equipment during the week.
- Additional preparation work was completed on the waste management building, including epoxy sealing of the floor and hook-up of the HEPA ventilation system.

DIFFICULTIES ENCOUNTERED

- None.

FIELD ACTIVITY FORECAST for WEEK ENDING 21 APR 06

- Field staff for the excavation will be mobilized on Monday. Excavation is expected to begin on Wednesday morning.

UPCOMING SCHEDULE

- The current projected field schedule is as follows:
- April 17 and 18 - Mobilize field staff and conduct site-specific training (including health and safety).
- April 19 through 22 (estimate) – Excavation on Trench #1.
- April 21 or 22 (estimate) – Sample soil in bottom of trench, then backfill.
- April 24 through May 5 (estimate) – Waste segregation and packaging.
- April 27 through 28 (projected) – Geoprobe soil and groundwater sampling.

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WEEKLY PROJECT SUMMARY
Week Ending 21 Apr 06

WORK SUMMARY

- Field staff arrived onsite throughout the day on Monday, April 17. Hank Siegrist provided radiological training to USDA personnel interested in visiting the site on Monday afternoon.
- Field and Health and Safety equipment was unpacked, tested, and readied for use during the day on Tuesday and Wednesday. Initial excavation to identify the exact location of Trench #1 occurred on Wednesday afternoon, with the NW corner of the trench being identified within about 8 feet of the expected location. The trench was identified by small pieces of glass and metal debris. The trench was located about 5 feet below ground surface, and appeared to be surrounded by a packed gravel surface about 3 feet wide and 6 inches thick.
- On Thursday morning, the cover of the waste area was removed, and the pit benched to allow for entry. Entry began on Thursday afternoon, with 6 waste drums filled with soil, and one drum partially filled with metal, glass, and ceramic debris. Excavation and the resulting waste were observed by numerous USD and BARC personnel.
- PID and radiological readings were collected throughout the activity. No VOCs were detected by the PID. The only radiological detections above background levels were associated with a rusted can with a radiological symbol on it.
- Due to rain expected Friday and Saturday, the trench was covered and bermed on Friday morning to ensure that rainwater did not accumulate within the trench.
- Inspection of the site on Saturday morning indicated that the covers and berms were being effective in keeping water from the waste.

DIFFICULTIES ENCOUNTERED

- Several minor adjustments and improvements were made in field excavation and health and safety procedures, based on field conditions.
- Based on the waste excavated thus far, it appears that Trench #1 consists primarily of dry soil with small amounts (less than 10%) of glass, rusted

metal, and ceramic. No indications have been found of liquids, carcasses, biological materials, or sealed sources.

FIELD ACTIVITY FORECAST for WEEK ENDING 28 APR 06

- Excavation is expected to resume on Monday morning, April 24, weather permitting.
- Excavation, backfill, and final dressing of the trench area is expected to continue through Wednesday.
- Collection of geoprobe and groundwater samples is expected to begin on Thursday, April 27, assuming the excavation and backfill schedule goes as planned.

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WEEKLY PROJECT SUMMARY
Week Ending 28 Apr 06

WORK SUMMARY

- Cabrera continued and completed excavation on Pit 1 on Monday and Tuesday. A composite waste soil sample was collected and shipped for expedited analysis. A total of 40 drums were filled, with 2 drums of debris and 38 drums of soil.
- On Wednesday, a total of five composite soil samples were collected with sample collected from every drum. Also, the pit bottom samples were collected on Wednesday.
- Thursday, radiological surveys were completed within the pit, and on the cover soil piles surrounding the pit. The pit was then backfilled by placing the cover soil over a geotextile liner. Subsurface soil geoprobe samples were collected in the reference area on Thursday. Although water was expected at 40-45 feet, the boring was extended to 60 feet with no sign of water, so no water sample was collected.
- Geoprobe samples were collected from subsurface soil and groundwater beneath the pit on Friday. The geoprobe met refusal at a very coarse gravel layer at a depth of 32 feet. Four soil samples were collected from the interval between 14 and 32 feet deep. Then, a different boring was made without the core sampler in order to be able to get past the gravel. The smaller rod was able to penetrate to 50 feet, and groundwater samples were collected.

DIFFICULTIES ENCOUNTERED

- None.

FIELD ACTIVITY FORECAST for WEEK ENDING 5 May 06

- Groundwater samples will be collected from monitoring wells MW-9 and MW-10.
- Laboratory results will be reported to the client as soon as they are received at Cabrera.

- Field preparations will be made for supplies and equipment in order to begin excavation on Pit 14. Excavation is expected to begin no sooner than Wednesday, and possibly not until the following Monday.

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WEEKLY PROJECT SUMMARY
Week Ending 5 May 06

WORK SUMMARY

- Cabrera completed preparations for excavation of Pit 14, and began excavation on Thursday. Preparations included detailed site walkthroughs and map reviews with John Jensen, Karen Zhang, and Jack Patterson to verify the location of Pit 14 before excavation.
- Pit 14 excavation was conducted on Thursday and Friday. The excavation revealed no liquids or scintillation vials, as had been expected. Instead, the pit contained bones representing the apparent remains of three cows, along with some plastic wrapping. Excavation included segregation of the bones, pit soils, and plastic/debris into separate containers.
- Radiological surveys of the remainder of the North Field were conducted, and identified three isolated locations of elevated radiological readings in the southeast corner of the North Field. Examination of these locations identified the source as rocks – possibly rock samples that had been collected by someone, and then thrown over the fence into the LLRBS when they were no longer wanted. The rocks have been placed into a container, and will be identified.

DIFFICULTIES ENCOUNTERED

- Expedited sampling results were expected from GEL this week, but have not been received as of Friday afternoon. Results will be reported to the client as soon as they are received at Cabrera.

FIELD ACTIVITY FORECAST for WEEK ENDING 12 May 06

- Samples will be collected from the pit bottom, drums and waste containers, and two monitoring wells during this week.
- Once samples are collected, Pit 14 will have walkover surveys conducted within the pit and on cover soil outside the pit. The pit will then be backfilled and dressed for sediment and erosion control.
- Additional demob activities, such as removal of equipment, may occur, depending on a possible decision for excavation of a third pit.

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WEEKLY PROJECT SUMMARY
Week Ending 12 May 06

WORK SUMMARY

- Cabrera completed collection of soil samples and walkover surveys in the base of Pit 14. Pit 14 was backfilled and graded.
- The drums and fiber boxes containing wastes from Pit 14 were composite sampled, and the containers were moved to the waste management building area and staged.
- Preparations began for possible excavation of Pit 26. Preparations included site walkthroughs and map reviews with Jack Patterson to verify the location of Pit 26 before excavation, and the acquisition of additional drums and PPE for the excavation.

DIFFICULTIES ENCOUNTERED

- None.

FIELD ACTIVITY FORECAST for WEEK ENDING 17 May 06

- Preparations for excavation of Pit 26 will continue. Pit 26 excavation, if approved, is expected to begin on Wednesday.

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WEEKLY PROJECT SUMMARY
Week Ending 19 May 06

WORK SUMMARY

- Cabrera began excavation of Pit 26 on Wednesday. Waste encountered in the pit included liquid scintillation vials, 1-gallon glass jugs full of liquid, needles and other biological materials, and other debris. Excavation continued through Friday.
- Drums and fiber boxes containing wastes from Pit 26 were moved to the waste management building area and staged.
- Cabrera presented a briefing on the status of the project to the USDA Radiation Safety Committee meeting on May 18.
- Cabrera met with USDA staff at Pit 26 on Friday to evaluate changed field conditions and agree on an approach to management of waste that is saturated with perched water.

DIFFICULTIES ENCOUNTERED

- Pit 26 was not found in its expected location, based on the schematic maps of the pits. The pit was expected to be found directly adjacent to the fenceline – instead, the excavator was used to dig uphill from the fenceline for approximately 20 feet before waste was encountered. This raises the question of whether the map was inaccurate, or whether Pit 26 did not contain any recognizable wastes, and the pit being excavated is the next pit up the hill (Pit 25).
- The configuration of waste within Pit 26 does not match the simple 10'X12'X5' model that has been used as an assumption for these excavations. In the middle of the pit, waste was found to exist within 1 foot of the surface. In addition, there was no clear boundary of 5 feet of clear soil separating Pit 26 from the next pit to the west. There may initially have been a boundary, but the boundary has been saturated with water and undergone slumping over the years, resulting in elimination of clear pit boundaries.
- Upon breaking the wall of Pit 26, water poured out in a heavy stream, and continued to flow through Thursday morning. Water collecting in the pit was drummed, and the excavator was used to dam the water. The water level is at approximately 8 foot depth, and thus saturates waste within the

pit. The initial hope was that this was perched water within Pit 26, and would therefore be of limited volume. However, as the volume continued to flow, and as it became clear that there was no soil boundary between Pit 26 and adjacent pits, it seems that the water is a larger volume reservoir that saturates numerous pits. This presents serious difficulties with respect to full removal of the waste material from Pit 26 and sampling underneath the pit. Because no water reservoir was expected (the pit is more than 25 feet above the water table), the field staff is not equipped for large-scale water management. Also, the existence of a large-scale water reservoir with saturated waste perched above the water table presents the potential for releasing contamination to the groundwater, which is clearly undesirable. The field team met with USDA personnel in the office on Thursday afternoon, and in the field on Friday morning, to determine a course of action to achieve the goals of the characterization study without risking a release of the perched water to the water table.

FIELD ACTIVITY FORECAST for WEEK ENDING 26 May 06

- Cabrera will finalize the removal of wastes within Pit 26, and begin segregation and sampling of the wastes within the waste management building.
- Samples will be collected from the pit, and the pit will be backfilled.
- As analytical results are received from the laboratory, they will be transmitted to USDA.

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WEEKLY PROJECT SUMMARY
Week Ending 26 May 06

WORK SUMMARY

- Cabrera continued excavation of Pit 26 through Wednesday. Waste encountered in the pit included liquid scintillation vials, 1-gallon glass jugs full of liquid, needles and other biological materials, and other debris. In addition, approximately 13 drums were filled with water from perched water that had entered the pit.
- Drums containing wastes from Pit 26 were moved to the waste management building area and staged.
- Pit bottom samples were collected in locations as discussed with John Jensen in the field, and documented in an e-mail dated May 19.
- Walkover surveys were completed in the pit bottom, and the pit was backfilled on Thursday.
- Preliminary segregation activities were conducted on the Pit 26 wastes in the waste management building.

DIFFICULTIES ENCOUNTERED

- The excavation for Pit 26 did not result in finding all sides and bottom of the waste. The edge of the pit was found on the east, south, and west sides, but waste continued further than anticipated on the north side. In addition, excavation of the bottom 1-2 of wastes was not possible due to the intrusion of perched water. Conversely, the volume of waste removed was increased due to the presence of waste materials within 1 foot of the surface, instead of at 5 feet, as planned. Overall, the volume of waste materials removed exceeded the planned volume.
- Because of the water and unusual configuration of the pit, the pit bottom samples were collected as follows:

- two samples from a soil pile that had been excavated from below the waste on the east edge, before this area filled with water;
- two samples from the area east of the pit, where the perched water had ponded;
- two samples from the bottom of the west and south sidewalls; and
- two samples from as close to beneath the waste as could be managed.

- In addition, two samples were collected from the water drums for expedited analysis.

FIELD ACTIVITY FORECAST for WEEK ENDING 2 June 06

- Cabrera will continue segregation of wastes from Pit 26.
- As analytical results are received from the laboratory, they will be transmitted to USDA.

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WEEKLY PROJECT SUMMARY
Week Ending 2 June 06

WORK SUMMARY

- Cabrera continued segregation of waste liquids, scintillation vials, and lab animal carcasses (rats) from Pit 26.
- Cabrera provided analytical results to USDA staff as they were received. Results from the waste characterization samples from Pit 1 were received, and indicate that the 38 soil drums contain no elevated levels of radiological or chemical contaminants. The 2 drums of debris do contain elevated concentrations of C-14. Results have been turned over to the Cabrera waste broker and corporate Health Physicist to develop a recommendation for proper disposal alternatives.
- Cabrera continued to work with geophysical data and excavation results from Pits 1, 14, and 26 in order to pinpoint the location of Pit 34. Field staff met with John Jensen and Karen Zhang on Friday, and made a determination of where to begin excavations for Pit 34.

DIFFICULTIES ENCOUNTERED

- None

FIELD ACTIVITY FORECAST for WEEK ENDING 9 June 06

- Cabrera will continue segregation of wastes from Pit 26, including collection of waste characterization samples.
- Excavation will begin on Pit 34, probably on Monday.
- As analytical results are received from the laboratory, they will be transmitted to USDA.

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WEEKLY PROJECT SUMMARY
Week Ending 9 June 06

WORK SUMMARY

- Cabrera conducted excavation of wastes from Pit 34 starting on Tuesday. The final wastes from the pit were removed on Friday, resulting in a total of more than 70 drums of debris, scintillation vials, and other wastes.
- Cabrera continued segregation of waste liquids, scintillation vials, and lab animal carcasses (rats) from Pit 26.
- Cabrera provided analytical results to USDA staff as they were received. Results from the waste characterization samples from Pit 14 were received, and indicate that the soil drums contain elevated levels of carbon-14. The results have been turned over to the Cabrera waste broker and corporate Health Physicist to develop a recommendation for proper disposal alternatives.
- Cabrera continued to work with geophysical data and excavation results from Pits 1, 14, and 26 in order to evaluate the ability to pinpoint Pit locations from the geophysical data.

DIFFICULTIES ENCOUNTERED

- None

FIELD ACTIVITY FORECAST for WEEK ENDING 16 June 06

- Cabrera will continue segregation of wastes from Pit 26, including collection of waste characterization samples.
- Once Pit 26 waste segregation is complete, work will begin on segregating wastes from Pit 34.
- If written NRC approval is, Cabrera will conduct additional excavation to find an adjacent pit to the south of Pit 34, and excavate wastes if they are found.
- As analytical results are received from the laboratory, they will be transmitted to USDA.

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WEEKLY PROJECT SUMMARY
Week Ending 16 June 06

WORK SUMMARY

- Cabrera continued the segregation of waste liquids, scintillation vials, and lab animal carcasses (rats) from Pit 26. The segregation was completed on Friday.
- Cabrera continued to work with geophysical data and excavation results from Pits 1, 14, and 26 in order to evaluate the ability to pinpoint Pit locations from the geophysical data.

DIFFICULTIES ENCOUNTERED

- None

FIELD ACTIVITY FORECAST for WEEK ENDING 23 June 06

- Cabrera will begin segregation of wastes from Pit 34.
- Waste characterization samples from the Pit 26 drums and tanks will be collected and submitted for analysis.
- If written NRC approval is, Cabrera will conduct additional excavation to find an adjacent pit to the south of Pit 34, and excavate wastes if they are found.
- As analytical results are received from the laboratory, they will be transmitted to USDA.

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WEEKLY PROJECT SUMMARY
Week Ending 23 June 06

WORK SUMMARY

- Cabrera continued the segregation of waste liquids, scintillation vials, and lab animal carcasses (rats) from Pit 34.
- Cabrera continued to work with geophysical data and excavation results from Pits 1, 14, and 26 in order to evaluate the ability to pinpoint Pit locations from the geophysical data.

DIFFICULTIES ENCOUNTERED

- None

FIELD ACTIVITY FORECAST for WEEK ENDING 30 June 06

- Cabrera will continue segregation of wastes from Pit 34.
- The geoprobe subcontractor will be onsite to collect deep soil boring and groundwater samples from Pit 14, Pit 26, and Pit 34.
- Approval has been received to conduct additional excavation in the area of Pit 34. Cabrera will work with USDA to determine where additional excavation should be conducted, and will begin the excavation.
- As analytical results are received from the laboratory, they will be transmitted to USDA.

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WEEKLY PROJECT SUMMARY
Week Ending 30 June 06

WORK SUMMARY

- Cabrera continued the segregation of waste liquids, scintillation vials, and lab animal carcasses (rats) from Pit 34.
- Cabrera began geoprobe work to collect samples from the Reference Pit, and Pits 14, 26, and 34.
- Cabrera continued to work with geophysical data and excavation results from Pits 1, 14, and 26 in order to evaluate the ability to pinpoint Pit locations from the geophysical data.

DIFFICULTIES ENCOUNTERED

- A walkthrough of the surface of Pits 14, 26, and 34 indicated that the heavy rains had made the ground too soft for geoprobe use. These areas have undergone excavation and backfilling, and have no vegetation, making the use of the track-rig geoprobe impossible. The Reference Pit samples were collected, but the geoprobe was re-scheduled for the week of July 10 for the rest of the pits.

FIELD ACTIVITY FORECAST for WEEK ENDING 7 July 06

- Cabrera will continue segregation of wastes from Pit 34.
- Approval has been received to conduct additional excavation in the area of Pit 34. A conference call will be held on july 5 to determine the strategy and purpose for additional excavation, if necessary.
- As analytical results are received from the laboratory, they will be transmitted to USDA.

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WEEKLY PROJECT SUMMARY
Week Ending 7 July 06

WORK SUMMARY

- Cabrera continued the segregation of waste liquids, scintillation vials, and lab animal carcasses (rats) from Pit 34.
- Cabrera continued to receive analytical data, tabulate it, and transmit results to USDA by e-mail. Results from Pit 26 soil samples and Pit 26 water were provided during the week.
- Cabrera and USDA held a conference call to discuss possible disposal options for excavated wastes, and to discuss the strategy for the extension of Pit 34. Options regarding certain regulatory exemptions for carbon-14 and tritium were discussed, but it was agreed that any decisions would depend on the final analytical data. Waste Characterization results for Pit 26 are not expected for a week or two, and Waste Characterization samples for Pit 34 cannot be collected until the segregation is complete, which is expected next week. The participants agreed to begin excavation of the Pit 34 extension to the north of Pit 34. The exact extent of the extension, and amount of waste to be removed, will be based on field conditions as they are uncovered, and field discussions with USDA representatives.

DIFFICULTIES ENCOUNTERED

- Additional rain during the week continued to make the pit areas too soft for geoprobe use. The final geoprobe work is now scheduled for the week of July 17.

FIELD ACTIVITY FORECAST for WEEK ENDING 14 July 06

- Cabrera will continue segregation of wastes from Pit 34. This activity should be completed during the week.
- Cabrera will conduct excavation of the extension for Pit 34, beginning on Monday.
- As analytical results are received from the laboratory, they will be transmitted to USDA.

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WEEKLY PROJECT SUMMARY
Week Ending 14 July 06

WORK SUMMARY

- Cabrera completed the segregation of waste liquids, scintillation vials, and lab animal carcasses (rats) from Pit 34.
- Cabrera continued to receive analytical data, tabulate it, and transmit results to USDA by e-mail.
- Cabrera performed excavation of the extension to Pit 34. The extension consisted of exploratory digging to the south of Pit 34, where a pit was found and marked, and then excavation of a pit to the north of Pit 34. The excavation resulted in the development of an additional 55 drums of waste, as well as containerized water.
- The extension was sampled and then backfilled. Cabrera began segregation of the wastes from the extension pit.

DIFFICULTIES ENCOUNTERED

- Both the pit to the south and the pit to the north encountered perched water in the pits. The pit to the south was not excavated, but the identification of perched water flowing into it from the west provides information that will be needed to support ultimate decommissioning. Water from the extension pit was containerized.

FIELD ACTIVITY FORECAST for WEEK ENDING 21 July 06

- Cabrera will continue segregation of wastes from the extension of Pit 34. This activity should be completed during the week.
- Cabrera will begin demob activities, including releasing the excavator and trench box.
- The final geoprobe boring work will begin on Monday, weather permitting. This activity should take 3-4 days.
- As analytical results are received from the laboratory, they will be transmitted to USDA.

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WEEKLY PROJECT SUMMARY
Week Ending 21 July 06

WORK SUMMARY

- Cabrera continued the segregation of waste liquids, scintillation vials, and lab animal carcasses (rats) from the Pit 34 extension.
- Cabrera completed the geoprobe sampling of soils and groundwater from Pits 14, 26, and 34.
- Cabrera continued to receive, tabulate, and evaluate incoming analytical data.
- Cabrera began the demobilization of heavy equipment from the site, including the trench box and excavators.

DIFFICULTIES ENCOUNTERED

- None.

FIELD ACTIVITY FORECAST for WEEK ENDING 28 July 06

- Cabrera will continue segregation of wastes from the extension of Pit 34. This activity should be completed during the week.
- Cabrera will continue demob activities, including re-establishing the fence and providing seeding and cover for the excavated areas.
- As analytical results are received from the laboratory, they will be transmitted to USDA.

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WEEKLY PROJECT SUMMARY
Week Ending 28 July 06

WORK SUMMARY

- Cabrera completed the segregation of waste liquids, scintillation vials, and lab animal carcasses (rats) from the Pit 34 extension.
- Cabrera continued to receive, tabulate, and evaluate incoming analytical data.
- Cabrera continued the demobilization of radiological equipment and trailers from the site.

DIFFICULTIES ENCOUNTERED

- None.

FIELD ACTIVITY FORECAST for WEEK ENDING 4 August 06

- Cabrera will complete the sampling of wastes from the extension of Pit 34.
- Cabrera will complete demob activities, including completion of the fence and providing seeding and cover for the excavated areas.
- As analytical results are received from the laboratory, they will be transmitted to USDA.

APPENDIX G

Shipping Manifests