

Tennessee Valley Authority 1101 Market Street, LP 3R Chattanooga, Tennessee 37402-2801

May 12, 2010

10 CFR 50.4

ATTN: Document Control Desk U.S. Nuclear Regulatory Commission Washington, D.C. 20555-0001

> Watts Bar Nuclear Plant, Unit 1 Facility Operating License No. NPF-90 NRC Docket No. 50-390

Annual Radiological Environmental Operating Report - 2009 Subject:

In accordance with the requirements of Section 5.9.2, "Annual Radiological Environmental Operating Report," of the Watts Bar Nuclear Plant, Unit 1, Technical Specifications and the Watts Bar Nuclear Plant Offsite Dose Calculation Manual, Administrative Control Section 5.1, the 2009 Annual Radiological Environmental Operating Report and Data Supplement are enclosed. This report is due by May 15, 2010. The due date falls on Saturday, May 15, 2010. Therefore, this report is due May 17, 2010.

The report, which is prepared by TVA's Environmental Radiological Monitoring and Instrumentation organization in Muscle Shoals, Alabama, describes and summarizes the results of radioactivity measurements made in the vicinity of Watts Bar Nuclear Plant and laboratory analyses of samples collected in the area. The results of the analysis indicate that exposure to members of the general public, which may have been attributable to the operation of Watts Bar Nuclear Plant, is negligible. The radioactivity measured was primarily the result of fallout or natural background.

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There are no regulatory commitments in this letter. Please direct any questions concerning this matter to Kevin Casey, Senior Project Manager, at (423) 751-8523.

Respectfully,

R. M. Krich

Enclosures: 1. Annu

1. Annual Radiological Environmental Operating Report - 2009

2. Annual Radiological Environmental Operating Report Data

Supplement - 2009

cc (Enclosures):

NRC Regional Administrator - Region II

NRC Senior Resident Inspector - Watts Bar Nuclear Plant

Enclosure 1

Watts Bar Nuclear Plant Annual Radiological Environmental Operating Report - 2009

Annual Radiological Environmental Operating Report

Watts Bar Nuclear Plant 2009



ANNUAL ENVIRONMENTAL RADIOLOGICAL OPERATING REPORT WATTS BAR NUCLEAR PLANT 2009

TENNESSEE VALLEY AUTHORITY

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EXECUTIVE SUMMARY

This report describes the radiological environmental monitoring program conducted by TVA in the vicinity of the Watts Bar Nuclear Plant (WBN) in 2009. The program includes the collection of samples from the environment and the determination of the concentrations of radioactive materials in the samples. Samples are taken from stations in the general area of the plant and from areas that should not be influenced by plant operations. Material sampled includes air, atmospheric moisture, water, milk, food crops, soil, fish, sediment, and direct radiation levels. Results from stations near the plant are compared with concentrations from control locations and with preoperational measurements to determine potential impacts of plant operations.

The majority of environmental radioactivity measured by the program was due to naturally occurring radioactive materials or radionuclides commonly found in the environment as a result of atmospheric fallout and the operation of other nuclear facilities in the area. Low levels of Cs-137 were measured in soil, fish, and shoreline sediment samples. The Cs-137 concentrations were consistent with the preoperational monitoring program results and with levels normally found in the environment as the result of past nuclear weapons testing. Trace levels of tritium were detected in a limited number of atmospheric moisture samples. Tritium at concentrations slightly above the analytical detection limit was also detected in a small number of water samples collected from Chickamauga Reservoir. These levels would not represent a significant contribution to the radiation exposures to members of the public.

Tritium was detected in onsite ground water monitoring wells. The tritium was the result of onsite ground water contamination from previously identified and repaired leaks in plant systems. In addition, Co-58, Co-60, Cs-134, Cs-137, and Sb-125 were identified in sediment collected from the onsite Yard Holding Pond. The level of activity measured in these onsite locations would not present a risk of exposure to the general public.

INTRODUCTION

This report describes and summarizes the results of radioactivity measurements made in the vicinity of WBN and laboratory analyses of samples collected in the area. The measurements are made to comply with the requirements of 10 CFR 50, Appendix A, Criterion 64 and 10 CFR 50, Appendix I, Section IV.B.2, IV.B.3 and IV.C and to determine potential effects on public health and safety. This report satisfies the annual reporting requirements of WBN Technical Specification 5.9.2 and Offsite Dose Calculation Manual (ODCM) Administrative Control 5.1. In addition to reporting the data prescribed by specific requirements, other information is included to help correlate the significance of results measured by this monitoring program to the levels of environmental radiation resulting from naturally occurring radioactive materials.

Naturally Occurring and Background Radioactivity

Most materials in our world today contain trace amounts of naturally occurring radioactivity. Potassium-40 (K-40), with a half-life of 1.3 billion years, is one of the major types of radioactive materials found naturally in our environment. Approximately 0.01 percent of all potassium is radioactive potassium-40. Other examples of naturally occurring radioactive materials are beryllium (Be)-7, bismuth (Bi)-212 and 214, lead (Pb)-212 and 214, thallium (Tl)-208, actinium (Ac)-228, uranium (U)-238 and 235, thorium (Th)-234, radium (Ra)-226, radon (Ra)-222, carbon (C) -14, and hydrogen (H)-3 (generally called tritium). These naturally occurring radioactive materials are in the soil, our food, our drinking water, and our bodies. The radiation from these materials makes up a part of the low-level natural background radiation. The remainder of the natural background radiation results from cosmic rays.

It is possible to get an idea of the relative hazard of different types of radiation sources by evaluating the amount of radiation the U.S. population receives from each general type of radiation source. The information below is primarily adapted from References 2 and 3.

U.S. GENERAL POPULATION AVERAGE DOSE EQUIVALENT ESTIMATES

Source	Millirem/Year Per Person		
Natural background dose equivalent			
Cosmic	27		
Cosmogenic	1		
Terrestrial	28		
In the body	39		
Radon	200		
Total	295		
Release of radioactive material in natural gas, mining, ore processing, etc.	5		
Medical (effective dose equivalent)	53		
Nuclear weapons fallout	less than 1		
Nuclear energy	0.28		
Consumer products	0.03		
Total	355 (approximately)		

As can be seen from the data presented above, natural background radiation dose equivalent to the U.S. population normally exceeds that from nuclear plants by several hundred times. This indicates that nuclear plant operations normally result in a population radiation dose equivalent which is insignificant compared to that which results from natural background radiation. It should be noted that the use of radiation and radioactive materials for medical uses has resulted in a similar effective dose equivalent to the U.S. population as that caused by natural background cosmic and terrestrial radiation.

Electric Power Production

Nuclear power plants are similar in many respects to conventional coal burning (or other fossil fuel) electrical generating plants. The basic process behind electrical power production in both types of plants is that fuel is used to heat water to produce steam which provides the force to turn

turbines and generators. In a nuclear power plant, the fuel is uranium and heat is produced in the

reactor through the fission of the uranium. Nuclear plants include many complex systems to

control the nuclear fission process and to safeguard against the possibility of reactor malfunction.

The nuclear reactions produce radionuclides commonly referred to as fission and activation

products. Very small amounts of these fission and activation products are released into the plant

systems. This radioactive material can be transported throughout plant systems and some of it

released to the environment.

Paths through which radioactivity from a nuclear power plant is routinely released are monitored.

Liquid and gaseous effluent monitors record the radiation levels for each release. These monitors

also provide alarm mechanisms to prompt termination of any release above limits.

Releases are monitored at the onsite points of release and through the radiological environmental

monitoring program which measures the environmental radiation in areas around the plant. In

this way, the release of radioactive materials from the plant is tightly controlled, and verification

is provided that the public is not exposed to significant levels of radiation or radioactive

materials as the result of plant operations.

The WBN ODCM, which describes the program required by the plant Technical Specifications,

prescribes limits for the release of radioactive effluents, as well as limits for doses to the general

public from the release of these effluents.

The dose to a member of the general public from radioactive materials released to unrestricted

areas, as given in NRC guidelines and the ODCM, is limited as follows:

Liquid Effluents

Total body

≤3 mrem/year

Any organ

≤10 mrem/year

-4-

Gaseous Effluents

Noble gases:

Gamma radiation

≤10 mrad/year

Beta radiation

≤20 mrad/year

Particulates:

Any organ

≤15 mrem/year

The EPA limits for the total dose to the public in the vicinity of a nuclear power plant, established in the Environmental Dose Standard of 40 CFR 190, are as follows:

Total body

≤25 mrem/year

Thyroid

<75 mrem/year

Any other organ

≤25 mrem/year

Appendix B to 10 CFR 20 presents annual average limits for the concentrations of radioactive materials released in gaseous and liquid effluents at the boundary of the unrestricted areas. Table 1 of this report presents the annual average concentration limits for the principal radionuclides associated with nuclear power plant effluents. The table also presents (1) the concentrations of radioactive materials in the environment which would require a special report to the NRC and (2) the detection limits for measured radionculides. It should be noted that the levels of radioactive materials measured in the environment are typically below or only slightly above the lower limit of detection.

SITE/PLANT DESCRIPTION

The WBN site is located in Rhea county, Tennessee, on the west bank of the Tennessee River at Tennessee River Mile (TRM) 528. Figure 1 shows the site in relation to other TVA projects. The WBN site, containing approximately 1770 acres on Chickamauga Lake, is approximately 2 miles south of the Watts Bar Dam and approximately 31 miles north-northeast of TVA's Sequoyah Nuclear Plant (SQN) site. Also located within the reservation are the Watts Bar Dam and Hydro-Electric Plant, the Watts Bar Steam Plant (not in operation), the TVA Central Maintenance Facility, and the Watts Bar Resort Area.

Approximately 16,000 people live within 10 miles of the WBN site. More than 80 percent of these live between 5 and 10 miles from the site. Two small towns, Spring City and Decatur, are located in this area. Spring City, with a population of approximately 2,200, is northwest and north-northwest from the site, while Decatur, with about 1,400 people, is south and south-southwest from the plant. The remainder of the area within 10 miles of the site is sparsely populated, consisting primarily of small farms and individual residences.

The area between 10 and 50 miles from the site includes portions of the cities of Chattanooga and Knoxville. The largest urban concentration in this area is the city of Chattanooga, located to the southwest and south-southwest. The city of Chattanooga has a population of about 155,000, with approximately 80 percent located between 40 and 50 miles from the site and the remainder located beyond 50 miles. The city of Knoxville is located to the east-northeast, with not more than 10 percent of its 177,000 plus people living within 50 miles of the site. Three smaller urban areas of greater than 20,000 people are located between 30 and 40 miles from the site. Oak Ridge is approximately 40 miles to the northeast, the twin cities of Alcoa and Maryville are located 45 to 50 miles to the east-northeast, and Cleveland is located about 30 miles to the south.

Chickamauga Reservoir is one of a series of highly controlled multiple-use reservoirs whose primary uses are flood control, navigation, and the generation of electric power. Secondary

uses include industrial and public water supply and waste disposal, fishing, and recreation. Public access areas, boat docks, and residential subdivisions have been developed along the reservoir shoreline.

WBN consists of two pressurized water reactors. WBN Unit 1 received a low power operating license (NPF-20) on November 9, 1995, and achieved initial criticality in January 1996. The full power operating license (NPF-90) was received on February 7, 1996. Commercial operation was achieved May 25, 1996. WBN Unit 2 was deferred October 24, 2000, in accordance with the guidance in Generic Letter 87-15, "Policy Statement on Deferred Plants." On August 3, 2007, TVA provided notice of its intent to reactivate and complete construction of WBN Unit 2. WBN Unit 2 resumed construction in late 2007, and expects to complete construction and request an operating license by April 2012.

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Most of the radiation and radioactivity generated in a nuclear power reactor is contained within the reactor systems. Plant effluent radiation monitors are designed to monitor radionuclides released to the environment. Environmental monitoring is a final verification that the systems are performing as planned. The monitoring program is designed to monitor the pathways between the plant and the people in the immediate vicinity of the plant. Sample types are chosen so that the potential for detection of radioactivity in the environment will be maximized. The Radiological Environmental Monitoring Program (REMP) for WBN is outlined in Appendix A.

There are two primary pathways by which radioactivity can move through the environment to humans: air and water (see Figure 2). The air pathway can be separated into two components: the direct (airborne) pathway and the indirect (ground or terrestrial) pathway. The direct airborne pathway consists of direct radiation and inhalation by humans. In the terrestrial pathway, radioactive materials may be deposited on the ground or on plants and subsequently ingested by animals and/or humans. Human exposure through the liquid pathway may result from drinking water, eating fish, or by direct exposure at the shoreline. The types of samples collected in this program are designed to monitor these pathways.

A number of factors were considered in determining the locations for collecting environmental samples. The locations for the atmospheric monitoring stations were determined from a critical pathway analysis based on weather patterns, dose projections, population distribution, and land use. Terrestrial sampling stations were selected after reviewing such things as the locations of dairy animals and gardens in conjunction with the air pathway analysis. Liquid pathway stations were selected based on dose projections, water use information, and availability of media such as fish and sediment. Table A-2 (Appendix A, Table 2: This notation system is used for all tables and figures given in the appendices.) lists the sampling stations and the types of samples collected from each. Modifications made in the WBN REMP in 2009 are described in Appendix B.

Deviations occur in the monitoring program due to equipment problems with automatic sampling systems, sample unavailability or when analyses cannot be completed. Deviations to the sampling and analysis schedule during 2009 are described in Appendix C.

To determine the amount of radioactivity in the environment prior to the operation of WBN, a preoperational radiological environmental monitoring program was initiated in December 1976 and operated through December 31, 1995. Measurements of the same types of radioactive materials that are measured currently were assessed during the preoperational phase to establish normal background levels for various radionuclides in the environment. During the 1950s, 60s, and 70s, atmospheric nuclear weapons testing released radioactive material to the environment causing fluctuations in background radiation levels. Knowledge of preexisting radionuclide patterns in the environment permits a determination, through comparison and trending analyses, of the actual environmental impact of WBN operation.

The determination of environmental impact during the operating phase also considers the presence of control stations that have been established in the environment. Results of environmental samples taken at control stations (far from the plant) are compared with those from indicator stations (near the plant) to aid in the determination of the impacts from WBN operation.

The sample analysis is performed by TVA's Environmental Radiological Monitoring and Instrumentation (ERM&I) group located at the Western Area Radiological Laboratory (WARL) in Muscle Shoals, Alabama, except for the Sr-89, 90 analysis of soil samples which was performed by a contract laboratory. Analyses are conducted in accordance with written and approved procedures and are based on accepted methods. A summary of the analysis techniques and methodology is presented in Appendix D. Data tables summarizing the sample analysis results are presented in Appendix H. The Data Supplement to this report contains the results of all measurements made as a part of this program.

The radiation detection devices and analysis methods used to determine the radionuclide content of samples collected in the environment are very sensitive to small amounts of radioactivity. The sensitivity of the measurement process is defined in terms of the lower limit of detection (LLD). A description of the nominal LLDs for the ERM&I laboratory is presented in Appendix E.

The ERM&I laboratory operates under a comprehensive quality assurance/quality control program to monitor laboratory performance throughout the year. The program is intended to detect any problems in the measurement process as soon as possible so they can be corrected. This program includes equipment checks to ensure that the radiation detection instruments are working properly and the analysis of quality control samples which are included alongside routine environmental samples. To provide for interlaboratory comparison program, the laboratory participates in an environmental cross-check program administered by Eckert and Ziegler Analytics. A complete description of the program is presented in Appendix F.

DIRECT RADIATION MONITORING

Direct radiation levels are measured at various monitoring points around the plant site. These measurements include contributions from cosmic radiation, radioactivity in the ground, fallout from atmospheric nuclear weapons tests conducted in the past, and any radioactivity that may be present as a result of plant operations. Because of the relatively large variations in background radiation as compared to the small levels from the plant, contributions from the plant may be difficult to distinguish.

Measurement Techniques

The Landauer InLight environmental dosimeter is used in the radiological environmental monitoring program for the measurement of direct radiation. This dosimeter contains four elements consisting of aluminum oxide detectors with varying plastic and copper filtrations to provide qualitative information about conditions during the exposure.

The dosimeters are placed approximately 1 meter above the ground, with two at each monitoring location. Sixteen monitoring points are located around the plant near the site boundary, one location in each of the 16 compass sectors. One monitoring point is also located in each of the 16 compass sectors at a distance of approximately four to five miles from the plant.

Dosimeters are also placed at additional monitoring locations out to approximately 15 miles from the site. The dosimeters are exchanged every 3 months. The dosimeters are sent to Landauer for processing and results reporting. The values are corrected for transit and shielded background exposure. An average of the two dosimeter results is calculated for each monitoring point. The system meets or exceeds the performance specifications outlined in ANSI N545-1975 and HPS Draft Standard N13.29 for environmental applications of dosimeters.

Results

The results for environmental dosimeter measurements are normalized to a standard quarter (91.25 days or 2190 hours). The monitoring locations are grouped according to the distance from the plant. The first group consists of all monitoring points within 2 miles of the plant. The second group is made up of all locations greater than 2 miles from the plant. Past data have shown that the average results from the locations more than 2 miles from the plant are essentially the same. Therefore, for purposes of this report, monitoring points 2 miles or less from the plant are identified as "onsite" stations and locations greater than 2 miles are considered "offsite."

The quarterly gamma radiation levels determined from the dosimeters deployed around WBN in 2009 are summarized in Table H-1. The exposures are measured in milliroentgens (mR). For purposes of this report, one milliroentgen, one millirem (mrem) and one millirad (mrad) are assumed to be numerically equivalent.

The rounded average annual exposures, as measured in 2009, are shown below. For comparison purposes, the average direct radiation measurements made in the preoperational phase of the monitoring program are also shown.

Annual WBN Average Direct Radiation Levels mR/Year

		Preoperational
	<u>2009</u>	Average
Onsite Stations	48	65
Offsite Stations	44	57

The data in Table H-1 indicate that the average quarterly direct radiation levels at the WBN onsite stations are approximately 1.0 mR/quarter higher than levels at the offsite stations. This difference is consistent with levels measured for the preoperation and

construction phases of TVA nuclear power plant sites where the average levels onsite were slightly higher than levels offsite. Figure H-1 compares plots of the data from the onsite stations with those from the offsite stations over the period from 1977 through 2009. The results from the new Landauer InLight dosimeters are lower across all locations when compared to the results previously obtained using the Panasonic UD-814 dosimeters. This difference is most likely due to the manner in how background badge data was applied for the in house processing of Panasonic dosimeters as compared to the method used by the vendor.

The data in Table H-2 contains the results of the individual monitoring stations. The results reported in 2009 are consistent with direct radiation levels identified at locations which are not influenced by the operation of WBN. There is no indication that WBN activities increased the background radiation levels normally observed in the areas surrounding the plant.

ATMOSPHERIC MONITORING

The atmospheric monitoring network is divided into three groups identified as local, perimeter, and remote. Four local air monitoring stations are located on or adjacent to the plant site in the general directions of greatest wind frequency. Four perimeter air monitoring stations are located between 6 to 11 miles from the plant, and two air monitors are located out to 15 miles and used as control or baseline stations. The monitoring program and the locations of monitoring stations are identified in the tables and figures of Appendix A.

Results from the analysis of samples in the atmospheric pathway are presented in Tables H-3, H-4, and H-5. Radioactivity levels identified in this reporting period are consistent with background and preoperational program data. There is no indication of an increase in atmospheric radioactivity as a result of WBN.

Sample Collection and Analysis

Air particulates are collected by continuously sampling air at a flow rate of approximately 2 cubic feet per minute (cfm) through a 2-inch glass fiber filter. The sampling system consists of a pump, a magnehelic gauge for measuring the drop in pressure across the system, and a dry gas meter to measure the total volume of air sampled. This system is housed in a building approximately 2 feet by 3 feet by 4 feet. The filter is contained in a sampling head mounted on the outside of the monitor building. The filter is replaced weekly. Each filter is analyzed for gross beta activity about 3 days after collection to allow time for the radon daughters to decay. Every 4 weeks composites of the filters from each location are analyzed by gamma spectroscopy.

Gaseous radioiodine is sampled using a commercially available cartridge containing TEDA-impregnated charcoal. This system is designed to collect iodine in both the elemental form and as organic compounds. The cartridge is located in the same sampling head as the air particulate

filter and is downstream of the particulate filter. The cartridge is changed at the same time as the particulate filter and samples the same volume of air. Each cartridge is analyzed for I-131 by gamma spectroscopy analysis.

Atmospheric moisture sampling is conducted by pulling air at a constant flow rate through a column loaded with approximately 400 grams of silica gel. Every two weeks, the column is exchanged on the sampler. The atmospheric moisture is removed from silica gel by heating and analyzed for tritium.

Results

The results from the analysis of air particulate samples are summarized in Table H-3. Gross beta activity in 2009 was consistent with levels reported in previous years. The average gross beta activity measured for air particulate samples was $0.021 \,\mathrm{pCi/m^3}$. The annual averages of the gross beta activity in air particulate filters at these stations for the period 1977-2009 are presented in Figure H-2. Increased levels due to fallout from atmospheric nuclear weapons testing are evident in the years prior to 1981 and a small increase from the Chernobyl accident can be seen in 1986. These patterns are consistent with data from monitoring programs conducted by TVA at other nuclear power plant construction sites. Comparison with the same data for the preoperational period of 1990-1995 indicates that the annual average gross beta activity for air particulates as measured in the 2009 monitoring program was consistent with the preoperational data.

Only natural radioactive materials were identified by the monthly gamma spectral analysis of the air particulate samples. As shown in Table H-4, I-131 was not detected in any charcoal cartridge samples collected in 2009.

The results for atmospheric moisture sampling are reported in Table H-5. Tritium was measured in a limited number of atmospheric moisture samples at levels slightly above the nominal LLD value of 3.0 pCi/cubic meter.

TERRESTRIAL MONITORING

Terrestrial monitoring is accomplished by collecting samples of environmental media that may transport radioactive material from the atmosphere to humans. For example, radioactive material may be deposited on a vegetable garden and be ingested along with the vegetables or it may be deposited on pasture grass where dairy cattle are grazing. When the cow ingests the radioactive material, some of it may be transferred to the milk and consumed by humans who drink the milk. Therefore, samples of milk, soil, and food crops are collected and analyzed to determine potential impacts from exposure through this pathway. The results from the analysis of these samples are shown in Tables H-6 through H-12.

A land use survey is conducted annually between April and October to identify the location of the nearest milk animal, the nearest residence, and the nearest garden of greater than 500 square feet producing fresh leafy vegetables in each of 16 meteorological sectors within a distance of 5 miles from the plant. This land use survey satisfies the requirements 10 CFR 50, Appendix I, Section IV.B.3. From data produced by the land use survey, radiation doses are projected for individuals living near the plant. Doses from air submersion are calculated for the nearest residence in each sector, while doses from drinking milk or eating foods produced near the plant are calculated for the areas with milk-producing animals and gardens, respectively. These dose projections are hypothetical extremes and do not represent actual doses to the general public. The results of the 2009 land use survey are presented in Appendix G.

Sample Collection and Analysis

Milk samples are collected every 2 weeks from two indicator dairies and from at least one control dairy. Milk samples are placed on ice for transport to the radioanalytical laboratory. A specific analysis for I-131 and a gamma spectral analysis are performed on each sample and once per quarter samples are analyzed for Sr-89 and Sr-90.

The monitoring program includes a provision for sampling of vegetation from locations where milk is being produced and when milk sampling cannot be conducted. There were no periods during 2009 when vegetation sampling was necessary.

Soil samples are collected annually from the air monitoring locations. The samples are collected with either a "cookie cutter" or an auger type sampler. After drying and grinding, the sample is analyzed by gamma spectroscopy. When the gamma analysis is complete, the sample is analyzed for Sr-89 and Sr-90.

Samples representative of food crops raised in the area near the plant are obtained from individual gardens, corner markets, or cooperatives. Types of foods may vary from year to year as a result of changes in the local vegetable gardens. In 2009, samples of apples, cabbage, corn, green beans, and tomatoes, were collected from local vegetable gardens and/or farms. Samples of the same food products grown in areas that would not be effected by the plant were collected as control samples. The edible portion of each sample is analyzed by gamma spectroscopy.

Results

The results from the analysis of milk samples are presented in Table H-6. All I-131 values were below the established nominal LLD of 0.4 pCi/liter. The results for the quarterly Sr-89, Sr-90 analysis were below the established LLD's for these analyses. The gamma isotopic analysis detected only naturally occurring radionuclides.

Consistent with most of the environment, Cs-137 was detected in the majority of the soil samples collected in 2009. The maximum concentration of Cs-137 was 1.23 pCi/g. The concentrations were consistent with levels previously reported from fallout. All other radionuclides reported were naturally occurring isotopes. The results of the analysis of soil samples are summarized in Table H-7.

A plot of the annual average Cs-137 concentrations in soil is presented in Figure H-3. Concentrations of Cs-137 in soil are steadily decreasing as a result of the cessation of weapons testing in the atmosphere, the 30 year half-life of Cs-137, and transport through the environment.

The radionuclides measured in food samples were naturally occurring. The results are reported in Tables H-8 through H-12.

LIQUID PATHWAY MONITORING

Potential exposures from the liquid pathway can occur from drinking water, ingestion of fish, or from direct radiation exposure from radioactive materials deposited in the shoreline sediment. The aquatic monitoring program includes the collection of samples of river (surface) water, ground water, drinking water supplies, fish, and shoreline sediment. Indicator samples were collected downstream of the plant and control samples collected within the reservoir upstream of the plant or in the next upstream reservoir (Watts Bar Lake).

Results from the analysis of the liquid pathway samples are presented in Table H-13 through H-19. Radioactivity levels in surface and public water, fish, and shoreline sediment were consistent with background and/or fallout levels previously reported. Low levels of Cs-137 were measured in samples of shoreline sediment and fish. Low levels of tritium were detected in a limited number of water samples collected in Chickamauga Reservoir. Results for the sediment sampling conducted in the onsite Yard Holding Pond and ground water monitoring in onsite wells are discussed later in this section.

Sample Collection and Analysis

Samples of surface water are collected from the Tennessee River using automatic sampling systems from two downstream stations and one upstream station. A timer turns on the system at least once every 2 hours. The line is flushed and a sample collected into a composite container. A l-gallon sample is removed from the container at 4-week intervals and the remaining water is discarded. Each sample is analyzed for gamma-emitting radionculides, gross beta activity, and tritium.

Samples are also collected by an automatic sampling system at the first two downstream drinking water intakes. These samples are collected in the same manner as the surface water samples.

These monthly samples are analyzed for gamma-emitting radionuclides, gross beta activity, and tritium. The samples collected by the automatic sampling device are taken directly from the river at the intake structure. Since the sample at this point is raw water, the upstream surface water sample is used as a control sample for drinking water.

Ground water is sampled from one onsite well down gradient from the plant, one onsite well up gradient from the plant, and four additional onsite ground water monitoring wells located along underground discharge lines. The onsite wells are sampled with a continuous sampling system. A composite sample is collected from the onsite wells every four weeks and analyzed for gamma-emitting radionuclides, gross beta activity, and tritium content. In addition, a grab sample is collected every four weeks from a private well in an area unaffected by WBN. The grab sample is also analyzed for gross beta activity, gamma-emitting radionuclides, and for tritium.

Samples of commercial and game fish species are collected semiannually from each of two reservoirs: the reservoir on which the plant is located (Chickamauga Reservoir) and the upstream reservoir (Watts Bar Reservoir). The samples are collected using a combination of netting techniques and electrofishing. The ODCM specifies analysis of the edible portion of the fish. To comply with this requirement, filleted portions are taken from several fish of each species. The samples are analyzed by gamma spectroscopy.

Samples of shoreline sediment are collected from recreation areas in the vicinity of the plant. The samples are dried, ground, and analyzed by gamma spectroscopy.

Samples of sediment are also collected from the onsite Yard Holding Pond. A total of five samples were collected in 2009. The samples are dried, ground, and analyzed by gamma spectroscopy.

Results

Gross beta activity was detectable above the nominal LLD in most of the surface water samples. The gross beta concentrations averaged 2.8 pCi/liter in downstream samples and 2.6 pCi/liter in upstream samples. These levels were consistent with results found during the preoperational monitoring program. A summary table of the results for surface water samples is shown in Table H-13.

No fission or activation products were identified by the gamma analysis of drinking water samples from either of two downstream monitoring locations. Average gross beta activity at downstream stations was 2.7 pCi/liter and the average for upstream station was also 2.6 pCi/liter. Low levels of tritium were detected in a total of five samples collected from the two downstream public water sampling locations. The measurable tritium levels occurred during a period of unusually low river flows. The highest tritium concentration detected was 363 pCi/L. This concentration is less than five percent of EPA safe drinking water limit of 20,000 pCi/L. The results are shown in Table H-14. Trend plots of the gross beta activity in surface water and drinking water samples from 1977 through 2009 are presented in Figure H-4.

The gamma isotopic analysis of ground water samples identified only naturally occurring radionuclides. Gross beta concentrations in samples from the onsite indicator locations averaged 3.0 pCi/liter. The average gross beta activity for samples from the control locations was 3.3 pCi/liter. Tritium was detected in samples from the onsite monitoring wells located near plant discharge lines. The tritium in onsite ground water was the result of previously identified leaks from plant systems. Repairs were made to resolve the leaks but the plume of contaminated ground water continues to move slowly across the site toward the river. The highest tritium concentration in samples from these monitoring locations was 3,420 pCi/L. There was no tritium detected in the onsite up gradient well or the offsite ground water monitoring location. The results are presented in Table H-15.

Measurable levels of Cs-137 were identified in the majority of the fish samples. The maximum Cs-137 concentration was 0.08 pCi/g measured in game fish collected at the upstream control location. Other radioisotopes found in fish were naturally occurring, with the most notable being K-40. The results are summarized in Tables H-16 and H-17. Trend plots of the annual average Cs-137 concentrations measured in fish samples are presented in Figure H-5. The Cs-137 activities are consistent with preoperational results produced by fallout or effluents from other nuclear facilities.

Cs-137 consistent with the concentrations present in the environment as the result of past nuclear weapons testing or other nuclear operations in the area was measured in one sample of shoreline sediment. The results for the analysis of shoreline sediment is presented in Table H-18. Trend plots of the average concentration of Cs-137 in shoreline sediment are presented in Figure H-6.

Consistent with previous monitoring conducted for the onsite ponds, Cs-137 was detected in the sediment samples. The average of the Cs-137 levels measured in sediment from the onsite ponds was 0.11 pCi/gm. In addition, Co-58, Co-60, Cs-134, and Sb-125 were also detected in some of the samples collected from the Yard Holding Pond. The results for the analysis of pond sediment samples are provided in Table H-19. Since these radionuclides were present in relatively low concentrations and confined to the Yard Holding Pond located in the owner controlled area not open to the general public, the presence of these radionuclides would not represent an increased risk of exposure to the general public.

ASSESSMENT AND EVALUATION

Potential doses to the public are estimated from measured effluents using computer models. These models were developed by TVA and are based on guidance provided by the NRC in Regulatory Guide 1.109 for determining the potential dose to individuals and populations living in the vicinity of the plant. The results of the effluent dose calculations are reported in the Annual Radiological Effluent Release Report. The doses calculated are a representation of the dose to a "maximum exposed individual." Some of the factors used in these calculations (such as ingestion rates) are maximum expected values which will tend to overestimate the dose to the "hypothetical" person. The calculated maximum dose due to plant effluents are small fractions of the applicable regulatory limits. In reality, the expected dose to actual individuals is significantly lower.

Based on the very low concentrations of radionuclides actually present in the plant effluents, radioactivity levels measured in the environment as result of plant operations are expected to be negligible. The results for the radiological environmental monitoring conducted for the WBN 2009 operations confirm this expectation.

Results

As stated earlier in this report, the estimated increase in radiation dose equivalent to the general public resulting from the operation of WBN is insignificant when compared to the dose from natural background radiation. The results from each environmental sample are compared with the concentrations from the corresponding control stations and appropriate preoperational and background data to determine influences from the plant. During this report period, Cs-137 was detected in shoreline sediment, soil, and fish collected for the WBN program. The Cs-137 concentrations measured were consistent with levels measured during the preoperational monitoring program. The low levels of tritium measured in water samples from Chickamauga Reservoir represented concentrations that were a small fraction of the EPA drinking water limit.

The levels of tritium detected in the onsite ground water monitoring wells and the radionuclides measured in samples of sediment from the Yard Holding Pond do not represent an increased risk of exposure to the public. These radionuclides were limited to the owner controlled area and would not present an exposure pathway for the general public.

Conclusions

It is concluded from the above analysis of environmental samples and from the trend plots presented in Appendix H, that exposure to members of the general public which may have been attributable to WBN is negligible. The radioactivity reported herein is primarily the result of fallout or natural background. Any activity which may be present in the environment as a result of plant operations does not represent a significant contribution to the exposure of Members of the Public.

REFERENCES

- 1. Merril Eisenbud, Environmental Radioactivity, Academic Press, Inc., New York, NY, 1987.
- 2. National Council on Radiation Protection and Measurements, Report No. 93, "Ionizing Radiation Exposure of the Population of the United States," September 1987.
- 3. United States Nuclear Regulatory Commission, Regulatory Guide 8.29, "Instruction Concerning Risks from Occupational Radiation Exposure," July 1981.

Table 1

COMPARISON OF PROGRAM LOWER LIMITS OF DETECTION WITH THE REGULATORY LIMITS FOR MAXIMUM ANNUAL AVERAGE EFFLUENT CONCENTRATIONS RELEASED TO UNRESTRICTED AREAS AND REPORTING LEVELS

	Concentrations in Water, pCi/Liter			Concentrations in Air, pCi/Cubic Meter		
	Effluent	Reporting	Lower limit	Effluent	Reporting	Lower limit
	Concentration ¹	Level ² _	of Detection ³	Concentration ¹	<u>Level²</u>	of Detection ³
11.0	1 000 000	20.000	270	100.000		2.00
H-3	1,000,000	20,000	270	100,000		3.00
Cr-51	500,000		45	30,000		0.02
Mn-54	30,000	1,000	5	1,000		0.005
Co-58	20,000	1,000	5	1,000		0.005
Co-60	3,000	300	5	50		0.005
Zn-65	5,000	300	. 10	400		0.005
Sr-89	8,000		5	1,000		0.0011
Sr-90	500		2	6		0.0004
Nb-95	30,000	400	5	2,000		0.005
Zr-95	20,000	400	10	400		0.005
Ru-103	30,000		5	900		0.005
Ru-106	3,000		40	20		0.02
I-131	1,000	2	0.4	200	0.9	0.03
Cs-134	900	30	5	200	10	0.005
Cs-137	1,000	50	5	200	20	0.005
Ce-144	3,000		30	40		0.01
Ba-140	8,000	200	25	2,000		0.015
La-140	9,000	200	10	2,000		0.01

Note: $1 \text{ pCi} = 3.7 \times 10^{-2} \text{ Bq}$.

Note: For those reporting levels that are blank, no value is given in the reference.

1 Source: Table 2 of Appendix B to 10 CFR 20.1001-20.2401

2 Source: WBN Offsite Dose Calculation Manual, Table 2.3-2

3 Source: Table E-1 of this report.

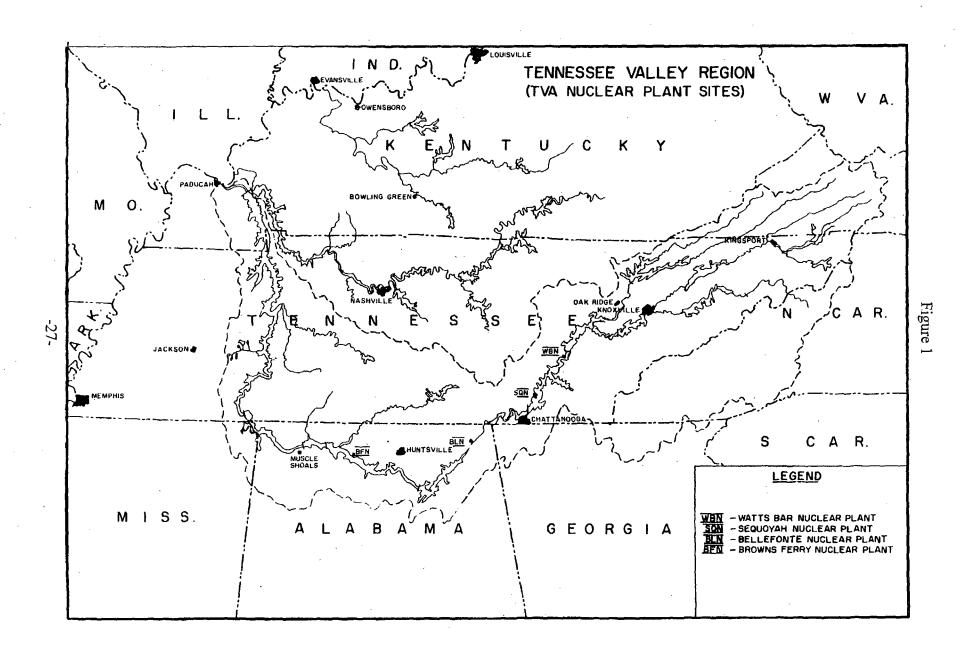
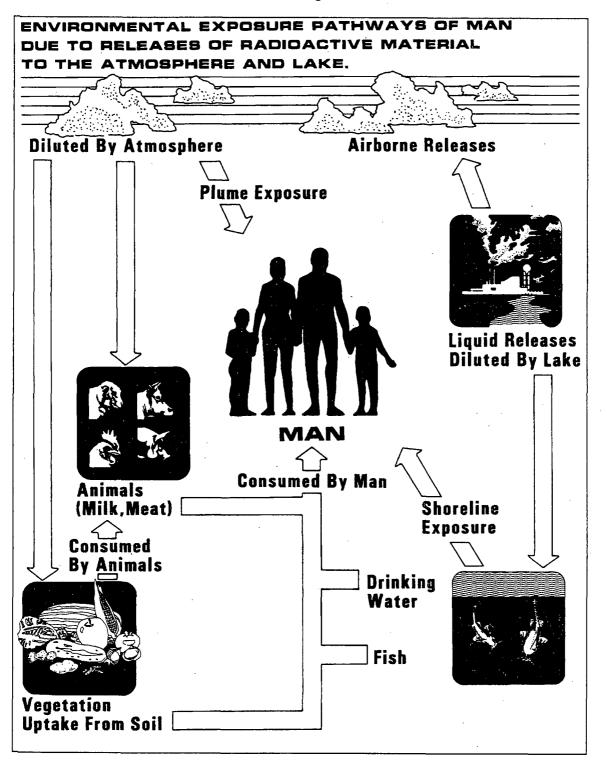


Figure 2



APPENDIX A

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM AND SAMPLING LOCATIONS

Table A-1

WATTS BAR NUCLEAR PLANT RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Exposure Pathway and/or Sample	Number of Samples and <u>Locations</u> ^b	Sampling and Collection Frequency	Type and Frequency of Analysis		
1. AIRBORNE					
a. Particulates	4 samples from locations (in different sectors) at or near the site boundary (LM-1, 2, 3, and 4).	Continuous sampler operation with sample collection weekly (more (frequently if required by dust loading).	Analyze for gross beta radioactivity greater than or equal to 24 hours following filter change. Perform gamma isotopic analysis on each sample if gross beta is greater than 10 times yearly mean of control sample. Composite at least once per 31 days (by location) for gamma scan.		
	4 samples from communities approximately 6-10 miles from the plant (PM-2, 3, 4, and 5).				
	2 samples from control locations greater than 10 miles from the plant (RM-2 and 3).				
b. Radioiodine	Samples from same locations as air particulates.	Continuous sampler operation with filter collection weekly.	I-131 at least once per 7 days. Analysis is performed by gamma spectroscopy.		
c. Atmospheric Moisture	4 samples from locations (in different sectors) at or near the site boundary (LM-1, 2, 3, and 4)	Continuous sampler operation with sample collection biweekly.	Analyze each sample for tritium.		
	2 samples from communities approximately 4-10 miles distance from the plant (PM-2, 5).				

Table A-1

WATTS BAR NUCLEAR PLANT RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM^a

		*	
Exposure Pathway and/or Sample	Number of Samples and <u>Locations</u> ^b	Sampling and Collection Frequency	Type and Frequency of Analysis
c. Atmospheric Moisture (Cont.)	2 samples from control location greater than 10 miles from the plant (RM-2 and RM-3).	·	
			·
d. Soil	Samples from same location as air particulates.	Once per year.	Gamma scan, Sr-89, Sr-90 once per year.
2. DIRECT	2 or more dosimeters placed at or near the site boundary in each of the 16 sectors.	At least once per 92 days.	Gamma dose at least once per 92 days.
	2 or more dosimeters placed at stations located approximately 5 miles from the plant in each of the 16 sectors.		
	2 or more dosimeters in at least 8 additional locations of special interest, including at least 2 control		

stations.

WATTS BAR NUCLEAR PLANT RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM^a

	Exposure Pathway and/or Sample	Number of Samples and Locations ^b	Sampling and Collection Frequency	Type and Frequency of Analysis
3.	WATERBORNE			
•	a. Surface	2 samples downstream from plant discharge (TRM 517.9 and TRM 523.1).	Collected by automatic sequential- type sampler with composite samples collected over a period of approximately 31 days.	Gross beta, gamma scan, and tritium analysis of each sample.
		I sample at a control location upstream from the plant discharge (TRM 529.3).		
	b. Ground	Five sampling locations from ground water monitoring wells adjacent to the plant (Wells No. 1, A, B, C, and F).	Collected by automatic sequential- type sampler with composite samples collected over a period of approximately 31 days.	Gross beta, gamma scan, and tritium analysis of each sample.
		1 sample from ground water source up gradient (Well No. 5).	Same as Well No. 1.	Gross beta, gamma scan, and tritium analysis of each sample.
		I sample from ground water source offsite (Farm L).	Grab sample at least once per 31 days.	Gross beta, gamma scan, and tritium analysis of each sample.
	c. Drinking	1 sample at the first two potable surface water supplies, downstream from the plant (TRM 503.8 and TRM 473.0).	Collected by automatic sequential- type sampler with composite sample collected monthly.	Gross beta, gamma scan, and tritium analysis of each sample.

Table A-1

WATTS BAR NUCLEAR PLANT RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM^a

Exposure Pathway and/or Sample	Number of Samples and Locations ^b	Sampling and Collection Frequency	Type and Frequency of Analysis
c. Drinking (Con't)	1 sample at a control location TRM 529.3 ^d .		
d. Sediment from Shoreline	1 sample downstream from plant Discharge (TRM 513.0).	At least once per 184 days.	Gamma scan of each sample.
	1 sample from a control location upstream from plant discharge (TRM 530.2).		
e. Pond Sediment	I sample from at least three locations in the Yard Holding Pond.	At least once per year.	Gamma scan of each sample.
5. INGESTION			
a. Milk	1 sample from milk producing animals in each of 1-3 areas indicated by the cow census were doses are calculated to be highest.	Every 2 weeks.	I-131 and gamma analysis on each sample. Sr-89 and Sr-90 once per quarter.
	1 or more samples from control locations.		
b. Fish	One sample of commercially important species and one sample of recreationally important species. One sample of each species from Chickamauga and Watts Bar Reservoirs.	At least once per 184 days.	Gamma scan on edible portions.

Table A-1

WATTS BAR NUCLEAR PLANT RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Exposure Pathway and/or Sample	Number of Samples and <u>Locations^b</u>	Sampling and Collection Frequency	Type and Frequency of Analysis
c. Vegetation ^e (Pasturage and grass)	Samples from farms producing milk but not providing a milk sample.	At least once per 31 day.	I-131 analysis and gamma scan of each sample.
d. Food Products	l sample each of principal food products grown at private gardens and/or farms in the immediate vicinity of the plant.	Annually at time of harvest. The types of foods available for sampling will vary. Following is a list of typical foods which may be available:	Gamma scan on edible portion.
		Cabbage, Lettuce and/or Greens Corn Green Beans Potatoes Tomatoes	

a. The sampling program outlined in this table is that which was in effect at the end of 2009.

b. Sample locations are shown on Figures A-1, A-2, A-3.

c. Samples shall be collected by collecting an aliquot at intervals not exceeding 2 hours.

d. The samples collected at TRMs 503.8 and 473.0 are taken from the raw water supply, therefore, the upstream surface water sample will be considered the control sample for drinking water.

e. Vegetation sampling is applicable only for farms that meet the criteria for milk sampling and when milk sampling cannot be performed.

Table A-2 WATTS BAR NUCLEAR PLANT RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SAMPLING LOCATIONS

Map Location <u>Number^a</u>	<u>Station</u>	Sector	Approximate Distance (Miles)	Indicator (I) or Control	Samples Collected ^b
				(C)	
2	PM-2	NW	7.0	I	AP,CF,SAM
3	PM-3	NNE	10.4	Ī	AP,CF,S
4	PM-4	NE/ENE°	7.6	Ī	AP,CF,S
5	PM-5	S .	8.0	Ī	AP,CF,S,AM
6	RM-2	SW	15.0	С	AP,CF,S,AM
7	RM-3	NNW	15.0	Č	AP,CF,S,AM
8	LM-1	SSW	0.5	Ī	AP,CF,SAM
9	LM-2	NNE	0.4	I	AP,CF,SAM
10	LM-3	NNE	1.9	I	AP,CF,S,AM
11	LM-4	SE	0.9	Ī	AP,CF,S,AM
12	Farm L	SSW	1.3	I^d	M,W
15	Farm K	ENE	11.6	С	M
18	Well #1	S	0.6	I	W
20	Farm N	ESE	4.1	1	M
22	Farm EH	SSW	24.0	С	M
23	Well #5	N	0.5	С	W
25	TRM 517.9		9.9 ^e	I	SW
26	TRM 523.1		4.7 ^e	I	SW
27	TRM 529.3		1.5°	C	SW,PW ^f
31	TRM 473.0		54.8 ^e	I	PW
*	(C. F. Industries)				
32	TRM 513.0		14.8 ^e	I	SS
33	TRM 530.2		2.4 ^e	С	SS
35	TRM 503.8		24.0 ^e	I	PW
	(Dayton)				
37	TRM 522.8-527.8			I	F .
	(downstream of WBN)				
38	TRM 471-530			I	F
	(Chickamauga Lake)				
39	Watts Bar Reservoir			C	F
81	Yard Pond	SSE/S/SSW	Onsite	I	PS
82	Well A	SSE	0.6	I	W
83	Well B	SSE	0.5	I	W
84	Well C	ESE	0.3	I	W
85	Well F	SE	0.3	I	- W

a. See Figures A-1, A-2, and A-3

b. Sample codes:

AM = Atmospheric Moisture

AP = Air particulate filter

PW = Public Water PS = Pond Sediment SS = Shoreline sediment

CF = Charcoal filter

SW = Surface water W = Well water

F = Fish

S = Soil

M = Milk

c. Station located on the boundary between these two sectors.

d. A control for well water.

e. Distance from the plant discharge (TRM 527.8)

f. The surface water sample is also used as a control for public water.

Table A-3 WATTS BAR NUCLEAR PLANT ENVIRONMENTAL DOSIMETERS LOCATIONS

Map ^a Location			Approximate Distance	Onsite (On) ^b or
Number	<u>Station</u>	Sector	(miles)	Offsite (Off)
2	NW-3	NW	7.0	Off
3	NNE-3	NNE	10.4	Off
4	ENE-3	NE/ENE	7.6	Off
5	S-3	· S	7.8	Off
6	SW-3	SW	15.0	Off
7	NNW-4	NNW	15.0	Off
10	NNE-1A	NNE	1.9	On
11	SE-1A	SE	0.9	On
12	SSW-2	SSW	1.3	On
14 ·	W-2	W	4.8	Off
40	N-1	N	1.2	On
41	N-2	N	4.7	Off
42	NNE-1	NNE	1.2	On
43	NNE-2	NNE	4.1	Off
44	NE-1	NE	0.9	On
45	NE-2	NE	2.9	Off
46	NE-3	NE	6.1	Off
47	ENE-1	ENE	0.7	On
48	ENE-2	ENE	5.8	Off
49	E-1	E	1.3	On
50	E-2	Ë	5.0	Off
51	ESE-1	ESE	1.2	On
52	ESE-2	ESE	4.4	Off
54	SE-2	SE	5.3	Off
55	SSE-1A	SSE	0.6	On
56	SSE-2	SSE	5.8	Off
57	S-1	S	0.7	On
58	S-2	S	4.8	Off
59	SSW-1	SSW	0.8	On
60	SSW-3	SSW	5.0	Off
62	SW-1	SS	. 0.8	On
63	SW-2	SW	5.3	Off
64	WSW-1	WSW	0.9	On
65	WSW-2	WSW	3.9	Off
66	W-1	W	0.9	On
67	WNW-1	WNW	0.9	On
68	WNW-2	WNW	4.9	Off
69	NW-1	NW	1.1	On
70	NW-2	NW	4.7	Off
71	NNW-1	NNW	1.0	On
72	NNW-2	NNW	4.5	Off
73	NNW-3	NNW	7.0	Off
74	ENE-2A	ENE	3.5	Off
75	SE-2A	SE	3.1	Off
76	S-2A	S	2.0	Off
77	W-2A	W	3.2	Off
78	NW-2A	NW	3.0	Off
79	SSE-1	SE	0.5	On
,,	555-1	JL	0.5	On

<sup>a. See Figures A-1, A-2, and A-3.
b. Dosimeters designated "onsite" are located 2 miles or less from the plant; "offsite" are located more than 2 miles</sup> from the plant.

Figure A-1

Radiological Environmental Sampling Locations

Within 1 Mile of the Plant

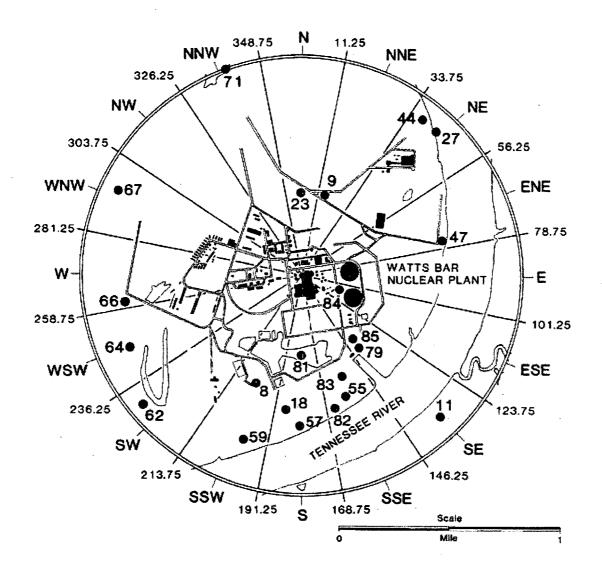


Figure A-2
Radiological Environmental Sampling Locations

From 1 to 5 Miles From The Plant

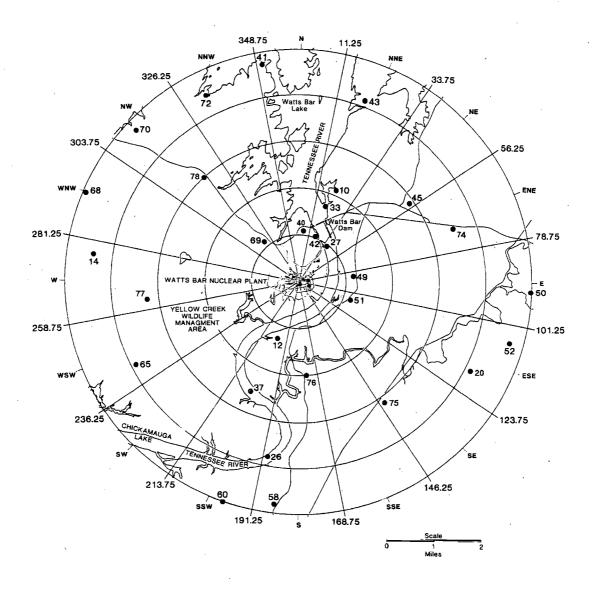
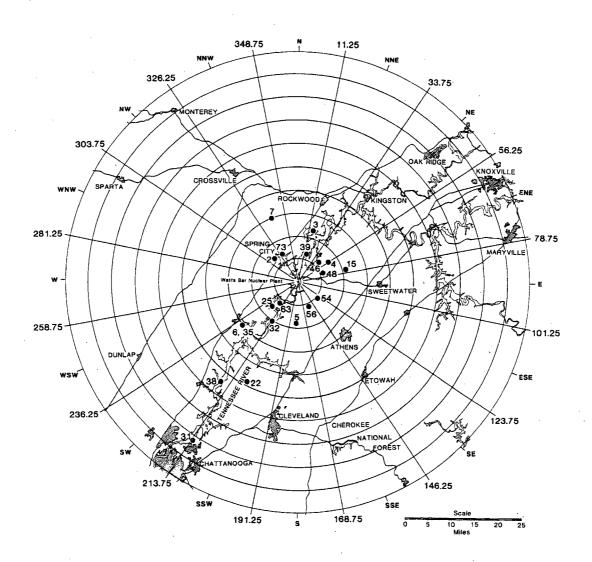


Figure A-3

Radiological Environmental Sampling Locations

Greater Than 5 Miles From the Plant



APPENDIX B 2009 PROGRAM MODIFICATIONS

Appendix B

Radiological Environmental Monitoring Program Modification

Due to problems with the water level in onsite monitoring Well D, a modification was made in the WBN REMP in June. Well D was replaced with Well F.

APPENDIX C PROGRAM DEVIATIONS

Appendix C

Program Deviations

Problems with sampling equipment prevented the collection of a total of three air monitoring samples, one atmospheric moisture sample, and one groundwater sample during the year.

Groundwater samples were not collected from one onsite monitoring well during the first four months of the year because the well was dry.

Table C-1
Radiological Environmental Monitoring Program Deviations

<u>Date</u> 01/20 - 4/14/09	Station Well D	Location 0.4 miles SSE	Remarks This onsite monitoring well was dry during the first four sampling cycles. The WBN ODCM was revised in June to replace Well D with Well F. Well F had been tested for several months was had maintained a consistent water level. A PER was not required for the missed samples since the well was dry and there was no water to be sampled.
01/21/09	Well C	0.3 miles ESE	The sample volume for the four week composite period was not adequate due to problem with the composite sampler used on this well. The problem was a broken sample line. The line was replaced and the sampler operated correctly for the next sampling cycle. The missed samples were documented with PER 161547.
03/24/09	LM-3	1.9 miles NNE	The sampling pump for the atmospheric moisture sampler was not turned on after the sample change out on 3/10/09 and no sample was collected for two week sampling period ending on 3/24/09. The missed sample was documented with PER 166974.
05/05/09	LM-4	0.9 miles SE	The total sample volume for air filter and charcoal cartridge samples was not adequate due to a problem with the sampling pump. The sampling pump had failed due to age and normal wear. The pump was replaced and the sampler was returned to normal operation for the next sampling cycle. The missed samples were documented with PER 170941.
08/17/09	LM-3	1.9 miles NNE	The total sample volume for air filter and charcoal cartridge samples was not measured due to failure of the gas meter used for total flow measurement. The gas meter was replaced and the sampler was returned to normal operation for the next sampling cycle. The missed samples were documented with PER 179440.
10/19/09	PM-2	0.4 miles SSE	The total sample volume for air filter and charcoal cartridge samples was not adequate due to a problem with the sampling pump. The drive belt was broken due to sticking bearings on the sampling pump. The pump was replaced and the sampler was returned to normal operation for the next sampling cycle. The missed samples were documented in PER 205579.

APPENDIX D ANALYTICAL PROCEDURES

Appendix D

Analytical Procedures

Analyses of environmental samples are performed by the radioanalytical laboratory located at the Western Area Radiological Laboratory facility in Muscle Shoals, Alabama, except for the Sr-89, 90 analysis of soil samples which was performed by a contract laboratory. Analysis procedures are based on accepted methods. A summary of the analysis techniques and methodology follows.

The gross beta measurements are made with an automatic low background counting system. Normal counting times are 50 minutes. Water samples are prepared by evaporating 500 ml of samples to near dryness, transferring to a stainless steel planchet, and completing the evaporation process. Air particulate filters are counted directly in a shallow planchet.

The specific analysis of I-131 in milk is performed by first isolating and purifying the iodine by radiochemical separation and then counting the final precipitate on a beta-gamma coincidence counting system. The normal count time is 50 minutes. With the beta-gamma coincidence counting system, background counts are virtually eliminated and extremely low levels of activity can be detected.

After a radiochemical separation, milk samples analyzed for Sr-89, 90 are counted on a low background beta counting system. The sample is counted a second time after a 7-day ingrowth period. From the two counts the Sr-89 and Sr-90 concentrations can be determined.

Water samples are analyzed for tritium content by first distilling a portion of the sample and then counting by liquid scintillation. A commercially available scintillation cocktail is used.

Gamma analyses are performed in various counting geometries depending on the sample type and volume. All gamma counts are obtained with germanium type detectors interfaced with a high resolution gamma spectroscopy system. Spectral data reduction is performed by the computer program HYPERMET.

The charcoal cartridges used to sample gaseous radioiodine are analyzed by gamma spectroscopy using a high resolution gamma spectroscopy system with germanium detectors.

Atmospheric moisture samples are collected on silica gel from a metered air flow. The moisture is released from the silica gel by heating and a portion of the distillate is counted by liquid scintillation for tritium using commercially available scintillation cocktail.

The necessary efficiency values, weight-efficiency curves, and geometry tables are established and maintained on each detector and counting system. A series of daily and periodic quality control checks are performed to monitor counting instrumentation. System logbooks and control charts are used to document the results of the quality control checks.

APPENDIX E

NOMINAL LOWER LIMITS OF DETECTION (LLD)

Appendix E

Nominal Lower Limits of Detection

A number of factors influence the LLD, including sample size, count time, counting efficiency, chemical processes, radioactive decay factors, and interfering isotopes encountered in the sample. The most probable values for these factors have been evaluated for the various analyses performed in the environmental monitoring program. The nominal LLDs calculated from these values, in accordance with the methodology prescribed in the ODCM, are presented in Table E-1. The maximum values for the lower limits of detection specified in the ODCM are shown in Table E-2.

The nominal LLDs are also presented in the data tables. For analyses for which nominal LLDs have not been established, an LLD of zero is assumed in determining if a measured activity is greater than the LLD.

TABLE E-1

Nominal LLD Values

A. Radiochemical Procedures

	Air Filters (<u>pCi/m³)</u>	Water (pCi/L)	Milk (<u>pCi/L)</u>	Wet Vegetation (pCi/kg wet)	Sediment and Soil (pCi/g dry)
Gross Beta	0.002	1.9			
Tritium	3.0	270			
Iodine-131		0.4	0.4	6.0	
Strontium-89	0.0011	5.0	3.5	31.0	1.6
Strontium-90	0.0004	2.0	2.0	12.0	0.4

5

Table E-1 Nominal LLD Values B. Gamma Analyses

	Particulate Filter pCi/m³	Charcoal Filter pCi/m³	Water and Milk <u>pCi/L</u>	Vegetation and Grain pCi/g, dry	Wet Vegetation pCi/kg, wet	Soil and Sediment pCi/g, dry	Fish pCi/g, dry	Clam Flesh pCi/g, dry	Foods Tomatoes Potatoes, etc. pCi/kg, wet
Ce-141	.005	.02	10	.07	. 35	.10	.07	.35	20
Ce-144	.01	.07	30	.15	115	.20	.15	.85	60
Cr-51	.02	0.15	45	.30	200	.35	.30	2.40	95
I-131	.005	0.03	10	.20	60	.25	.20	1.70	20
Ru-103	.005	0.02	5	.03	25	.03	.03	.25	25
Ru-106	.02	0.12	40 , .	.15	190	.20	.15	1.25	90
Cs-134	.005	0.02	5	.03	30	.03	.03	.14	10
Cs-137	.005	0.02	5	.03	25	.03	.03	.15	10
Zr-95	.005	0.03	, 10	.05	45	.05	.05	.45	45
Nb-95	.005	0.02	. 5	.25	30	.04	.25	.25	10
Co-58	.005	0.02	5	.03	20	.03	.03	.25	10
Mn-54	.005	0.02	5	.03	20	.03	.03	.20	· 10
Zn-65	.005	0.03	10	.05	45	.05	.05	.40	45
Co-60	.005	0.02	5	.03	20	.03	.03	.20	10
K-40	.04	0.30	100	.40	400	.75	.40	3.50	250
Ba-140	.015	0.07	25	.30	130	.30	.30	2.40	50
La-140	.01	0.04	10	.20	50	.20	.20	1.40	25
Fe-59	.005	0.04	10	.08	40	.05	.08	.45	25
Be-7	.02	0.15	45	.25	200	.25	.25	1.90	90
Pb-212	.005	0.03	15	.04	40	.10	.04	.30	40
Pb-214	.005	0.07	20	.50	80	.15	.50	.10	80
Bi-214	.005	0.05	20	.10	55	.15	.10	.50	40
Bi-212	.02	0.20	- 50	.25	250	.45	.25	2.00	130
T1-208	.002	0.02	10	.03	30	.06	.03	.25	30
Ra-224						.75			,
Ra-226	, 		·			.15			
Ac-228	.01	0.07	20	.10	70	.25	.10	.75	50

Table E-2

Maximum Values for the Lower Limits of Detection (LLD)

Specified by the WBN Offsite Dose Calculation Manual

<u>Analysis</u>	Water p <u>Ci/L</u>	Airborne Particulate or Gases pCi/m ³	Fish pCi/kg, wet	Milk p <u>Ci/L</u>	Food Products pCi/kg, wet	Sediment pCi/kg, dry
gross beta	4	1 x 10 ⁻²	N.A.	N.A.	N.A.	N.A.
H-3	2000ª	N.A.	N.A.	N.A.	N.A.	N.A.
Mn-54	15	N.A.	130	N.A.	N.A.	N.A.
Fe-59	30	N.A.	260	N.A.	N.A.	N.A.
Co-58,60	15	N.A.	130	N.A.	N.A.	N.A.
Zn-65	30	N.A.	260	N.A.	N.A.	N.A.
Zr-95	30	N.A.	N.A.	N.A.	N.A.	N.A.
Nb-95	15	N.A.	N.A.	N.A.	N.A.	N.A.
I-131	1 ^b	7 x 10 ⁻²	N.A.	1	60	N.A.
Cs-134	15	5 x 10 ⁻²	130	15	60	150
Cs-137	18	6 x 10 ⁻²	150	18	80	180
Ba-140	60	N.A.	N.A.	60	N.A.	N.A.
La-140	15	N.A.	N.A.	15	N.A.	N.A.

a. If no drinking water pathway exists, a value of 3000 pCi/liter may be used.

b. If no drinking water pathway exists, a value of 15 pCi/liter may be used.

APPENDIX F

QUALITY ASSURANCE/QUALITY CONTROL PROGRAM

Appendix F

Quality Assurance/Quality Control Program

A quality assurance program is employed by the laboratory to ensure that the environmental monitoring data are reliable. This program includes the use of written, approved procedures in performing the work, provisions for staff training and certification, internal self assessments of program performance, audits by various external organizations, and a laboratory quality control program.

The quality control program employed by the radioanalytical laboratory is designed to ensure that the sampling and analysis process is working as intended. The program includes equipment checks and the analysis of quality control samples along with routine samples. Instrument quality control checks include background count rate and counts reproducibility. In addition to these two general checks, other quality control checks are performed on the variety of detectors used in the laboratory. The exact nature of these checks depends on the type of device and the method it uses to detect radiation or store the information obtained.

Quality control samples of a variety of types are used by the laboratory to verify the performance of different portions of the analytical process. These quality control samples include blanks, replicate samples, blind samples, or cross-checks.

Blanks are samples which contain no measurable radioactivity or no activity of the type being measured. Such samples are analyzed to determine whether there is any contamination of equipment or commercial laboratory chemicals, cross-contamination in the chemical process, or interference from isotopes other than the one being measured.

Duplicate samples are generated at random by the sample computer program which schedules the collection of the routine samples. For example, if the routine program calls for four milk samples every week, on a random basis each farm might provide an additional sample several times a year. These duplicate samples are analyzed along with other routine samples. They provide information about the variability of radioactive content in the various sample media.

If enough sample is available for a particular analysis, the laboratory staff can split it into two portions. Such a sample provides information about the variability of the analytical process since two identical portions of material are analyzed side by side.

Analytical knowns are another category of quality control sample. A known amount of radioactivity is added to a sample medium. The lab staff knows the radioactive content of the sample. Whenever possible, the analytical knowns contain the same amount of radioactivity each time they are run. In this way, analytical knowns provide immediate data on the quality of the measurement process.

Blind spikes are samples containing radioactivity which are introduced into the analysis process disguised as ordinary environmental samples. The lab staff does not know the sample contains radioactivity. Since the bulk of the ordinary workload of the environmental laboratory contains no measurable activity or only naturally occurring radioisotopes, blind spikes can be used to test the detection capability of the laboratory or can be used to test the data review process. If an analysis routinely generates numerous zeroes for a particular isotope, the presence of the isotope is brought to the attention of the laboratory supervisor in the daily review process. Blind spikes test this process since the blind spikes contain radioactivity at levels high enough to be detected. Furthermore, the activity can be put into such samples at the extreme limit of detection (near the LLD) to verify that the laboratory can detect very low levels of activity.

Another category of quality control samples is the internal cross-checks. These samples have a known amount of radioactivity added and are presented to the lab staff labeled as cross-check samples. This means that the quality control staff knows the radioactive content or "right answer" but the lab personnel performing the analysis do not. Such samples test the best

performance of the laboratory by determining if the lab can find the "right answer". These samples provide information about the accuracy of the measurement process. Further information is available about the variability of the process if multiple analyses are requested on the same sample. Like blind spikes or analytical knowns, these samples can also be spiked with low levels of activity to test detection limits. During 2009, all analysis results for internal cross-check samples were within agreement limits when compared to the known value.

To provide for an independent verification of the laboratory's ability to make accurate measurements, the laboratory participated in an environmental level cross-check program available through Eckert and Ziegler Analytics, during 2009. The results of TVA's participation in this cross-check program are presented in Table F-1. As shown in Table F-1, the result for the Cs-134 reported for the third quarter gamma in air filter cross check was too low. A review of the lab results of other gamma cross checks containing Cs-134 analyzed during 2009 verified that all other Cs-134 results for QC samples were within the applicable agreement limits. This data included two cross checks analyzed after the sample with the low result. Corrective action program problem evaluation report (PER) 222670 was initiated to document the investigation of this Cs-134 measurement.

The quality control data are routinely collected, examined and reported to laboratory supervisory personnel. They are checked for trends, problem areas, or other indications that a portion of the analytical process needs correction or improvement. The end result is a measurement process that provides reliable and verifiable data and is sensitive enough to measure the presence of radioactivity far below the levels which could be harmful to humans.

Table F-1

Results For 2009 External Cross Checks

		Res	*	
Test Period	Sample Type / Analysis	Known	<u>TVA</u>	Agreement
Einet One et en	W/-+ (- C'A)			•
First Quarter	Water (pCi/L) Gross Beta	2.35E+02	2.37E+02	1.01
	. Gross Deta	2.331, 02	2.571.02	1.01
	Water (pCi/Filter)		•	
	³H	4.48E+03	5.78E+03	1.29
First Quarter	Water (pCi/L)			
Thist Quarter	water (PCDE)	6.90E+01	6.91E+01	1.00
	¹⁴¹ Ce	1.20E+02	1.18E+02	0.98
	⁵¹ Cr	3.87E+02	3.91E+02	1.01
	¹³⁴ Cs	1.19E+02	1.10E+02	0.92
	¹³⁷ Cs	1.41E+02	1.45E+02	1.03
	⁵⁸ Co	1.51E+02	1.50E+02	0.99
	⁵⁴ Mn	1.62E+02	1.69E+02	1.04
	⁵⁹ Fe	1.27E+02	1.22E+02	0.96
	⁶⁵ Zn	1.97E+02	2.06E+02	1.05
	⁶⁰ Co	1.80E+02	1.89E+02	1.05
		٠		
First Quarter	Milk (pCi/L)			
	. 131 _I	7.95E+01	7.91E+01	0.99
	⁸⁹ Sr	8.35E+01	8.84E+01	1.06
	⁹⁰ Sr	1.33E+01	1.52E+01	1.14
Third Quarter	Water (pCi/L)			
initu Quarter	Water (pc//L) 3H	1.41E+04	1.44E+04	1.02
		1.412.04	1.446 (04	1.02
Third Quarter	Sand (pCi/gram)			
	¹⁴¹ Ce	0.640	0.613	0.96
	⁵¹ Cr	0.515	0.513	1.00
	¹³⁴ Cs	0.287	0.269	0.94
	¹³⁷ Cs	0.431	0.442	1.03
	⁵⁸ Co	0.232	0.233	1.00
	⁵⁴ Mn	0.480	0.502	1.05
	⁵⁹ Fe	0.343	0.350	1.02
	⁶⁵ Zn	0.474	0.503	1.06
	60Co	0.373	0.389	1.04
Third Quarter	Air Filter (pCi/filter)			
I niru Quarter	Gross Beta	80.1	69.3	0.87
	51000 D411		07.5	0.07
Third Quarter	Air Filter (pCi/filter).			
	¹⁴¹ Ce.	228.0	198.0	0.87
	⁵¹ Cr	183.0	168.0	0.92
	¹³⁴ Cs	102.0	78.7	0:77
	¹³⁷ Cs	153.0	139.0	0.91
	⁵⁸ Co	82.3	80.9	0.98
	⁵⁴ Mn	171.0	167.0	0.98
	. ⁵⁹ Fe	122.0	121.0	0.99
	⁶⁵ Zn	169.0	170.0	1.01
	⁶⁰ Co	133.0	120.0	0.90
	57			

APPENDIX G

LAND USE SURVEY

Appendix G

Land Use Survey

A land use survey was conducted in accordance with the provisions of ODCM Control 1.3.2 to identify the location of the nearest milk animal, the nearest residence, and the nearest garden of greater than 500 square feet producing fresh leafy vegetables in each of 16 meteorological sectors within a distance of 5 miles from the plant.

The land use survey was conducted between April 1 and October 1 using appropriate techniques such as door-to-door survey, mail survey, telephone survey, aerial survey, or information from local agricultural authorities or other reliable sources.

Using the survey data, relative radiation doses were projected for individuals near the plant. Doses from air submersion were calculated for the nearest resident in each sector, while doses from drinking milk or eating foods produced near the plant were calculated for the areas with milk producing animals and gardens, respectively. These doses were calculated using historical meteorological data. They also assume that the effluent releases are equivalent to the design basis source terms. The calculated doses are relative in nature and do not reflect actual exposures received by individuals living near WBN.

In response to the 2009 WBN land use survey, annual doses were calculated for air submersion, vegetable ingestion, and milk ingestion. The location of nearest resident changed in three sectors during 2009. However, the changes were very small distances in two of the sectors. In addition, the location of the nearest garden changed in a total of eight sectors. There were no changes in the location for nearest resident or for milk ingestion.

As in previous year, the owner of Farm Ho did not want to participate in the milk sampling.

Milk samples were obtained from the farm between Farm Ho and the plant.

The results of the 2009 land use survey and resulting relative projected annual dose calculations documented that there were no significant changes in land use of unrestricted areas. No required changes in the sampling locations for the radiological environmental monitoring program were identified as result of the land use survey.

Tables G-1, G-2, and G-3 compare results of the relative projected annual dose calculations for 2008 and 2009.

Table G-1

Watts Bar Nuclear Plant
Relative Projected Annual Air Submersion Dose to the Nearest Residence
Within 5 Miles of Plant^a

mrem/year

	2008		2009		
	Approximate		Approximate		
Sector	Distance (Miles)	Annual Dose	Distance (Miles)	Annual Dose	
N	1.3	0.24	1.3	0.24	
NNE	2.3	0.22	2.3	0.22	
NE	2.1	0.27	2.1	0.27	
ENE	1.5	0.43	1.9	0.30	
E	2.0	0.26	2.0	0.26	
ESE	2.8	0.16	2.8	0.16	
SE	0.9	0.75	0.9	0.75	
SSE	1.0	0.36	1.0	0.36	
S	1.0	0.38	1.0	0.38	
SSW	1.2	0.29	1.2	0.28	
SW	2.7	0.09	2.7	0.09	
WSW	1.3	0.29	1.3	0.29	
W .	1.8	0.05	1.8	0.05	
WNS	1.0	0.18	1.0	0.18	
NW	1.3	0.09	1.3	0.08	
NNW	2.7	0.02	2.7	0.02	

a. Assumes the effluent releases are equivalent to design basis source terms.

Table G-2

Watts Bar Nuclear Plant Relative Projected Annual Ingestion Dose to Child's Bone Organ from Ingestion of Home-Grown Foods Nearest Garden Within 5 Miles of Plant^a

mrem/year

	20	008	200	<u> 19</u>
•	Approximate		Approximate	
Sector	Distance (Miles)	Annual Dose	Distance (Miles)	Annual Dose
N	4.7	0.50	4.7	0.50
NNE	3.8	1.91	2.8	· 3.31
NE	2.1	5.87	2.1	5.87
ENE	2.9	3.12	2.9	3.12
E	3.0	2.91	2.9	3.08
ESE	3.0	3.06	3.0	3.06
SE	2.9	2.18	0.9	14.8
SSE	1.0	7.30	1.0	7.30
S	1.4	5.36	2.2	2.78
SSW	1.2	6.57	1.4	5.23
SW	ъ		Ъ	
WSW	2.9	1.32	2.9	1.32
W	3.4	0.39	2.9	0.50
WNW	3.7	0.24	0.9	3.75
NW	2.0	0.63	1.3	1.63
NNW	2.8	0.50	2.8	0.50

a. Assumes the effluent releases are equivalent to design basis source terms.b. Garden not identified within 5 miles of the plant in this sector.

Table G-3

Watts Bar Nuclear Plant

Relative Projected Annual Dose to Receptor Thyroid from Ingestion of Milk^a

(Nearest Milk-Producing Animal Within 5 Miles of Plant)

mrem/year

Location	Sector	Approximate Distance <u>Miles</u>	<u>Annua</u> 2008	<u>1 Dose</u> 2009	X/Q $\underline{s/m}^3$
Cows	•				
Farm N ^b	ESE	4.1	0.04	0.06	1.35 E-6
Farm L ^b	SSW	1.3	0.27	0.26	2.24 E-6
Farm Ho ^c	SSW	1.5	0.33	0.31	1.36 E-6

a. Assumes the plant is operating and effluent releases are equivalent to design basis source terms.

b. Milk being sampled at these locations.

c. Owner unwilling to provide samples or information. The dose calculated assumes consumption of the milk by an adult and a feeding factor equivalent to 33 percent. If milk from this location were to be consumed by teens, children or infants, the estimated doses would be 0.50, 1.03 and 2.44 mrem/year, respectively.

APPENDIX H DATA TABLES AND FIGURES

Table H - 1

DIRECT RADIATION LEVELS

Average External Gamma Radiation Levels at Various Distances from Watts Bar Nuclear Plant for Each Quarter - 2009 mR / Quarter (a)

Average External Gamma Radiation Levels (b)

	1st qtr	2nd qtr	3rd qtr	4th qtr	mR / yr
Average 0 - 2 miles (onsite)	10.8	11.1	12.9	13	48
Average > 2 miles (offsite)	10.2	10.6	12.1	11.5	44

- (a) Field periods normalized to one standard quarter (2190 hours)
- (b) Average of the individual measurements in the set

TABLE H - 2
DIRECT RADIATION LEVELS

Individual Stations at Watts Bar Nuclear Plant

•				Envi	evels			
					mR/c	uarter		•
Мар	TLD		Approx	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Annual
Location	Station	Direction,	Distance,	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Exposure
<u>Number</u>	Number	<u>degrees</u>	<u>miles</u>	<u> 2009</u>	<u>2009</u>	<u>2009</u>	<u>2009</u>	mR/year
40	N-1	10	1.2	14.1	12.7	15.9	12.4	55.1
41	N-2	350	4.7	10.3	12.7	12.5	11.4	46.9
42	NNE-1	21	1.2	12.5	11.7	12.0	15.6	51.8
10	NNE-1A	22	1.9	9.2	(1)	10.5	10.4	40.1
43	NNE-2	20	4.1	10.3	9.9	11.0	9.3	40.5
3	NNE-3	17	10.4	10.3	9.5	10.5	11.9	42.2
44	NE-1	39	.9	12.5	10.8	14.9	13.5	51.7
45	NE-2	54	2.9	9.8	12.2	12.0	12.4	46.4
46	NE-3	47	6.1	9.2	7.6	(1)	8.3	33.5
47	ENE-1	74	.7	13.0	9.9	13.4	13.5	49.8
48	ENE-2	69	5.8	8.1	10.4	12.0	9.9	40.4
74	ENE-2A	69	3.5	9.2	10.4	8.5	10.9	39.0
4	ENE-3	56	7.6	7.6	6.7	11.0	9.3	34.6
49	E-1	85	1.3	8.7	9.0	11.0	11.4	40.1
50	E-2	92	5.0	11.4	8.6	13.0	13.5	46.5
51	ESE-1	109	1.2	6.0	9.0	10.0	9.3	34.3
52	ESE-2	. 106	4.4	14.1	14.9	13.9	18.1	61.0
11	SE-1A	138	.9	11.9	10.4	11.5	12.4	46.2
54	SE-2	128	5.3	7.6	11.3	13.0	10.9	42.8
75	SE-2A	144	3.1	9.2	13.6	12.5	12.4	47.7
79	SSE-1	146	.5	8.7	11.3	13.0	12.4	45.4
55	SSE-1A	161	.6	9.8	9.9	9.5	12.4	41.6
56	SSE-2	156	5.8	12.5	13.1	14.4	16.1	56.1

note (1) Sum of available quarterly data normalized to 1 year for the annual exposure value

TABLE H - 2 continued

DIRECT RADIATION LEVELS

Individual Stations at Watts Bar Nuclear Plant

				Envi				
			•	-	mR/c	uarter		-
Map	TLD		Арргох	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Annual
Location	Station	Direction,	Distance,	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Exposure
<u>Number</u>	<u>Number</u>	degrees	<u>miles</u>	<u> 2009</u>	<u>2009</u>	<u>2009</u>	<u>2009</u>	mR/year
57	S-1	182	.7	11.4	9.5	10.0	15.6	46.5
58	S-2	185	4.8	8.1	8.6	9.0	7.8	33.5
76	S-2A	177	2.0	9.8	14.9	15.9	11.9	52.5
- 5	S-3	185	7.8	8.1	9.0	10.0	8.3	35.4
59	SSW-1	199	8.	13.6	14.0	17.9	13.0	58.5
12	SSW-2	200	1.3	11.4	10.8	12.0	9.3	43.5
60	SSW-3	199	5.0	10.3	9.0	11.5	11.9	42.7
62	SW-1	226	.8	9.8	12.2	13.9	13.5	49.4
63	SW-2	220	5.3	7.6	9.9	10.5	11.9	39.9
6	SW-3	225	15.0	7.6	8.6	12.5	5.2	33.9
64	WSW-1	255	.9	8.1	9.9	11.5	13.5	43.0
65	WSW-2	247	3.9	13.6	11.7	16.4	11.9	53.6
66	W-1	270	.9	10.9	10.4	13.0	17.6	51.9
14	W-2	277	4.8	8.1	8.6	10.5	9.9	37.1
77	W-2A	268	3.2	10.9	10.8	10.0	10.4	42.1
67	WNW-1	294	.9	16.3	18.6	21.3	20.7	76.9
68	WNW-2	292	4.9	13.6	13.6	15.9	16.1	59.2
69	NW-1	320	1.1	8.1	9.0	12.5	10.9	40.5
70	NW-2	313	4.7	13.0	13.6	13.9	11.9	52.4
78	NW-2A	321	3.0	11.9	9.5	10.0	8.3	39.7
2	NW-3	317	7.0	10.3	12.7	14.4	16.1	53.5
71	NNW-1	340	1.0	9.8	9.9	11.5	10.4	41.6
72	NNW-2	333	4.5	14.1	12.7	12.5	14.0	53.3
73	NNW-3	329	7.0	6.0	5.4	10.5	11.9	33.8
7	NNW-4	337	15.0	11.4	9.0	10.5	10.9	41.8

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN AIR FILTER PCI/M3 - 0.037 BQ/M3

Name of Facility: WATTS BAR NUCLEAR PLANT Location of Facility: RHEA

TENNESSEE

Docket Number: 50-390,391 Reporting Period: 2009

	Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
GRO	SS BETA	517					
		2.00E-03	2.13E-02 (413 / 413) 1.02E-02 - 3.39E-02	PM2 SPRING CITY 7.0 MILES NW	2.16E-02 (51 / 51) 1.05E-02 - 3.24E-02	2.09E-02 (104 / 104) 1.03E-02 - 3.20E-02	
GAM	IMA SCAN (GELI)	130					
,	AC-228	1.00E-02	104 VALUES < LLD	PM3 10.4 MILES NNE	13 VALUES < LLD	26 VALUES < LLD	
ı	BE-7	2.00E-02	1.12E-01 (104 / 104) 4.86E-02 - 1.72E-01	LM-4 WB 0.9 MILES SE	1.18E-01 (13 / 13) 7.77E-02 - 1.71E-01	1.15E-01 (26 / 26) 5.64E-02 - 1.82E-01	
I	BI-214	5.00E-03	1.53E-02 (103 / 104) 5.10E-03 - 5.98E-02	LM-4 WB 0.9 MILES SE	1.97E-02 (13 / 13) 1.21E-02 - 3.33E-02	1.92E-02 (26 / 26) 5.80E-03 - 5.24E-02	
-68-	<-40	4.00E-02	4.07E-02 (2 / 104) 4.04E-02 - 4.10E-02	PM4 7.6 MILES NE/ENE	4.10E-02 (1 / 13) 4.10E-02 - 4.10E-02	26 VALUES < LLD	
	PB-212	5.00E-03	104 VALUES < LLD	PM2 SPRING CITY 7.0 MILES NW	13 VALUES < LLD	26 VALUES < LLD	
	PB-214	5.00E-03	1.52E-02 (100 / 104) 5.60E-03 - 6.66E-02	LM-4 WB 0.9 MILES SE	2.00E-02 (13 / 13) 1.20E-02 - 3.19E-02	1.87E-02 (25 / 26) 7.10E-03 - 4.68E-02	
•	ΓL-208	2.00E-03	104 VALUES < LLD	PM2 SPRING CITY 7.0 MILES NW	13 VALUES < LLD	2.40E-03 (1 / 26) 2.40E-03 - 2.40E-03	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN CHARCOAL FILTER PCI/M3 - 0.037 BQ/M3

Name of Facility: WATTS BAR NUCLEAR PLANT Location of Facility: RHEA

TENNESSEE

Docket Number: 50-390,391 Reporting Period: 2009

	Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
G	AMMA SCAN (GELI)	517					
	AC-228	7.00E-02	413 VALUES < LLD	LM1 0.5 MILES SSW	52 VALUES < LLD	104 VALUES < LLD	
	BI-214	5.00E-02	7.02E-02 (111 / 413) 5.02E-02 - 2.06E-01	PM2 SPRING CITY 7.0 MILES NW	7.65E-02 (16 / 51) 5.02E-02 - 2.06E-01	7.90E-02 (18 / 104) 5.14E-02 - 1.72E-01	
	I-131	3.00E-02	SEE NOTE 3				•
	K-40	3.00E-01	3.86E-01 (94 / 413) 3.04E-01 - 5.58E-01	LM-4 WB 0.9 MILES SE	4.01E-01 (10 / 51) 3.07E-01 - 5.58E-01	3.82E-01 (21 / 104) 3.09E-01 - 5.20E-01	
Ļ	PB-212	3.00E-02	413 VALUES < LLD	PM4 7.6 MILES NE/ENE	52 VALUES < LLD	104 VALUES < LLD	
6	PB-214	7.00E-02	8.30E-02 (48 / 413) 7.02E-02 - 1.39E-01	LM3 1.9 MILES NNE	9.74E-02 (4 / 51) 7.17E-02 - 1.39E-01	1.16E-01 (7 / 104) 7.22E-02 - 2.77E-01	
	TL-208	2.00E-02	413 VALUES < LLD	LM1 0.5 MILES SSW	52 VALUES < LLD	104 VALUES < LLD	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E-1

Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).

Note: 3. The analysis of Charcoal Filters was performed by Gamma Spectroscopy. No I-131 was detected. The LLD for I-131 by Gamma Spectroscopy was 0.03 pCi/cubic meter.

Tennessee Valley Authority

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



Number of Nonroutine Reported Measurements

RADIOACTIVITY IN ATMOSPHERIC MOISTURE PCI/M3 - 0.037 BQ/M3

Name of Facility: WATTS BAR NUCLEAR PLANT Location of Facility: RHEA TENNESSEE

3.00E+00

6.09E+00 (17 / 154)

3.24E+00 - 1.38E+01

Reporting Period: 2009

6.74E+00 (3 / 25)

4.05E+00 - 1.17E+01

Docket Number: 50-390,391

52 VALUES < LLD

Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	
TRITIUM	206					

PM5 DECATUR

6.2 MILES S

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Tennessee Valley Authority
Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN MILK PCI/L - 0.037 BQ/L

Name of Facility: WATTS BAR NUCLEAR PLANT.

Location of Facility: RHEA

TENNESSEE

Docket Number: 50-390,391 Reporting Period: 2009

	Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
К	DDINE-131	104 4.00E-01	52 VALUES < LLD			52 VALUES < LLD	
G	AMMA SCAN (GELI)	104					
	AC-228	2.00E+01	52 VALUES < LLD	NORTON FARM 4.1 MILES ESE	26 VALUES < LLD	1.92E+02 (2 / 52) 2.61E+01 - 3.58E+02	
	BI-214	2.00E+01	3.55E+01 (25 / 52) 2.00E+01 - 7.84E+01	NORTON FARM 4.1 MILES ESE	3.75E+01 (13 / 26) 2.00E+01 - 7.84E+01	3.31E+01 (21 / 52) 2.08E+01 - 6.82E+01	
	K-40	1.00E+02	1.31E+03 (51 / 52) 3.53E+02 - 1.56E+03	LAYMAN FARM 1.3 MILES SSW	1.33E+03 (26 / 26) 3.53E+02 - 1.56E+03	1.30E+03 (52 / 52) 1.07E+03 - 1.44E+03	
-71-	PB-212	1.50E+01	52 VALUES < LLD	NORTON FARM 4.1 MILES ESE	26 VALUES < LLD	52 VALUES < LLD	
	PB-214	2.00E+01	3.03E+01 (18 / 52) 2.00E+01 - 4.60E+01	NORTON FARM 4.1 MILES ESE	3.14E+01 (10 / 26) 2.05E+01 - 4.60E+01	2.94E+01 (13 / 52) 2.02E+01 ~ 5.67E+01	
	TL-208	1.00E+01	52 VALUES < LLD	NORTON FARM 4.1 MILES ESE	26 VALUES < LLD	52 VALUES < LLD	
s	R 89	14	• .				
	•	3.50E+00	7 VALUES < LLD			7 VALUES < LLD	
s	R 90	14		•			
		2.00E+00	7 VALUES < LLD			7 VALUES < LLD	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN SOIL PCI/GM - 0.037 BQ/G (DRY WEIGHT)

Name of Facility: WATTS BAR NUCLEAR PLANT Location of Facility: RHEA

TENNESSEE

Docket Number: 50-390,391 Reporting Period: 2009

	Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
G	AMMA SCAN (GELI)	10	•				
	AC-228	2.50E-01	1.07E+00 (8 / 8) 8.87E-01 - 1.30E+00	PM5 DECATUR 6.2 MILES S	1.30E+00 (1 / 1) 1.30E+00 - 1.30E+00	6.84E-01 (2 / 2) 6.44E-01 - 7.23E-01	
	BE-7	2.50E-01	3.38E-01 (4 / 8) 2.87E-01 - 3.84E-01	LM-4 WB 0.9 MILES SE	3.84E-01 (1 / 1) 3.84E-01 - 3.84E-01	4.80E-01 (1 / 2) 4.80E-01 - 4.80E-01	
	BI-212	4.50E-01	1.17E+00 (8 / 8) 7.80E-01 - 1.49E+00	LM-4 WB 0.9 MILES SE	1.49E+00 (1 / 1) 1.49E+00 - 1.49E+00	6.26E-01 (2 / 2) 5.17E-01 - 7.35E-01	
	BI-214	1.50E-01	9.36E-01 (8 / 8) 7.61E-01 - 1.14E+00	LM1 0.5 MILES SSW	1.14E+00 (1 / 1) 1.14E+00 - 1.14E+00	6.98E-01 (2 / 2) 5.49E-01 - 8.47E-01	
1	CS-137	3.00E-02	3.53E-01 (7 / 8) 3.83E-02 - 1.23E+00	PM2 SPRING CITY 7.0 MILES NW	1.23E+00 (1 / 1) 1.23E+00 - 1.23E+00	2.50E-01 (2 / 2) 1.43E-01 - 3.57E-01	
.72-	K-40	7.50E-01	1.26E+01 (8 / 8) 3.89E+00 - 2.41E+01	LM-4 WB 0.9 MILES SE	2.41E+01 (1 / 1) 2.41E+01 - 2.41E+01	4.61E+00 (2 / 2) 4.30E+00 - 4.91E+00	
	PA-234M	4.00E+00	8 VALUES < LLD	PM3 10.4 MILES NNE	1 VALUES < LLD	2 VALUES < LLD	
	PB-212	1.00E-01	1.08E+00 (8 / 8) 8.69E-01 - 1.23E+00	PM5 DECATUR 6.2 MILES S	1.23E+00 (1 / 1) 1.23E+00 - 1.23E+00	6.41E-01 (2 / 2) 5.94E-01 - 6.87E-01	,
	PB-214	1,50E-01	9.95E-01 (8 / 8) 8.36E-01 - 1.24E+00	LM1 0.5 MILES SSW	1.24E+00 (1 / 1) 1.24E+00 - 1.24E+00	7.24E-01 (2 / 2) 6.26E-01 - 8.22E-01	
	RA-226	1.50E-01	9.36E-01 (8 / 8) 7.61E-01 - 1.14E+00	LM1 0.5 MILES SSW	1.14E+00 (1 / 1) 1.14E+00 - 1.14E+00	6.98E-01 (2 / 2) 5.49E-01 - 8.47E-01	
	TL-208	6.00E-02	3.62E-01 (8 / 8) 2.86E-01 - 4.20E-01	LM1 0.5 MILES SSW	4.20E-01 (1 / 1) 4.20E-01 - 4.20E-01	2.04E-01 (2 / 2) 1.84E-01 - 2.24E-01	
s	R 89	10					
		1.60E+00	8 VALUES < LLD			2 VALUES < LLD	
s	R 90	10					
		4.00E-01	8 VALUES < LLD			2 VALUES < LLD	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Tennessee Valley Authority

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN APPLES PCI/KG - 0.037 BQ/KG (WET WT)

Name of Facility: WATTS BAR NUCLEAR PLANT

Location of Facility: RHEA

TENNESSEE

Docket Number: 50-390,391 Reporting Period: 2009

Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
GAMMA SCAN (GELI)	2					
BI-214	4.00E+01	2.03E+02 (1 / 1) 2.03E+02 - 2.03E+02	LM-4 WB 0.9 MILES SE	2.03E+02 (1 / 1) 2.03E+02 - 2.03E+02	1.38E+02 (1 / 1) 1.38E+02 - 1.38E+02	
K-40	2.50E+02	8.11E+02 (1 / 1) 8.11E+02 - 8.11E+02	LM-4 WB 0.9 MILES SE	8.11E+02 (1 / 1) 8.11E+02 - 8.11E+02	9.48E+02 (1 / 1) 9.48E+02 - 9.48E+02	
PB-214	8.00E±01	2.04E+02 (1 / 1) 2.04E+02 - 2.04E+02	LM-4 WB 0.9 MILES SE	2.04E+02 (1 / 1) 2.04E+02 - 2.04E+02	1.11E+02 (1 / 1) 1.11E+02 - 1.11E+02	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN CABBAGE PCI/KG - 0.037 BQ/KG (WET WT)

Name of Facility: WATTS BAR NUCLEAR PLANT

Location of Facility: RHEA

TENNESSEE

Docket Number: 50-390,391 Reporting Period: 2009

	Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
G/	AMMA SCAN (GELI)	2					
	AC-228	5.00E+01	1 VALUES < LLD	2.5 MILES NE	1 VALUES < LLD	1 VALUES < LLD	
	BI-214	4.00E+01	7.36E+01 (1 / 1) 7.36E+01 - 7.36E+01	2.5 MILES NE	7.36E+01 (1 / 1) 7.36E+01 - 7.36E+01	6.38E+01 (1 / 1) 6.38E+01 - 6.38E+01	
	K-40	2.50E+02	1.84E+03 (1 / 1) 1.84E+03 - 1.84E+03	2.5 MILES NE	1.84E+03 (1 / 1) 1.84E+03 - 1.84E+03	2.12E+03 (1 / 1) 2.12E+03 - 2.12E+03	
	PB-212	4.00E+01	1 VALUES < LLD	2.5 MILES NE	1 VALUES < LLD	1 VALUES < LLD	
ı,	PB-214	8.00E+01	1 VALUES < LLD	2.5 MILES NE	1 VALUES < LLD	1 VALUES < LLD	
7.4	TL-208	3.00E+01	1 VALUES < LLD	2.5 MILES NE	1 VALUES < LLD	1 VALUES < LLD	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Tennessee Valley Authority

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN CORN PCI/KG - 0.037 BQ/KG (WET WT)

Name of Facility: WATTS BAR NUCLEAR PLANT Location of Facility: RHEA TENNESSEE

Docket Number: 50-390,391 Reporting Period: 2009

Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
GAMMA SCAN (GEL!)	2				·	, •
BI-214	4.00E+01	5.58E+01 (1 / 1) 5.58E+01 - 5.58E+01	2.5 MILES NE	5.58E+01 (1 / 1) 5.58E+01 - 5.58E+01	7.72E+01 (1 / 1) 7.72E+01 - 7.72E+01	
K-40	2.50E+02	2.37E+03 (1 / 1) 2.37E+03 - 2.37E+03	2.5 MILES NE	2.37E+03 (1 / 1) 2.37E+03 - 2.37E+03	2.08E+03 (1 / 1) 2.08E+03 - 2.08E+03	
PB-212	4.00E+01	1 VALUES < ŁLD	2.5 MILES NE	1 VALUES < LLD	1 VALUES < LLD	
PB-214	8.00E+01	1 VALUES < LLD	2.5 MILES NE	1 VALUES < LLD	8.62E+01 (1 / 1) 8.62E+01 - 8.62E+01	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Tennessee Valley Authority

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN GREEN BEANS PCI/KG - 0.037 BQ/KG (WET WT)

Name of Facility: WATTS BAR NUCLEAR PLANT

Location of Facility: RHEA

TENNESSEE .

Docket Number: 50-390,391 Reporting Period: 2009

Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
GAMMA SÇAN (GELI)	2				•	
BI-214	4.00E+01	5.66E+01 (1 / 1) 5.66E+01 - 5.66E+01	2.5 MILES NE	5.66E+01 (1/1) 5.66E+01 - 5.66E+01	6.58E+01 (1 / 1) 6.58E+01 - 6.58E+01	
K-40	2.50E+02	2.00E+03 (1 / 1) 2.00E+03 - 2.00E+03	2.5 MILES NE	2.00E+03 (1 / 1) 2.00E+03 - 2.00E+03	1.58E+03 (1 / 1) 1.58E+03 - 1.58E+03	
PB-214	8.00E+01	1 VALUES < LLD	2.5 MILES NE	1 VALUES < LLD	1 VALUES < LLD	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Tennessee Valley Authority

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN TOMATOES PCI/KG - 0.037 BQ/KG (WET WT)

Name of Facility: WATTS BAR NUCLEAR PLANT

Location of Facility: RHEA

TENNESSEE

Docket Number: 50-390,391 Reporting Period: 2009

Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
GAMMA SCAN (GELI)	. 2					
BI-214	4.00E+01	6.43E+01 (1 / 1) 6.43E+01 - 6.43E+01	2.5 MILES NE	6.43E+01 (1 / 1) 6.43E+01 - 6.43E+01	6.32E+01 (1 / 1) 6.32E+01 - 6.32E+01	
K-40	2.50E+02	2.12E+03 (1 / 1) 2.12E+03 - 2.12E+03	2.5 MILES NE	2.12E+03 (1 / 1) 2.12E+03 - 2.12E+03	1.80E+03 (1 / 1) 1.80E+03 - 1.80E+03	
PB-214	8.00E+01	1 VALUES < LLD	2.5 MILES NE	1 VALUES < LLD	1 VALUES < LLD	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Tennessee Valley Authority

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN SURFACE WATER(Total) PCI/L - 0.037 BQ/L

Name of Facility: WATTS BAR NUCLEAR PLANT Location of Facility: RHEA TENNESSEE

Docket Number: 50-390,391 Reporting Period: 2009

	Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
GR	OSS BETA	39		·			
		1.90E+00	2.81E+00 (20 / 26) 1.93E+00 - 5.29E+00	TRM 517.9	2.96E+00 (9 / 13) 1.95E+00 - 5.29E+00	2.61E+00 (7 / 13) 2.07E+00 - 3.42E+00	
GA	MMA SCAN (GELI)	39					
	AC-228	2.00E+01	2.77E+01 (2 / 26) 2.66E+01 - 2.89E+01	TRM 517.9	2.89E+01 (1 / 13) 2.89E+01 - 2.89E+01	. 13 VALUES < LLD	
1	BI-214	2.00E+01	4.30E+01 (20 / 26) 2.13E+01 - 1.31E+02	TRM 523.1	4.44E+01 (10 / 13) 2.13E+01 - 1.31E+02	3.37E+01 (5 / 13) 2.60E+01 - 5.04E+01	
	K-40	1.00E+02	26 VALUES < LLD	TRM 523.1	13 VALUES < LLD	13 VALUES < LLD	
-78-	PB-212	1.50E+01	26 VALUES < LLD	TRM 523.1	13 VALUES < LLD	13 VALUES < LLD	
	PB-214	2.00E+01	4.10E+01 (12 / 26) 2.07E+01 - 1.19E+02	TRM 523.1	4.98E+01 (5 / 13) 2.07E+01 - 1.19E+02	2.76E+01 (3 / 13) 2.28E+01 - 3.71E+01	
	TL-208	1.00E+01	26 VALUES < LLD	TRM 523.1	13 VALUES < LLD	13 VALUES < LLD	
TPI	TIUM	39	*				
TIN	TOW	2.70E+02	26 VALUES < LLD			13 VALUES < LLD	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN PUBLIC WATER(Total) PCI/L - 0.037 BQ/L

Name of Facility: WATTS BAR NUCLEAR PLANT Location of Facility: RHEA

TENNESSEE

Docket Number: 50-390,391 Reporting Period: 2009

Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
GROSS BETA	39					
	1.90E+00	2.72E+00 (17 / 26) 1.93E+00 - 4.24E+00	RM-2 DAYTON TN 17.8 MILES NNE	2.88E+00 (10 / 13) 1.93E+00 - 4.24E+00	2.61E+00 (7 / 13) 2.07E+00 - 3.42E+00	
GAMMA SCAN (GELI)	39					•
AC-228	2.00E+01	26 VALUES < LLD	RM-2 DAYTON TN 17.8 MILES NNE	13 VALUES < LLD	13 VALUES < LLD	
· BI-212	5.00E+01	26 VALUES < LLD	RM-2 DAYTON TN 17.8 MILES NNE	13 VALUES < LLD	13 VALUES < LLD	
BI-214	2.00E+01	3.28E+01 (16 / 26) 2.03E+01 - 5.16E+01	CF INDUSTRIES TRM 473.0	3.50E+01 (8 / 13) 2.24E+01 - 5.16E+01	3.37E+01 (5 / 13) 2.60E+01 - 5.04E+01	
-79-	1.00E+02	26 VALUES < LLD	RM-2 DAYTON TN 17.8 MILES NNE	13 VALUES < LLD	13 VALUES < LLD	
PB-212	1.50E+01	26 VALUES < LLD	RM-2 DAYTON TN 17.8 MILES NNE	13 VALUES < LLD	13 VALUES < LLD	
PB-214	2.00E+01	3.00E+01 (10 / 26) 2.01E+01 - 4.91E+01	CF INDUSTRIES TRM 473.0	3.17E+01 (5 / 13) 2.01E+01 - 4.91E+01	2.76E+01 (3 / 13) 2.28E+01 - 3.71E+01	
TL-208	1.00E+01	26 VALUES < LLD	RM-2 DAYTON TN 17.8 MILES NNE	13 VALUES < LLD	13 VALUES < LLD	
TRITIUM	47			•		
	2.70E+02	3.09E+02 (5 / 34) 2.70E+02 - 3.63E+02	CF INDUSTRIES TRM 473.0	3.17E+02 (4 / 17) 2.70E+02 - 3.63E+02	13 VALUES < LLD	•

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN WELL WATER(Total) PCI/L - 0.037 BQ/L

Name of Facility: WATTS BAR NUCLEAR PLANT Location of Facility: RHEA

TENNESSEE

Docket Number: 50-390,391 Reporting Period: 2009

	Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
G	ROSS BETA	86					
		1.90E+00	3.00E+00 (39 / 60) 1.97E+00 - 4.92E+00	WBN MW-F O.30 MILES SE)	3.62E+00 (7 / 8) 2.43E+00 - 4.92E+00	3.29E+00 (8 / 26) 1.91E+00 - 7.06E+00	
G	AMMA SCAN (GELI)	86	•				
	AC-228	2.00E+01	60 VALUES < LLD	WBN MW-C 0.25 MILES ESE)	12 VALUES < LLD	26 VALUES < LLD	
	BI-214	2.00E+01	3.89E+01 (32 / 60) 2.08E+01 - 9.74E+01	WBN MW-B 0.45 MILES SSE)	5.16E+01 (7 / 13) 2.43E+01 - 8.06E+01	1.49E+02 (16 / 26) 2.64E+01 - 2.86E+02	
	K-40	1.00E+02	1.08E+02 (1 / 60) 1.08E+02 - 1.08E+02	WBN MW-A 0.58 MILES SSE)	1.08E+02 (1 / 13) 1.08E+02 - 1.08E+02	26 VALUES < LLD	
-80-	PB-212	1.50E+01	60 VALUES < LLD	WBN MW-B 0.45 MILES SSE)	13 VALUES < LLD	26 VALUES < LLD	
	PB-214	2.00E+01	3.27E+01 (26 / 60) 2.05E+01 - 8.89E+01	WBN MW-B 0.45 MILES SSE)	4.14E+01 (6 / 13) 2.40E+01 - 6.50E+01	1.39E+02 (15 / 26) 2.85E+01 - 2.82E+02	
	TL-208	1.00E+01	60 VALUES < LLD	WBN MW-C 0.25 MILES ESE)	12 VALUES < LLD	26 VALUES < LLD	
TF	RITIUM	86					
		2.70E+02	2.09E+03 (32 / 60) 3.47E+02 - 3.42E+03	WBN MW-B 0.45 MILES SSE)	3.08E+03 (13 / 13) 2.57E+03 - 3.42E+03	2.87E+02 (1 / 26) 2.87E+02 - 2.87E+02	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Tennessee Valley Authority

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN COMMERCIAL FISH PCI/GM - 0.037 BQ/G (DRY WEIGHT)

Name of Facility: WATTS BAR NUCLEAR PLANT Location of Facility: RHEA TENNESSEE

Docket Number: 50-390,391 Reporting Period: 2009

	Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	me Mean (F) Mean (F)		Number of Nonroutine Reported Measurements
G	AMMA SCAN (GELI)	6					
	AC-228	1.00E-01	1.28E-01 (1 / 4) 1.28E-01 - 1.28E-01	CHICKAMAUGA RES TRM 471-530	1.28E-01 (1 / 2) 1.28E-01 - 1.28E-01	2 VALUES < LLD	
	BI-214	1.00E-01	1.69E-01 (4 / 4) 1.04E-01 - 2.62E-01	CHICKAMAUGA RES TRM 471-530	1.83E-01 (2 / 2) 1.04E-01 - 2.62E-01	1.63E-01 (1 / 2) 1.63E-01 - 1.63E-01	
. ,	CS-137	3.00E-02	4.35E-02 (2 / 4) 4.20E-02 - 4.50E-02	DOWNSTREAM STATION 1 DOWNSTREAM	4.35E-02 (2 / 2) 4.20E-02 - 4.50E-02	5.80E-02 (2 / 2) 4.29E-02 - 7.31E-02	
	K-40	4.00E-01	1.29E+01 (4 / 4) 1.17E+01 - 1.37E+01	CHICKAMAUGA RES TRM 471-530	1.34E+01 (2 / 2) 1.32E+01 - 1.37E+01	1.28E+01 (2 / 2) 1.24E+01 - 1.32E+01	
.	PB-212	4.00E-02	9.10E-02 (1 / 4) 9.10E-02 - 9.10E-02	CHICKAMAUGA RES TRM 471-530	9.10E-02 (1 / 2) 9.10E-02 - 9.10E-02	2 VALUES < LLD	
\$ 1-	PB-214	5.00E-01	4 VALUES < LLD	DOWNSTREAM STATION 1 DOWNSTREAM	2 VALUES < LLD	2 VALUES < LLD	
	TL-208	3.00E-02	4.70E-02 (1 / 4) 4.70E-02 - 4.70E-02	CHICKAMAUGA RES TRM 471-530	4.70E-02 (1 / 2) 4.70E-02 - 4.70E-02	2 VALUES < LLD	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN GAME FISH PCI/GM - 0.037 BQ/G (DRY WEIGHT)

Name of Facility: WATTS BAR NUCLEAR PLANT Location of Facility: RHEA

TENNESSEE

Docket Number: 50-390,391 Reporting Period: 2009

	Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
G.	AMMA SCAN (GELI)	6			·		
	AC-228	1.00E-01	4 VALUES < LLD	DOWNSTREAM STATION 1 DOWNSTREAM	2 VALUES < LLD	2 VALUES < LLD	
	BI-214	1.00E-01	2.30E-01 (4 / 4) 1.10E-01 - 3.33E-01	CHICKAMAUGA RES TRM 471-530	3.19E-01 (2 / 2) 3.05E-01 - 3.33E-01	2.04E-01 (2 / 2) 1.45E-01 - 2.63E-01	
	CS-137	3.00E-02	4.42E-02 (3 / 4) 3.74E-02 - 4.94E-02	DOWNSTREAM STATION 1 DOWNSTREAM	4.76E-02 (2 / 2) 4.58E-02 - 4.94E-02	5.95E-02 (2 / 2) 3.58E-02 - 8.32E-02	
	K-40	4.00E-01	1.43E+01 (4 / 4) 1.25E+01 - 1.58E+01	CHICKAMAUGA RES TRM 471-530	1.53E+01 (2 / 2) 1.47E+01 - 1.58E+01	1.63E+01 (2 / 2) 1.47E+01 - 1.79E+01	
⊹	PB-212	4.00E-02	4 VALUES < LLD	DOWNSTREAM STATION 1 DOWNSTREAM	2 VALUES < LLD	2 VALUES < LLD	
·82-	PB-214	5.00E-01	4 VALUES < LLD	DOWNSTREAM STATION 1 DOWNSTREAM	2 VALUES < LLD	2 VALUES < LLD	
	TL-208	3.00E-02	4 VALUES < LLD	DOWNSTREAM STATION 1 DOWNSTREAM	2 VALUES < LLD	2 VALUES < LLD	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN SHORELINE SEDIMENT PCI/GM - 0.037 BQ/G (DRY WEIGHT)

Name of Facility: WATTS BAR NUCLEAR PLANT Location of Facility: RHEA

TENNESSEE

Docket Number: 50-390,391 Reporting Period: 2009

Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
GAMMA SCAN (GELI)	4					
AC-228	2.50E-01	1.51E+00 (2 / 2) 1.36E+00 - 1.65E+00	COTTON PORT MARINA TRM 513	1.51E+00 (2 / 2) 1.36E+00 - 1.65E+00		
BE-7	2.50E-01	4.28E-01 (1 / 2) 4.28E-01 - 4.28E-01	COTTON PORT MARINA TRM 513	4.28E-01 (1 / 2) 4.28E-01 - 4.28E-01	2 VALUES < LLD	
BI-212	4.50E-01	1.78E+00 (2 / 2) 1.53E+00 - 2.02E+00	COTTON PORT MARINA TRM 513	1.78E+00 (2 / 2) 1.53E+00 - 2.02E+00	2 VALUES < LLD	
BI-214	1.50E-01	7.05E-01 (2 / 2) 5.78E-01 - 8.31E-01	COTTON PORT MARINA TRM 513	7.05E-01 (2 / 2) 5.78E-01 - 8.31E-01		
CS-137	3.00E-02	6.32E-02 (1 / 2) 6.32E-02 - 6.32E-02	COTTON PORT MARINA TRM 513	6.32E-02 (1 / 2) 6.32E-02 - 6.32E-02	2 VALUES < LLD	a .
&	7.50E-01	3.21E+01 (2 / 2) 3.05E+01 - 3.36E+01	COTTON PORT MARINA TRM 513	3.21E+01 (2 / 2) 3.05E+01 - 3.36E+01	` '	
PB-212	1.00E-01	1.45E+00 (2 / 2) 1.28E+00 - 1.61E+00	COTTON PORT MARINA TRM 513	1.45E+00 (2 / 2) 1.28E+00 - 1.61E+00	` '	
PB-214	1.50E-01	7.40E-01 (2 / 2) 5.92E-01 - 8.88E-01	COTTON PORT MARINA TRM 513	7.40E-01 (2 / 2) 5.92E-01 - 8.88E-01	2.46E-01 (1 / 2) 2.46E-01 - 2.46E-01	
RA-226	1.50E-01	7.05E-01 (2 / 2) 5.78E-01 - 8.31E-01		7.05E-01 (2 / 2) 5.78E-01 - 8.31E-01		
TL-208	6.00E-02	5.42E-01 (2 / 2) 4.48E-01 - 6.35E-01	COTTON PORT MARINA TRM 513	5.42E-01 (2 / 2) 4.48E-01 - 6.35E-01	1.05E-01 (1 / 2) 1.05E-01 - 1.05E-01	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).

Tennessee Valley Authority

Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory



RADIOACTIVITY IN POND SEDIMENT PCI/GM - 0.037 BQ/G (DRY WEIGHT)

Name of Facility: WATTS BAR NUCLEAR PLANT

Location of Facility: RHEA

TENNESSEE

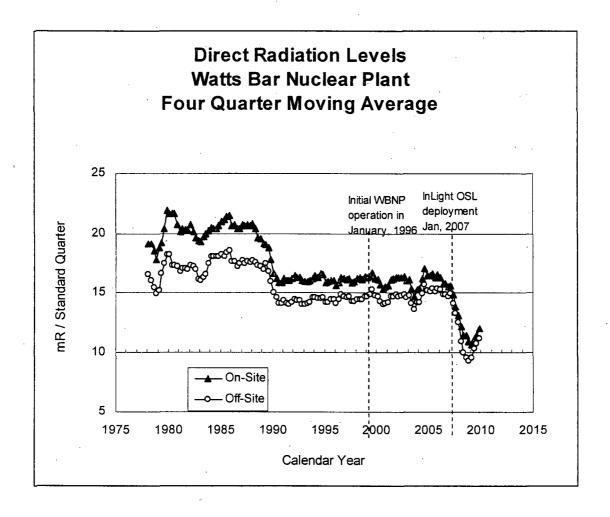
Docket Number: 50-390,391 Reporting Period: 2009

	Type and Total Number of Analysis Performed	Lower Limit of Detection (LLD) See Note 1	Indicator Locations Mean (F) Range See Note 2	Location with Highest Name Distance and Direction	Annual Mean Mean (F) Range See Note 2	Control Locations Mean (F) Range See Note 2	Number of Nonroutine Reported Measurements
G	GAMMA SCAN (GELI)				·		
	AC-228	2.50E-01	8.56E-01 (5 / 5) 6.59E-01 - 1.10E+00	YP-13 YARD POND	1.10E+00 (1 / 1) 1.10E+00 - 1.10E+00	VALUES < LLD	
-	BE-7	2.50E-01	3.76E-01 (4 / 5) 3.51E-01 - 4.09E-01	YP-13 YARD POND	4.09E-01 (1 / 1) 4.09E-01 - 4.09E-01	VALUES < LLD	
	BI-212	4.50E-01	9.27E-01 (5 / 5) 8.01E-01 - 1.08E+00	YP-13 YARD POND	1.08E+00 (1 / 1) 1.08E+00 - 1.08E+00	VALUES < LLD	
	BI-214	1.50E-01	7.52E-01 (5 / 5) 6.54E-01 - 9.41E-01	YP-13 YARD POND	9.41E-01 (1 / 1) 9.41E-01 - 9.41E-01	VALUES < LLD	
!_	CO-58	3.00E-02	5.71E-02 (4 / 5) 3.85E-02 - 9.00E-02	LV-3 LOW VOL WASTE POND	9.00E-02 (1 / 1) 9.00E-02 - 9.00E-02	VALUES < LLD	
24	CO-60	3.00E-02	9.51E-02 (4 / 5) 4.58E-02 - 1.61E-01	YP-17 YARD POND	1.61E-01 (1 / 1) 1.61E-01 - 1.61E-01	VALUES < LLD	
	CS-134	3.00E-02	7.26E-02 (1 / 5) 7.26E-02 - 7.26E-02	LV-3 LOW VOL WASTE POND	7.26E-02 (1 / 1) 7.26E-02 - 7.26E-02	VALUES < LLD	
	CS-137	3.00E-02	1.12E-01 (5 / 5) 3.72E-02 - 1.93E-01	YP-13 YARD POND	1.93E-01 (1 / 1) 1.93E-01 - 1.93E-01	VALUES < LLD	
*	K-40	7.50E-01	1.10E+01 (5 / 5) 8.09E+00 - 1.69E+01	YP-13 YARD POND	1.69E+01 (1 / 1) 1.69E+01 - 1.69E+01	VALUES < LLD	
	MN-54	3.00E-02	5 VALUES < LLD	YP-13 YARD POND	1 VALUES < LLD	VALUES < LLD	
	PB-212	1.00E-01	8.64E-01 (5 / 5) 6.24E-01 - 1.21E+00	YP-13 YARD POND	1.21E+00 (1 / 1) 1.21E+00 - 1.21E+00	VALUES < LLD	
	PB-214	1.50E-01	7.73E-01 (5 / 5) 6.26E-01 - 9.78E-01	YP-13 YARD POND	9.78E-01 (1 / 1) 9.78E-01 - 9.78E-01	VALUES < LLD	
	RA-224	7.50E-01	1.06E+00 (1 / 5) · 1.06E+00 - 1.06E+00	YP-13 YARD POND	1.06E+00 (1 / 1) 1.06E+00 - 1.06E+00	VALUES < LLD	
	SB-125	-1.00E+00	2.14E-01 (2 / 5) 1.55E-01 - 2.73E-01	· YP-17 YARD POND	2.73E-01 (1 / 1) 2.73E-01 - 2.73E-01	VALUES < LLD	

Note: 1. Nominal Lower Level of Detection (LLD) as described in Table E - 1

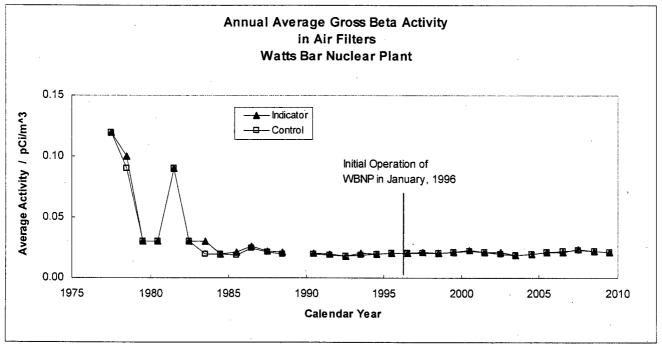
Note: 2. Mean and Range based upon detectable measurements only. Fraction of detectable measurements at specified location is indicated in parentheses (F).

Figure H-1
Direct Radiation



Dosimeters are processed quarterly. This chart shows trends in the average measurement for all dosimeters grouped as "on-site" or "off-site". The data from preoperational phase, prior to 1996, show the same trend of "on-site" measurements higher than "off-site" measurements that is observed in current data indicating that the slightly higher "on-site" direct radiation levels are not related to plant operations.

Figure H-2
Radioactivity in Air Filters



To more clearly show trends developed since the end of atmospheric weapons testing, the data beginning with the resumption of the monitoring program in 1990 is shown in greater detail.

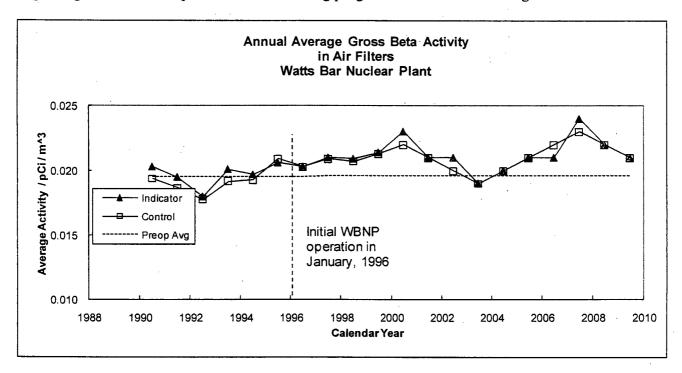
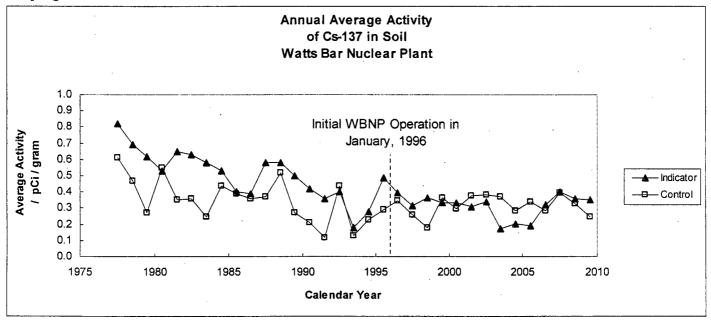


Figure H-3

Cs-137 in Soil

Cesium-137 was produced by past nuclear weapons testing and is present in almost every environmental sample exposed to the atmosphere. The "control" and "indicator" locations have generally trended downward with year-to-year variation, since the beginning of the monitoring program from the Watts Bar site.



In almost every year, the "indicator" locations have shown greater activity of Cs-137 than the "control" locations. This trend, with its preoperational average is shown below.

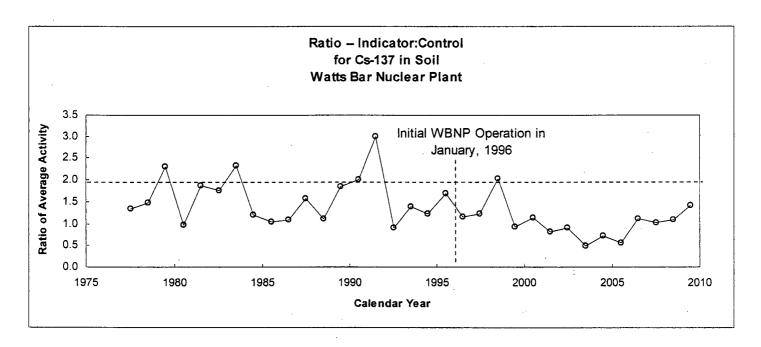
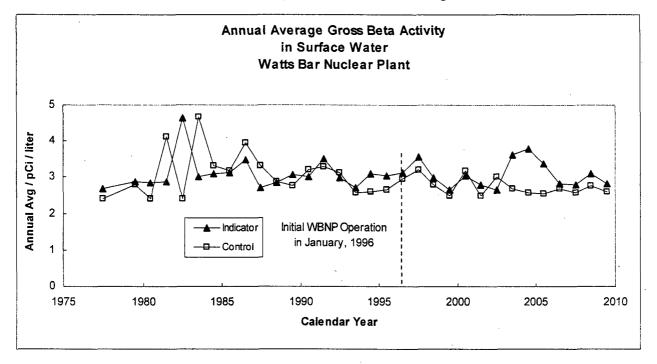


Figure H-4
Gross Beta Activity in Surface and Drinking Water



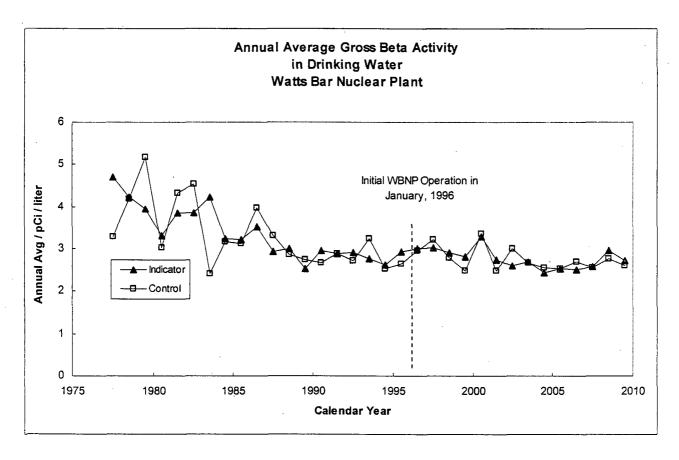
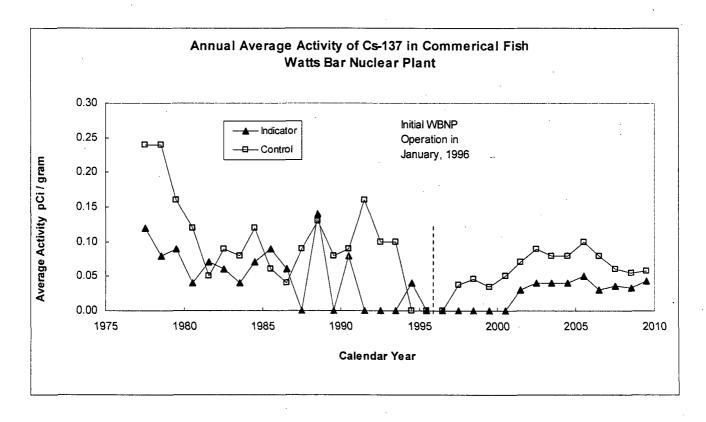


Figure H-5
Radioactivity in Fish



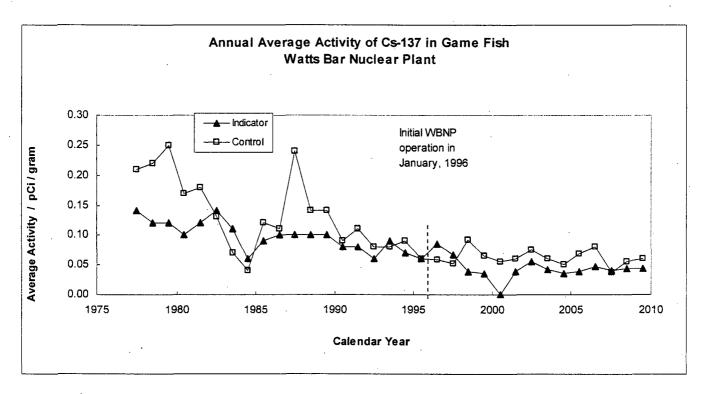
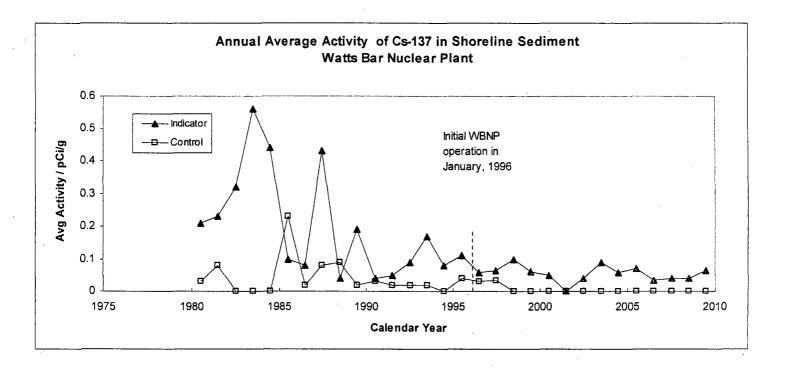


Figure H-6

Radioactivity in Shoreline Sediment

The Cs-137 present in the shoreline sediments of the Tennessee River system was produced both by testing of nuclear weapons and by related nuclear operations in the upper reaches of the Tennessee River watershed. The amounts of Cs-137 have declined significantly during the course of monitoring for the Watts Bar site, so much so that not all samples contain detectable levels.



Enclosure 2

Watts Bar Nuclear Plant Annual Radiological Environmental Operating Report Data Supplement - 2009

Annual
Radiological
Environmental
Operating Report

Watts Bar Nuclear Plant Data Supplement 2009

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT WATTS BAR NUCLEAR PLANT DATA SUPPLEMENT

2009

TENNESSEE VALLEY AUTHORITY

RADIOLOGICAL ENVIRONMENTAL MONITORING DATA WATTS BAR NUCLEAR PLANT

2009

This supplement to the Watts Bar Nuclear Plant Annual Radiological Environmental Operating Report (AREOR) presents the results of individual sample analyses and radiation measurements. The results are ordered by sample type then by sample location and analysis type. If no gamma activity was detected in a sample, the notation 'NO ACTIVITY DETECTED' is entered. The sample locations are described in Appendix A to the AREOR.

These tables include all results, whether above or below the Lower Limit of Detection.

Negative values are an artifact of counting statistics and do not imply a negative activity.

The uncertainty reported for specific analyses such as gross beta, Sr-89 and 90 and tritium is the one sigma counting error. For gamma analyses, the uncertainty reported is the one-sigma error calculated by the gamma spectral analysis software.

		•				• •			
Station	<u>Location</u>	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>		Activity	<u>Error</u>	Date Collected	<u>Lab Number</u>
2116	RM-2 DAYTON TN	15.0 MILES SW					•		
		•	GROSS I	BETA					
			•			.0246	.0027	12/30/08	920094
						.0208	.0027	01/05/09	920174
				·		.0200	.0025	01/12/09	920271
						.0231	.0023	01/20/09	920403
	,					.0279	.0030	01/26/09	920556
	•					.0268	.0029	02/02/09	920641
,							i i	02/02/09	920739
	•					.0206	.0023		
		•	, .			.0243	.0026	02/16/09	920845
						.0277	.0030	02/23/09	920997
<u>-</u>				* 4		.0238	.0026	03/02/09	921079
1 •						.0257	.0028	03/09/09	921175
		•				.0165	.0019	03/16/09	921288
						.0222	.0024	03/23/09	921458
	•				÷	.0140	,0016	03/30/09	921543
	•	,				.0183	.0021	04/06/09	921645
						.0187	.0021	04/13/09	921755
						.0144	.0017	04/20/09	921883
		•				.0191	.0021	04/27/09	922092
		•				.0159	.0018	05/04/09	922191
					•	.0121	.0014	05/11/09	922308
						.0156	.0018	05/18/09	922440
						.0133	.0015	05/26/09	922561
						.0171	.0020	06/01/09	922689
**						.0223	.0024	06/08/09	922806
	•			•		.0188	.0021	06/15/09	922958
	· ·		. •			.0241	.0026	06/22/09	923063

Station 2116	Location RM-2 DAYTON TN	Description 15.0 MILES SW	Analysis Nuclide	Activity	<u>Error</u>	Date Collected	Lab Number
			GROSS BETA				
•	·		,	,	0000	00/00/00	,
		,		.0239	.0026	06/29/09	923186
	•			.0162	.0018	07/07/09	923293
				.0220	.0024	07/13/09	923425
		•		.0198	.0022	07/20/09	923540
				.0262	.0028	07/27/09	923690
				.0173	.0019	08/03/09	923792
				.0260	.0028	08/10/09	923928
			•	.0264	.0028	08/17/09	924034
		•		.0120	.0014	08/24/09	924166
- 2				.0231	.0025	09/01/09	924277
į	•			.0309	.0033	09/08/09	924430
		,		.0261	.0028	09/14/09	924514
•	•			.0199	.0022	09/21/09	924632
•				.0163	.0018	09/28/09	924736
				.0190	.0021	10/05/09	924864
				.0163	.0018	10/13/09	924948
				.0127	.0016	10/19/09	925047
				.0191	.0021	10/26/09	925236
				.0182	.0020	11/02/09	925368
,				.0287	.0031	11/09/09	925471
				.0246	.0027	11/16/09	925571
				.0295	.0031	11/23/09	925705
				.0222	.0024	11/30/09	925840
	•			.0196	.0022	12/07/09	925919
			·	.0242	.0026	12/14/09	926014
	•		•	.0221	.0024	12/21/09	926167

Station	Location	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
2116	RM-2 DAYTON TN	15.0 MILES SW	CAMMAA	SCAN (GELI)	•			
			GAWWA .	AC-228	•			
•		,		710 220	.0040	.0019	03/16/09	921322
					.0064	.0017	09/28/09	924770
					.0054	.0021	12/21/09	926201
				BE-7	:			
					.1039	.0072	01/20/09	920437
	·				.1409	.0098	02/16/09	920879
				•	.1821	.0151	03/16/09	921322
•					.1283	.0111	04/13/09	921789
	. ,				.1221	.0092	05/11/09	922342
1			•		.1093	.0076	06/08/09	922840
ω		•			1020	.0095	07/07/09	923327
		•			.1149	.0121	08/03/09	923826
				•	.1265	.0097	09/01/09	924316
-					.1064	.0120	09/28/09	924770
		4			.0906	.0082	10/26/09	925270
					.1039	.0096	11/23/09	925739
	·			•	.0864	.0078	12/21/09	926201
	•			BI-214				
					.0285	.0024	01/20/09	920437
	•	•			.0126	.0017	02/16/09	920879
			•		.0163	.0022	03/16/09	921322
					.0286	.0026	04/13/09	921789
					.0182	.0020	05/11/09	922342
		•		•	.0103	.0012	06/08/09	922840
-					.0159	.0022	07/07/09	923327
1			•		.0126	.0016	08/03/09	923826

.0059 .0014 09/01/09 .0123 .0015 09/28/09	
.0123 .0015 09/28/09	
	924316
.0181 .0021 10/26/09	924770
	925270
	925739
.0131 .0017 12/21/09	926201
K-40	
.0352 .0094 02/16/09	920879
.0271 .0083 03/16/09	921322
.0095 .0060 05/11/09	922342
.0060 .0080 06/08/09	922840
.0313 .0081 09/01/09	924316
.0243 .0093 09/28/09	924770
.0008 .0053 12/21/09	926201
PB-212	
.0014 .0005 02/16/09	920879
.0003 .0008 06/08/09	922840
.0011 .0006 07/07/09	923327
.00080005 09/01/09	924316
.0011 .0005 09/28/09	924770
PB-214	
.0282 .0024 01/20/09	920437
.0173 .0021 02/16/09	920879
.0123 .0017 03/16/09	921322
.0300 .0028 04/13/09	921789
.0185 .0018 05/11/09	922342
.0073 .0012 06/08/09	922840

<u>Station</u>	Location	<u>Description</u>	<u>Analysis</u> <u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
2116	RM-2 DAYTON TN	15.0 MILES SW	044444 00441 (0511)				
			GAMMA SCAN (GELI)				
	•	•	PB-214	.0187	.0023	07/07/09	923327
				.0143	.0023	08/03/09	923826
		•	· .	.0078	.0024	09/01/09	924316
		•	. *				
		•		.0111	.0016	09/28/09	924770
	•			0142	.0017	10/26/09	925270
			•	.0468	.0026	11/23/09	925739
	•	•		.0124	.0013	12/21/09	926201
	•	•	TL-208	0004	0004		000040
				.0004	.0004	06/08/09	922840
	•			.0009	.0005	09/01/09	924316
0404	1344	0.5.444.50.00144		.0011	.0004	09/28/09	924770
3101	LM1	0.5 MILES SSW	GROSS BETA			•	
		•	GROSS BETA				
•		2		.0269	.0029	12/30/08	920060
				.0196	.0022	01/06/09	920155
			•	.0246	.0027	01/13/09	920242
		•		.0291	.0031	01/20/09	920377
				.0316	.0034	01/26/09	920522
				.0241	.0026	02/03/09	920622
				.0223	.0025	02/09/09	920711
				.0250	.0027	02/17/09	920818
				.0290	.0031	02/23/09	920963
		•		.0248	.0027	03/02/09	921060
	·			.0291	.0031	03/09/09	921147
				.0202	.0022	03/16/09	921262
			•	.0202	.0022	33, 13, 33	021202

				*			
<u>Station</u>	Location	Description	Analysis Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
3101	LM1	0.5 MILES SSW	•	•			
			GROSS BETA				
						20104100	004.404
				.0230	.0025	03/24/09	921424
				.0118	.0014	03/31/09	921524
				.0148	.0017	04/07/09	921617
				.0193	.0022	04/14/09	921728
	·			.0161	.0019	04/20/09	921849
	•			.0199	.0022	04/28/09	922067
				.0228	.0025	05/05/09	922162
				.0115	.0014	05/11/09	922282
				.0154	.0017	05/19/09	922406
- 6				.0138	.0016	05/26/09	922542
1				.0188	.0021	06/02/09	922661
				.0182	.0020	06/09/09	922780
			-	.0169	.0020	06/15/09	922924
	•	•		.0199	.0022	06/22/09	923044
*				.0214	.0023	06/30/09	923147
			• •	0156	.0018	07/07/09	923267
				.0216	.0024	07/14/09	923391
	•			.0196	.0022	07/20/09	923521
		•		.0251	.0027	07/27/09	923662
		,		.0164	.0018	08/04/09	923766
		•		.0262 ⁻	.0029	08/10/09	923894
				.0245	.0027	08/17/09	924015
•				.0127	.0015	08/25/09	924138
				.0225	.0025	09/01/09	924251
			• .	.0272	.0029	09/09/09	924396
	,	•		.0253	.0028	09/14/09	924495

• •						•	
Station	Location	<u>Description</u>	Analysis Nuclide	<u>Activity</u>	Error	Date Collected	<u>Lab Number</u>
3101	LM1	0.5 MILES SSW					
		·	GROSS BETA				
						00/00/00	004004
			•	.0200	.0022	09/22/09	924604
			. *	.0136	.0016	09/29/09	924710
			•	.0188	.0021	10/06/09	924830
				.0138	.0015	10/15/09	924929
		•	•	.0130	.0017	10/20/09	925019
		• · ·	•	.0209	.0023	10/27/09	925204
		•		.0178	.0020	11/03/09	925333
			•	.0267	.0029	11/09/09	925452
			•	.0241	.0026	11/17/09	925542
1				.0258	.0028	11/24/09	925679
7 -	•		· ·	.0225	.0024	12/01/09	925806
		•		.0165	.0019	12/07/09	925900
	,			.0267	.0029	12/14/09	925985
	*			.0238	.0026	12/21/09	926141
			GAMMA SCAN (GELI) AC-228				•
				.0038	.0017	03/16/09	921313
				.0011	.0012	07/07/09	923318
			BE-7	•		•	
				.1127	.0107	01/20/09	920428
	,			.1270	.0137	02/17/09	920870
		•	and the second second	.1684	.0122	03/16/09	921313
	,			.0998	.0085	04/14/09	921780
		· .		.0982	.0078	05/11/09	922333
				.1138	.0091	06/09/09	922831
		•		1006	.0082	07/07/09	923318

Table 1
RADIOACTIVITY IN AIR FILTER
WATTS BAR NUCLEAR PLANT
PCI/M3 - 0.037 BQ/M3
12/28/2008 - 12/25/2009

	•		•				
<u>Station</u>	<u>Location</u>	<u>Description</u>	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
3101	LM1	0.5 MILES SSW				•	
•			GAMMA SCAN (GELI) BE-7			,	
-	•			.1126	.0086	08/04/09	923817
				.1094	.0074	09/01/09	924307
				.0963	.0067	09/29/09	924761
	·	i .		.0838	.0064	10/27/09	925261
				.0486	.0100	11/24/09	925730
		•		.0808	.0078	12/21/09	926192
	•		Bl-214	•			
				.0172	.0034	01/20/09	920428
				.0234	.0027	02/17/09	920870
1				.0120	.0013	03/16/09	921313
∞ .		6		.0056	.0012	04/14/09	921780
				.0082	.0013	05/11/09	922333
		•		.0041	.0012	06/09/09	922831
				.0074	.0010	07/07/09	923318
	*			.0103	.0016	08/04/09	923817
				.0070	.0016	09/01/09	924307
		i		.0295	.0025	09/29/09	924761
				.0058	.0012	10/27/09	925261
	*.			.0188	.0024	11/24/09	925730
				.0083	.0012	12/21/09	926192
-			K-40			•	
		•		.0317	.0079	03/16/09	921313
		•		.0045	.0083	04/14/09	921780
		ì		.0032	.0065	05/11/09	922333
				.0040	.0072	06/09/09	922831
	•			.0224	.0083	08/04/09	923817

Station 3101	Location LM1	Description 0.5 MILES SSW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	<u>Date Collected</u>	<u>Lab Number</u>
. •			GAMMA	SCAN (GELI)				
	•			K-40	.0214	.0078	09/01/09	924307
		•	1		.0117	.0060	09/29/09	924761
	•				.0002	.0044	10/27/09	925261
		•			.0028	.0074	12/21/09	926192
				PB-212	.0020	.0074	12/2 1/09	920192
•				FD-212	.0011	.0008	03/16/09	921313
					.0015	.0004	08/04/09	923817
		•	•		.0020	.0005	09/01/09	924307
	•			PB-214	.0020	.0000	00/01/00	024001
'n		•		FD-21 -4	.0206	.0019	01/20/09	920428
. 9					.0215	.0016	02/17/09	920870
1				· .	.0120	.0020	03/16/09	921313
		· · · · · · · · · · · · · · · · · · ·			.0060	.0010	04/14/09	921780
					.0080	.0013	05/11/09	922333
	•				.0031	.0009	06/09/09	922831.
					.0072	.0012		923318
					.0088	.0009	08/04/09	923817
		*	* *		.0066	.0012	09/01/09	924307
•		. *			.0267	.0012	09/29/09	924761
					.0076	.0010	10/27/09	925261
:						.0010	11/24/09	925730
				I .	.0192			
		•	• •	= : 000	.0056	.0011	12/21/09	926192
				TL-208	0012	0005	03/16/09	921313
					.0012	.0005	05/11/09	
	•			•	.0002	.0003		922333
					.0007	.0005	06/09/09	922831

Station LM1 Description Analysis Nuclide Activity Error Date Collected Lab Number Lab Num	•		•	,						
GAMMA SCAN (GELI) TL-208 1.0014					Analysis Nuclide	•	<u>Activity</u>	<u>Error</u>	Date Collected	<u>Lab Number</u>
TIL-208	3101	LIVII		0.5 MILES 55W	CAMMA SCAN (CELL)				,	
10014										
A MILES NNE GROSS BETA		•		•	12 200		0014	.0004	08/04/09	923817
3102 LM2 0.4 MILES NNE GROSS BETA 1.0282 .0030 12/30/08 920063 .0209 .0023 01/06/09 920157 .0243 .0026 01/13/09 920245 .0272 .0029 01/20/09 920379 .0299 .0032 01/26/09 920525 .0299 .0032 01/26/09 920525 .0243 .0026 02/03/09 920525 .0243 .0026 02/03/09 920525 .0211 .0024 02/09/09 920714 .0242 .0026 02/17/09 920820 .0296 .0032 02/23/09 920820 .0296 .0032 02/23/09 920820 .0296 .0032 02/23/09 921052 .0296 .0032 03/09/09 921150 .0211 .0020 03/06/09 921150 .0173 .0020 03/16/09 921264 .0211 .0023 03/23/09 921264 .0211 .0023 03/23/09 921264 .0211 .0023 03/23/09 921264 .0211 .0023 03/23/09 921264 .0211 .0023 03/23/09 921264 .0211 .0023 03/23/09 921264 .0211 .0023 03/23/09 921264 .0211 .0023 03/23/09 921264 .0211 .0023 03/23/09 921264 .0211 .0023 03/23/09 921264 .0211 .0023 03/23/09 921264 .0211 .0023 03/23/09 921264 .0211 .0020 04/06/09 921265 .0100 .0020 04/13/09 921266 .0160 .0020 04/13/09 921730 .0163 .0019 04/27/09 922069 .0246 .0027 05/04/09 922165 .0246 .0027 05/04/09 922269 .0246 .0027 05/04/09 922269 .0246 .0027 05/04/09 922269				. "	• .					
GROSS BETA 0.282 0.030 12/30/08 920063 0.0209 0.023 01/06/09 920157 0.0243 0.026 01/13/09 920379 0.0272 0.029 01/26/09 920379 0.0299 0.032 01/26/09 920525 0.0299 0.032 01/26/09 920525 0.0243 0.026 02/03/09 920624 0.0211 0.024 02/09/09 920714 0.0242 0.026 02/17/09 920820 0.0296 0.032 02/23/09 920966 0.0233 0.025 03/02/09 921062 0.0284 0.029 03/09/09 921150 0.0173 0.020 03/16/09 921264 0.0211 0.023 03/23/09 921427 0.0172 0.015 03/30/09 921526 0.0180 0.020 04/13/09 921620 0.0180 0.020 04/13/09 921852 0.0190 0.021 04/27/09 922069 0.0246 0.027 05/04/09 922165 0.0246 0.027 05/04/09 922165 0.0246 0.027 05/04/09 922165 0.0246 0.027 05/04/09 922165 0.0120 0.015 05/11/09 922284	3102	LM2		0.4 MILES NNE						0007
					GROSS BETA					
.0209 .0023 01/06/09 920157 .0243 .0026 01/13/09 920245 .0272 .0029 01/20/09 920379 .0299 .0032 01/26/09 920525 .0293 .0026 02/03/09 920524 .0211 .0024 02/09/09 920714 .0211 .0024 02/09/09 920714 .0242 .0026 02/17/09 920820 .0296 .0032 02/23/09 920966 .0233 .0025 03/02/09 921062 .0264 .0029 03/09/09 921150 .0173 .0020 03/16/09 921264 .0211 .0023 03/23/09 921427 .0117 .0015 03/30/09 921526 .0117 .0015 03/30/09 921526 .0117 .0015 03/30/09 921526 .01180 .0020 04/13/09 921526 .01180 .0020 04/13/09 921852 .01190 .0021 04/27/09 9221852 .01190 .0021 04/27/09 922165 .0120 .0026 .0027 05/04/09 922165			•		•				-	
10243 0.026 0.1/13/09 920245 0.0272 0.029 0.1/20/09 920379 0.0299 0.032 0.1/26/09 920525 0.0243 0.026 0.2/03/09 920624 0.0211 0.024 0.0209/09 920714 0.0242 0.026 0.032 0.2/23/09 920820 0.0296 0.032 0.02/23/09 920966 0.0233 0.025 0.3/02/09 921062 0.0264 0.029 0.3/09/09 921150 0.0173 0.002 0.3/16/09 921264 0.0211 0.023 0.3/23/09 921427 0.0177 0.015 0.3/30/09 921526 0.0172 0.020 0.4/06/09 921620 0.0180 0.0020 0.4/13/09 921852 0.0180 0.0020 0.4/13/09 921852 0.0190 0.0021 0.4/27/09 922069 0.0246 0.027 0.5/04/09 922165 0.0246 0.027 0.5/04/09 922165 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922165 0.0246 0.027 0.5/04/09 922165 0.0246 0.027 0.5/04/09 922165 0.0246 0.027 0.5/04/09 922165 0.0246 0.027 0.5/04/09 922165 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 92284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922284 0.0246 0.027 0.5/04/09 922089 0.0246 0.027 0.5/04/09 0.0246 0.027 0.5/04/09 0.0246 0.027 0.5/04/09 0.0246 0.027 0.5/04/09 0.0246 0.027 0.027 0.027 0.0246 0.0246 0.0246 0.0246	· ·			•			.0282	.0030	12/30/08	920063
10272 0029 01/20/09 920379 00299 0032 01/26/09 920525 00243 0026 02/03/09 920624 00211 0.0024 0.026 0.027/09/09 920714 00242 0.006 0.027/09/09 920820 00296 0.0032 0.0223/09 920862 00296 0.0032 0.0223/09 920966 00233 0.025 0.03/02/09 921062 00264 0.029 0.03/09/09 921150 00173 0.002 0.03/16/09 921264 00117 0.003 0.03/23/09 921427 00127 0.015 0.03/03/09 921526 00172 0.000 0.04/06/09 921620 00180 0.002 0.04/13/09 921852 00190 0.0021 0.04/27/09 922069 00246 0.0027 0.5/04/09 922165 00246 0.0027 0.5/04/09 0.5/04/09 00246 0.0027 0.5/04/09 0.5/04/04	·				•		.0209	.0023	01/06/09	920157
100 100	÷			•			.0243	.0026	01/13/09	920245
							.0272	.0029	01/20/09	920379
.0211 .0024 02/09/09 920714 .0242 .0026 02/17/09 920820 .0296 .0032 02/23/09 920966 .0233 .0025 03/02/09 921062 .0264 .0029 03/09/09 921150 .0173 .0020 03/16/09 921264 .0211 .0023 03/23/09 921427 .0127 .0015 03/30/09 921526 .0172 .0020 04/06/09 921620 .0180 .0020 04/13/09 921730 .0163 .0019 04/20/09 921852 .0190 .0021 04/27/09 922069 .0246 .0027 05/04/09 92165 .0120 .0015 05/11/09 922284							.0299	.0032	01/26/09	920525
.0211 .0024 02/09/09 920714 .0242 .0026 02/17/09 920820 .0296 .0032 02/23/09 920966 .0233 .0025 03/02/09 921062 .0264 .0029 03/09/09 921150 .0173 .0020 03/16/09 921264 .0211 .0023 03/23/09 921427 .0127 .0015 03/30/09 921526 .0172 .0020 04/06/09 921620 .0180 .0020 04/13/09 921730 .0163 .0019 04/20/09 921852 .0190 .0021 04/27/09 922069 .0246 .0027 05/04/09 922165 .0120 .0015 05/11/09 922284				•		'	.0243	.0026	02/03/09	920624
.0296 .0032 .02/23/09 .920966 .0233 .0025 .03/02/09 .921062 .0264 .0029 .03/09/09 .921150 .0264 .0029 .03/09/09 .921264 .0211 .0023 .03/23/09 .921264 .0211 .0023 .03/23/09 .921427 .0127 .0015 .03/30/09 .921526 .0172 .0020 .04/06/09 .921620 .0180 .0020 .04/13/09 .921730 .0163 .0019 .04/20/09 .921852 .0190 .0021 .04/27/09 .922069 .0246 .0027 .05/04/09 .922165 .0120 .0015 .05/11/09 .922284	•			·			.0211	.0024	02/09/09	920714
.0233 .0025 03/02/09 921062 .0264 .0029 03/09/09 921150 .0173 .0020 03/16/09 921264 .0211 .0023 03/23/09 921427 .0127 .0015 03/30/09 921526 .0172 .0020 04/06/09 921620 .0180 .0020 04/13/09 921730 .0163 .0019 04/20/09 921852 .0190 .0021 04/27/09 922069 .0246 .0027 05/04/09 922165 .0120 .0015 05/11/09 922284					•		.0242	.0026	02/17/09	920820
.0264 .0029 03/09/09 921150 .0173 .0020 03/16/09 921264 .0211 .0023 03/23/09 921427 .0127 .0015 03/30/09 921526 .0172 .0020 04/06/09 921620 .0180 .0020 04/13/09 921730 .0163 .0019 04/20/09 921852 .0190 .0021 04/27/09 922069 .0246 .0027 05/04/09 922165 .0120 .0015 05/11/09 922284							.0296	.0032	02/23/09	920966
.0173 .0020 03/16/09 921264 .0211 .0023 03/23/09 921427 .0127 .0015 03/30/09 921526 .0172 .0020 04/06/09 921620 .0180 .0020 04/13/09 921730 .0163 .0019 04/20/09 921852 .0190 .0021 04/27/09 922069 .0246 .0027 05/04/09 922165 .0120 .0015 05/11/09 922284		,		•			.0233	.0025	03/02/09	921062
.0211 .0023 03/23/09 921427 .0127 .0015 03/30/09 921526 .0172 .0020 04/06/09 921620 .0180 .0020 04/13/09 921730 .0163 .0019 04/20/09 921852 .0190 .0021 04/27/09 922069 .0246 .0027 05/04/09 922165 .0120 .0015 05/11/09 922284			•				.0264	.0029	03/09/09	921150
.0127 .0015 03/30/09 921526 .0172 .0020 04/06/09 921620 .0180 .0020 04/13/09 921730 .0163 .0019 04/20/09 921852 .0190 .0021 04/27/09 922069 .0246 .0027 05/04/09 922165 .0120 .0015 05/11/09 922284						•	.0173	.0020	03/16/09	921264
.0172 .0020 04/06/09 921620 .0180 .0020 04/13/09 921730 .0163 .0019 04/20/09 921852 .0190 .0021 04/27/09 922069 .0246 .0027 05/04/09 922165 .0120 .0015 05/11/09 922284			÷				.0211	.0023	03/23/09	921427
.0180 .0020 04/13/09 921730 .0163 .0019 04/20/09 921852 .0190 .0021 04/27/09 922069 .0246 .0027 05/04/09 922165 .0120 .0015 05/11/09 922284	¢*				•		.0127	.0015	03/30/09	921526
.0163 .0019 04/20/09 921852 .0190 .0021 04/27/09 922069 .0246 .0027 05/04/09 922165 .0120 .0015 05/11/09 922284		•					.0172	.0020	04/06/09	921620
.0190 .0021 04/27/09 922069 .0246 .0027 05/04/09 922165 .0120 .0015 05/11/09 922284							.0180	.0020	04/13/09	921730
.0246 .0027 05/04/09 922165 .0120 .0015 05/11/09 922284							.0163	.0019	04/20/09	921852
.0120 .0015 05/11/09 922284							.0190	.0021	04/27/09	922069
				•			.0246	.0027	05/04/09	922165
.0183 .0020 05/19/09 922409							.0120	.0015	05/11/09	922284
				· .		**	.0183	.0020	05/19/09	922409

Station 3102	<u>Location</u> LM2	Description 0.4 MILES NNE	Analysis Nuclide		Activity	<u>Error</u>	Date Collected	<u>Lab Number</u>
3102	LM2	0.4 MILES MINE	GROSS BETA					•
					.0151	.0018	05/26/09	922544
			1		.0171	.0019	06/02/09	922664
					.0210	.0024	06/08/09	922782
			,	4	.0189	.0021	06/15/09	922927
					.0201	.0022	06/23/09	923046
					.0238	.0026	06/30/09	923151
				and the second	.0157	.0018	07/07/09	923269
					.0233	.0025	07/14/09	923394
\$.0184	.0021	07/20/09	923523
1 .	•	•			.0263	.0028	07/27/09	923665
11					.0174	.0019	08/04/09	923768
1		, :			.0257	.0028	08/10/09	923897
			e e e e e e e e e e e e e e e e e e e		.0245	.0027	08/17/09	924017
·				•	.0124	.0015	08/25/09	924141
					.0246	.0027	09/01/09	924253
					.0313	.0033	09/08/09	924399
		•			.0254	.0028	09/14/09	924497
			•		0196	.0022	09/22/09	924607
		,	•	`	.0158	.0018	09/29/09	924712
		•			.0193	.0022	10/06/09	924833
				•	.0141	.0016	10/15/09	924931
* .				,	.0120	.0016	10/20/09 -	925022
		•	4		.0194	.0022	10/27/09	925206
<i>\$</i>		• .			.0185	.0021	11/03/09	925336
					.0300	.0032	11/09/09	925454
				•	.0247	.0026	11/17/09	925545
	•					.00_0		

Table 1
RADIOACTIVITY IN AIR FILTER
WATTS BAR NUCLEAR PLANT
PCI/M3 - 0.037 BQ/M3
12/28/2008 - 12/25/2009

	•							•	
Station	Location		<u>Description</u>	Analysis Nuclide		Activity	Error	Date Collected	Lab Number
3102	LM2		0.4 MILES NNE					**	
				GROSS BETA		,			•
ů.			•			.0253	.0027	11/24/09	925681
	1 2 m					.0233			
	-				•		.0024		925809
7						.0189	.0022		925902
			•			.0238	.0026		925988
	• .			OARMA OOAN (OEU)		.0234	.0026	12/21/09	926143
			•	GAMMA SCAN (GELI) AC-228	•				
				AU-220		.0032	.0019	05/11/09	922334
		*				.0032	.0018		922832
				BE-7		.0040	.0017	00/00/09	922032
12			•	DL-1		.1061	.0077	01/20/09	920429
2						.1275	.0103		920429
	•			•		.1450	.0102		921314
•		1.2				.1211	.0102	04/13/09	921781
						.1199	.0090		921761
•						.1342			
							.0111		922832
				,		.1071	.0100		923319
-				•		.1107	.0093		923818
		•		-		.1136	.0080		924308
						.0925	.0079		924762
			•			.0826	.0088		925262
:						.1026	.0091		925731
						.0867	.0093	12/21/09	926193
		. 7		BI-214		2224	0000	104100100	000 400
			•			.0221	.0022		920429
						.0351	.0030	02/17/09	920871

				•		•		
Station	<u>Location</u>	<u>Description</u> 0.4 MILES NNE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	<u>Lab Number</u>
3102	LM2	U.4 MILES NINE		CAN (GELI)		٠.	· · · · · · · · · · · · · · · · · · ·	
				BI-214	.0150	.0019	03/16/09	921314
	•				.0069	.0013	04/13/09	921781
					.0119	.0013	05/11/09	922334
				•			06/08/09	922832
					.0057	.0011	:	923319
					.0100	.0013	07/07/09	
	*				.0116	.0016	08/04/09	923818
	•	•			.0138	.0012	09/01/09	924308
•	•				.0127	.0019	09/29/09	924762
	•				.0105	.0018	10/27/09	925262
<u>.</u>					.0181	.0018	11/24/09	925731
~	•	·			.0084	.0016	12/21/09	926193
	ř.		•	K-40				
	· 1		•		.0060	.0057	01/20/09	920429
	•				.0135	.0069	02/17/09	920871
	•				.0230	.0089	04/13/09	921781
			•		.0178	.0092	05/11/09	922334
•					.0289	.0090	06/08/09	922832
	•			•	.0171	.0080	07/07/09	923319
		•		*.	.0130	.0065	08/04/09	923818
					.0023	.0048	09/01/09	924308
٠.	•				.0135	.0090	09/29/09	924762
					.0182	.0069	11/24/09	925731
		. •			.0298	.0079	12/21/09	926193
•				PB-212				
	·	•		4	.0009	.0006	04/13/09	921781
					.0005	.0005	05/11/09	922334

Station 3102	Location LM2	Description 0.4 MILES NNE	Analysis	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
,			GAMMA S	SCAN (GELI)				
•	•			PB-212				
					.0017	.0007	06/08/09	922832
				•	.0012	.0006	07/07/09	923319
	•				.0012	.0009	09/29/09	924762
•		•	*	•	.0018	.0007	12/21/09	926193
. •			* *	PB-214				
		· .			.0187	.0020	01/20/09	920429
					.0325	.0027	02/17/09	920871
					.0128	.0017	03/16/09	921314
				•	.0063	.0011	04/13/09	921781
		•			.0115	.0016	05/11/09	922334
14					.0046	.0010	06/08/09	922832
•	•				.0097	.0015	07/07/09	923319
	•			ı•	.0153	.0015	08/04/09	923818
					.0122	.0015	09/01/09	924308
	•				.0167	.0021	09/29/09	924762
•					.0105	.0012	10/27/09	925262
				•	.0188	.0021	11/24/09	925731
		•			.0060	.0013	12/21/09	926193
				TL-208			•	
	_				.0007	.0004	04/13/09	921781
	•	•			.0005	.0005	05/11/09	922334
	·				.0009	.0003	06/08/09	922832
				•	.0004	.0003	07/07/09	923319
3106	PM2 SPRING CITY	7.0 MILES NW						
			GROSS E	BETA		*		
					.0248	.0027	12/30/08	920067

•				•			
<u>Station</u>	<u>Location</u>	<u>Description</u>	Analysis Nuclide	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
3106	PM2 SPRING CITY	7.0 MILES NW	•				
	•		GROSS BETA	•			
				.0220	.0025	01/05/09	920160
		•		.0236	.0025	01/12/09	920249
					.0020	01/20/09	920382
				.0280		01/26/09	920529
	• •		•	.0303	.0033		920529
				.0235	.0026	02/02/09	
		. *		0203	.0023	02/09/09	920718
				.0241	.0026	02/16/09	920823
		•	•	.0268	.0029	02/23/09	920970
ı				.0228	.0025	03/02/09	921065
15	•			.0257	.0028	03/09/09	921154
5				.0192	.0021	03/16/09	921267
				.0225	.0025	03/23/09	921431
				.0125	.0015	03/30/09	921529
			•	.0189	.0021	04/06/09	921624
				.0185	.0021	04/13/09	921733
			··	.0160	.0018	04/20/09	921856
				.0206	.0023	04/27/09	922072
				.0252	.0027	05/04/09	922169
				.0105	.0013	05/11/09	922287
	•			.0150	.0017	05/18/09	922413
				0131	.0015	05/26/09	922547
				.0155	.0018	06/01/09	922668
			•	.0212	.0023	06/08/09	922785
		•		.0191	.0021	06/15/09	922931
				.0220	.0024	06/22/09	923049
				.0250	.0027	06/29/09	923157
				.0200	.0027	00,20,00	020.0.

Station	Location	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	<u>Lab Number</u>
3106	PM2 SPRING CITY	7.0 MILES NW	00000	DETA				
		•	GROSS I	BEIA				
•					.0167	.0019	07/06/09	923272
					.0220	.0024	07/13/09	923398
					.0180	.0020	07/20/09	923526
•					.0241	.0026	07/27/09	923669
		•			.0187	.0020	08/03/09	923771
			e		.0282	.0030	08/10/09	923901
					.0260	.0030	08/17/09	924020
					.0124	.0015	08/24/09	924145
•				•	.0247	.0026	09/01/09	924256
16					.0324	.0034	09/08/09	924403
9)					.0279	.0030	09/14/09	924500
					.0240	.0026	09/21/09	924611
	•				.0160	.0018	09/28/09	924715
					.0203	.0022	10/05/09	924837
					.0171	.0019	10/13/09	924934
	•				.0194	.0022	10/26/09	925209
		•			.0181	.0021	11/02/09	925340
	· · · · ·			• .	.0286	.0031	11/09/09	925457
	•	· · · · · · · · · · · · · · · · · · ·	٠.		.0243	.0026	11/16/09	925549
	•	•			.0293	.0031	11/23/09	925684
		•			.0229	.0025	11/30/09	925813
					.0168	.0019	12/07/09	925905
					.0263	.0028	12/14/09	925992
		*			.0224	.0025	12/21/09	926146
•	,				.~~.	.5520		5-55

			·				
Station 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	Analysis Nuclide	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
	FWZ SPRING CITT	7.0 WILES NVV	GAMMA SCAN (GELI) AC-228				
				.0019	.0012	06/08/09	922833
	•		BE-7				•
				.0935	.0089	01/20/09	920430
		•		.1215	.0106	02/16/09	920872
		•	•	.1707	.0128	03/16/09	921315
				.1182	.0103	04/13/09	921782
				.1035	.0081	05/11/09	922335
		4. · ·		1205	.0106	06/08/09	922833
				.1147	.0095	07/06/09	923320
1				.1001	.0102	08/03/09	923819
17	,	•		.1205	.0092	09/01/09	924309
1	•			.1009	.0133	09/28/09	924763
•	,	•		.0995	.0117	10/26/09	925263
				.1083	.0123	11/23/09	925732
<i>:</i> .		•		.0784	.0101	12/21/09	926194
.*		•	BI-214				
				.0095	.0014	01/20/09	920430
		•		.0121	.0017	02/16/09	920872
				.0218	.0019	03/16/09	921315
		•		.0138	.0016	04/13/09	921782
	•	·		.0089	.0014	05/11/09	922335
				.0068	.0013	06/08/09	922833
				.0106	.0016	07/06/09	923320
		•		.0197	.0018	08/03/09	923819
				.0197	.0021	09/01/09	924309
	•			.0182	.0024	09/28/09	924763

Table 1
RADIOACTIVITY IN AIR FILTER
WATTS BAR NUCLEAR PLANT
PCI/M3 - 0.037 BQ/M3
12/28/2008 - 12/25/2009

							•		
Station 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	<u>Analysis</u>	<u>Nuclide</u>		<u>Activity</u>	Error	Date Collected	Lab Number
	```		GAMMA :	SCAN (GELI)				•	
				BI-214			•		
						.0170	.0028	10/26/09	925263
	•				•	.0110	.0020	11/23/09	925732
		•				.0075	.0014	12/21/09	926194
•		•		K-40					
•		•				.0134	.0082	02/16/09	920872
				•		.0137	.0068	03/16/09	921315
			•			.0017	.0047	04/13/09	921782
						.0084	.0065	06/08/09	922833
•	•		• .			.0035	.0057	07/06/09	923320
1			e.			.0059	.0065	08/03/09	923819
18-						.0298	.0083	09/28/09	924763
				PB-212					
						.0005	.0006	01/20/09	920430
					•	.0002	.0006	02/16/09	920872
		r				.0023	.0006	05/11/09	922335
						.0022	.0007	09/28/09	924763
				PB-214		-			
						.0058	.0011	01/20/09	920430
	•					.0112	.0015	02/16/09	920872
						.0223	.0017	03/16/09	921315
						.0120	.0015	04/13/09	921782
						.0067	.0012	05/11/09	922335
						.0041	.0014	06/08/09	922833
	·				-	.0081	.0013	07/06/09	923320
				•		.0191	.0017	08/03/09	923819
*						.0212	.0019	09/01/09	924309

Station 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA SCAN (GELI) PB-214				
	•			.0165	.0019	09/28/09	924763
				.0202	.0021	10/26/09	925263
		·		.0117	.0015	11/23/09	925732
-				.0072	.0012	12/21/09	926194
		·	TL-208				
	·	,		.0015	.0006	01/20/09	920430
	•			.0014	.0005	02/16/09	920872
				.0011	.0004	05/11/09	922335
			•	.0009	.0003	09/28/09	924763
i 				.0002	.0004	11/23/09	925732
9 3107	PM3	10.4 MILES NNE	•				•
			GROSS BETA	· · · · · · · · · · · · · · · · · · ·			
•				.0239	.0026	12/29/08	920070
				.0199	.0020	01/06/09	920162
	•	•		.0199	.0022	01/13/09	920162
		• .			.0030	01/13/09	920232
				.0279			920532
				.0305	.0033	.01/26/09 02/02/09	920532
			·	.0246	.0027		
	•	•		.0203	.0023	02/09/09	920721
				.0237	.0026	02/16/09	920825
				.0294	.0031	02/23/09	920973
		•		.0251	.0027	03/02/09	921067
				.0310	.0033	03/09/09	921157
			•	.0236	.0027	03/16/09	921269
	•	•		.0171	.0019	03/23/09	921434

Table 1
RADIOACTIVITY IN AIR FILTER
WATTS BAR NUCLEAR PLANT
PCI/M3 - 0.037 BQ/M3
12/28/2008 - 12/25/2009

Station 3107	<u>Location</u> PM3	<u>Description</u> 10.4 MILES NNE	Analysis Nuclide	Activity	<u>Error</u>	Date Collected	Lab Number
			GROSS BETA				
		•	•	.0124	.0015	03/30/09	921531
				.0193	.0022	04/06/09	921627
	•			.0177	.0020	04/13/09	921735
			, ·	.0139	.0016	04/20/09	921859
	•			.0186	.0021	04/27/09	922074
		•		.0258	.0028	05/04/09	922172
				.0102	.0013	05/11/09	922289
				.0147	.0017	05/18/09	922416
	4		•	.0168	.0019	05/26/09	922549
- 20				.0156	.0019	06/01/09	922671
0				.0238	.0026	06/08/09	922787
· · · · · · · · · · · · · · · · · · ·				.0184	.0021	06/15/09	922934
			. ~	.0186	.0021	06/22/09	923051
			•	.0224	.0025	06/29/09	923161
	•	·	•	.0153	.0018	07/06/09	923274
				.0236	.0026	07/13/09	923401
-	,			.0174	.0020	07/20/09	923528
			•	.0247	.0027	07/27/09	923672
		•		.0180	.0020	08/03/09	923773
				.0270	.0029	08/10/09	923904
				.0255	.0028	08/17/09	924022
				.0104	.0013	08/24/09	924148
				.0245	.0026	09/01/09	924258
				.0303	.0032	09/08/09	924406
				.0281	.0031	09/14/09	924502
i.			•	.0244	.0027	09/21/09	924614

Station 3107	Location PM3	Description 10.4 MILES NNE	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
			GROSS BETA				
				.0147	.0017	09/28/09	924717
	•			.0182	.0021	10/05/09	924840
			•	.0169	.0019	10/13/09	924936
				.0131	.0016	10/19/09	925029
			•	.0195	.0022	10/26/09	925211
				.0176	.0020	11/02/09	925343
				.0288	.0031	11/09/09	925459
•		•		.0262	.0028	11/16/09	925552
				.0286	.0031	11/23/09	925686
1 N)				.0230	.0025	11/30/09	925816
21 -	•			.0173	.0020	12/07/09	925907
	,			.0258	.0030	12/14/09	925995
	$\mathcal{L}_{\mathcal{A}} = \{ (1, 2, \dots, 2, n) \mid (1, 2, \dots, n) \in \mathcal{A} : \mathcal{A} : \mathcal{A} \in \mathcal{A} : $			.0234	.0026	12/21/09	926148
			GAMMA SCAN (GELI)			•	
			AC-228			•	
				.0027	.0014	09/28/09	924764
	•			.0012	.0015	10/26/09	925264
			BE-7	4400		04/00/00	000404
				.1122	.0096	01/20/09	920431
				.1223	.0097	02/16/09	920873
		•		.1722	.0113	03/16/09	921316
			•	.1278	.0117	04/13/09	921783
			•	.1009	.0090	05/11/09	922336
	•			.1325	.0098	06/08/09	922834
				.0879	.0077	07/06/09	923321
				.1124	.0102	08/03/09	923820

GAMMA SCAN (GELI) BE-7	Station 3107	Location PM3	-	scription 4 MILES NNE	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
1199   .0077   09/01/09   924310     1080   .0083   09/28/09   924564     1088   .0082   10/26/09   925264     1226   .0119   11/23/09   925733     10785   .0088   12/21/09   926195		•			GAMMA S					
1080   .0083   .09/28/09   .924764   .0888   .0082   .10726/09   .925264   .1226   .0119   .11/23/09   .92533   .0785   .0088   .12/21/09   .926195   .0785   .0088   .12/21/09   .926195   .0785   .0088   .12/21/09   .926195   .0088   .0021   .0017   .01/20/09   .920431   .0178   .0021   .0216/09   .921316   .0248   .0021   .0216/09   .921316   .0248   .0021   .0216/09   .921316   .0046   .0021   .041/3/09   .921383   .0024   .0016   .0014   .05711/09   .922336   .00249   .0026   .0706/09   .923321   .0236   .0027   .0803/09   .923820   .0236   .0027   .0803/09   .923820   .0236   .0027   .0084   .0018   .09/28/09   .924310   .0085   .0014   .0072   .0085   .0014   .0072   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .008733   .0087333   .0087333   .0087333   .0087333   .0087333   .0087333   .0087333   .0087333   .0087						BE-/	.1199	.0077	09/01/09	924310
1026   10726/09   925264   1226   1019   11/23/09   925733   12/21/09   925733   12/21/09   926195   12/21/09   926195   12/21/09   926195   12/21/09   926195   12/21/09   926195   12/21/09   926195   12/21/09   926195   12/21/09   920873   12/21/09   920873   12/21/09   920873   12/21/09   920873   12/21/09   920873   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   921316   12/21/09   12/21/09   12/21/09   12/21/09   12/21/09   12/21/09							.1080	.0083	09/28/09	924764
BI-214  BI-214  BI-214  BI-214  BI-214  D102 D178 D021 D178 D021 D176/09 D2873 D028 D021 D176/09 D021 D177 D016 D014 D0117 D016 D014 D0117 D016 D016 D014 D0117 D016 D016 D014 D017 D016 D016 D017 D016 D016 D017 D017 D016 D017 D017 D017 D017 D017 D017 D017 D017					•				10/26/09	
BI-214  BI-214    0.0102				•					,	
BI-214    0.102			•	•						
0.0102						BI-214				
10178							.0102	.0017	01/20/09	920431
1.0146								.0021	02/16/09	920873
1.0106	•						.0248	.0021	03/16/09	921316
10117	1		•			,	.0146	.0021	04/13/09	921783
Note							.0106	.0014	05/11/09	922336
1.0236	•						.0117	.0016	06/08/09	922834
1.0111				•			.0249	.0026	07/06/09	923321
1.0148	•						.0236	.0027	08/03/09	923820
1.0065							.0111	.0017	09/01/09	924310
0094							.0148	.0018	09/28/09	924764
K-40  K-40  0232  .0025  12/21/09  926195  0270  .0084  01/20/09  920431  .0075  .0056  02/16/09  920873  .0312  .0105  .0316/09  921316  .0111  .0051  .0072  .09/01/09  924310					•		.0065	.0014	10/26/09	925264
K-40  0270 0084 01/20/09 920431 0075 0056 02/16/09 920873 0312 0105 03/16/09 921316 0111 0051 05/11/09 922336 0194 0072 09/01/09 924310	•		•				.0094	.0014	11/23/09	925733
.0270 .0084 01/20/09 920431 .0075 .0056 02/16/09 920873 .0312 .0105 03/16/09 921316 .0111 .0051 05/11/09 922336 .0194 .0072 09/01/09 924310	;						0232	.0025	12/21/09	926195
.0270 .0084 01/20/09 920431 .0075 .0056 02/16/09 920873 .0312 .0105 03/16/09 921316 .0111 .0051 05/11/09 922336 .0194 .0072 09/01/09 924310						K-40				
.0312 .0105 03/16/09 921316 .0111 .0051 05/11/09 922336 .0194 .0072 09/01/09 924310						•	.0270	.0084	01/20/09	920431
.0111 .0051 05/11/09 922336 .0194 .0072 09/01/09 924310							.0075	.0056	02/16/09	920873
.0194 .0072 09/01/09 924310							.0312	0105	03/16/09	921316
		•		•	•		.0111	.0051	05/11/09	922336
.0119 .0060 09/28/09 924764		•					.0194	.0072	09/01/09	924310
		•					.0119	.0060	09/28/09	924764

Station 3107	Location PM3		Description 10.4 MILES NNE	Analysis	Nuclide	Activity	<u>Error</u>	Date Collected	<u>Lab Number</u>
				GAMMA	SCAN (GELI)				
					K-40	.0172	0000	10/26/09	925264
							.0088		
					DD 242	.0350	.0106	11/23/09	925733
	*				PB-212	.0015	.0007	01/20/09	920431
						.0015	.0007	03/16/09	921316
			•			.0015	.0006	11/23/09	925733
		,			PB-214	.0013	.0000	11/25/09	923733
					F D-2 14	.0074	.0013	01/20/09	920431
•	•					.0165	.0017	02/16/09	920873
1						.0190	.0019	03/16/09	921316
23						.0099	.0015	04/13/09	921783
1 ,						.0092	.0014	05/11/09	922336
			•	,		.0084	.0016	06/08/09	922834
						.0234	.0019	07/06/09	923321
					•	.0250	.0030	08/03/09	923820
		•				.0107	.0014	09/01/09	924310
						.0163	.0016	09/28/09	924764
					,	.0077	.0012	10/26/09	925264
					,	.0096	.0014	11/23/09	925733
			•			.0259	.0030	12/21/09	926195
					TL-208			•	
						.0001	.0005	02/16/09	920873
3108	PM4		7.6 MILES NE/ENE						
			•	GROSS E	BETA		•	•	
				•		.0250	.0028	12/29/08	920072
	•					.0219	.0024	01/05/09	920164

Station 3108	<u>Location</u> PM4	Description 7.6 MILES NE/ENE	<u>Analysis</u>	Nuclide		Activity	<u>Error</u>	Date Collected	Lab Number
			GROSS E	BETA					
•						.0269	.0029	01/12/09	920254
•	•					.0273	.0029	01/20/09	920386
	•					.0310	.0033	01/26/09	920534
		•		*		.0258	.0028	02/02/09	920631
			•			.0211	.0023	02/09/09	920723
						.0228	.0025	02/16/09	920827
	•					.0272	.0029	02/23/09	920975
		•				.0238	.0026	03/02/09	921069
·						.0290	.0031	03/09/09	921159
I N)		•				.0182	.0020	03/16/09	921271
24 -						.0228	.0025	03/24/09	921436
•	1					.0102	.0013	03/30/09	921533
	·					.0186	.0021	04/06/09	921629
						.0198	.0022	04/13/09	921737
						.0149	.0017	04/20/09	921861
-						.0215	.0024	04/27/09	922076
					•	.0239	.0026	05/04/09	922174
				•		.0123	.0015	05/11/09	922291
						.0150	.0017	05/18/09	922418
						.0147	.0017	05/26/09	922551
á.	<i>:</i>					.0167	.0020	06/01/09	922673
						.0224	.0025	06/08/09	922789
						.0198	.0022	06/15/09	922936
	•					.0205	.0023	06/23/09	923053
					•	.0232	.0026	06/29/09	923164
•					•	.0156	.0018	07/07/09	923276

Station 3108	Location PM4		Description 7.6 MILES NE/ENE	<u>Analysis</u>	Nuclide	Activity	<u>Error</u>	Date Collected	Lab Number
				GROSS I	BETA				
						.0265	.0029	07/13/09	923403
	•					.0181	.0020	07/20/09	923530
						.0248	.0027	07/27/09	923674
•						.0182	.0020	08/03/09	923775
				•		.0272	.0029	08/10/09	923906
					•	.0267	.0029	08/17/09	924024
		,				.0122	.0015	08/24/09	924150
						.0234	.0025	09/01/09	924260
						.0313	.0033	09/08/09	924408
1						.0296	.0032	09/14/09	924504
25			•			.0222	.0024	09/21/09	924616
•					•	.0165	.0019	09/28/09	924719
						.0180	.0020	10/05/09	924842
						.0159	.0018	10/13/09	924938
		•				.0130	.0016	10/19/09	925031
						.0193	.0022	10/26/09	925213
			•			.0175	.0020	11/02/09	925345
•		•				.0281	.0030	11/09/09	925461
				•		.0232	.0025	11/16/09	925554
		•				.0288	.0031	11/23/09	925688
		•				.0218	.0024	11/30/09	925818
						.0187	.0021	12/07/09	925909
		•		•		.0246	.0027	12/14/09	925997
						.0245	.0027	12/21/09	926150

*	,							
Station	<u>Location</u>	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
3108	PM4	7.6 MILES NE/ENE						
,				CAN (GELI)				
•				AC-228		0040		000004
				חר ז	.0033	.0019	08/03/09	923821
				BE-7	.0998	.0073	01/20/09	920432
					.0996	.0120	02/16/09	920432
					, .1275 .1546	.0120	03/16/09	920874
					.1216	.0093	04/13/09	921317
					.1062	.0093	05/11/09	921764
					.1236	.0090	06/08/09	922337
	,				.0935	.0098	07/07/09	
1					.0935	.0071	08/03/09	923322
26	-							923821
Ĭ					.0621 .0939	.0074	09/01/09	924311
						.0110	09/28/09	924765
					.0917	.0095	10/26/09	925265
					.1014	.0082	11/23/09	925734
				DI 04 À	.0752	.0079	12/21/09	926196
			,	BI-214	.0096	.0016	01/20/09	920432
					.0598	.0010	02/16/09	920432
• .		·		_	.0224	.0020	03/16/09	921317
	•				.0111	.0020	04/13/09	921784
					.0202	.0013	05/11/09	922337
*		·			.0073	.0023	06/08/09	922835
				1	.0073	.0019	07/07/09	923322
					.0107	.0013	08/03/09	923322
					.0198	.0014	09/01/09	923021
	• •			•	.0189	.0024	09/28/09	924311
					.UIO3	.0024	09120109	924700

GAMMA SCAN (GELI) BI-214	10/26/09	•
	10/26/09	
.0160 .0021		925265
.0085 .0010	11/23/09	925734
.0060 .0015	12/21/09	926196
K-40		
.0096 .0052	03/16/09	921317
.0033 .0084	04/13/09	921784
.0049 .0083	07/07/09	923322
.0076 .0096	08/03/09	923821
.0040 .0052	09/28/09	924765
.0310 .0093	10/26/09	925265
27 .0410 .0101	12/21/09	926196
PB-212		
.0006 .0005	04/13/09	921784
.0013 .0006	05/11/09	922337
.0009 .0007	07/07/09	923322
.0008 .0005	08/03/09	923821
.0022 .0007	10/26/09	925265
.0019 .0006	12/21/09	926196
PB-214		
.0117 .0055	01/20/09	920432
.0666 .0037	02/16/09	920874
.0149 .0016	03/16/09	921317
.0118 .0015	04/13/09	921784
.0168 .0023	05/11/09	922337
.0060 .0012	06/08/09	922835
.0067 .0011	07/07/09	923322

Station	Location PM4	Description 7.6 MILES NE/ENE	Analysis Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
3108	PIVI4	7.0 MILES NE/ENE	GAMMA SCAN (GELI) PB-214				
			10211	.0101	.0015	08/03/09	923821
				.0222	.0018	09/01/09	924311
				.0185	.0017	09/28/09	924765
				.0168	.0018	10/26/09	925265
				.0083	.0015	11/23/09	925734
				.0060	.0014	12/21/09	926196
			TL-208				
				.0000	.0004	11/23/09	925734
	·			.0005	.0003	12/21/09	926196
<u>'</u> 3109	PM5 DECATUR	8.0 MILES S		i			
- 3109 28			GROSS BETA				
1							
				.0246	.0027	12/29/08	920074
				.0226	.0025	01/05/09	920166
				.0222	.0025	01/12/09	920256
				.0303	.0032	01/20/09	920388
				.0328	.0035	01/26/09	920536
			•	.0270	.0029	02/02/09	920633
				.0216	.0024	02/09/09	920725
				.0248	.0027	02/16/09	920829
		•		.0313	.0034	02/23/09	920977
	•			.0255	.0028	03/02/09	921071
		•		.0266	.0029	03/09/09	921161
				.0192	.0022	03/16/09	921273
				.0228	.0025	03/23/09	921438
				.0151	.0018	03/30/09	921535

Table 1
RADIOACTIVITY IN AIR FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 12/28/2008 - 12/25/2009

	Station 3109	Location PM5 DECATUR	Description 8.0 MILES S	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
0.192				GROSS BETA	,	• •		
1.0157					.0181	.0021	04/06/09	921631
0.0208	•				.0192	.0022	04/13/09	921739
1.0267			•		.0157	.0018	04/20/09	921863
1.0117					.0208	.0023	04/27/09	922078
1.0161					.0267	.0029	05/04/09	922176
1.0163					.0117	.0014	05/11/09	922293
10143			•		.0161	.0018	05/18/09	922420
.0203 .0023 .06/08/09 922791 .0199 .0022 .06/15/09 922938 .0210 .0023 .06/22/09 923055 .0250 .0027 .06/29/09 923167 .0161 .0018 .07/06/09 923278 .0227 .0025 .07/13/09 923405 .0129 .0015 .07/20/09 923532 .0258 .0028 .07/27/09 923676 .0167 .0019 .08/03/09 923777 .0295 .0031 .08/10/09 923908 .0237 .0026 .08/17/09 924026 .0111 .0014 .08/24/09 924152 .0212 .0023 .09/01/09 924262			•	•	.0163	.0018	05/26/09	922553
.0203 .0023 06/08/09 922/91 .0199 .0022 06/15/09 922938 .0210 .0023 06/22/09 923055 .0250 .0027 06/29/09 923167 .0161 .0018 07/06/09 923278 .0227 .0025 07/13/09 923405 .0129 .0015 07/20/09 923532 .0258 .0028 07/27/09 923676 .0167 .0019 08/03/09 923777 .0295 .0031 08/10/09 923908 .0237 .0026 08/17/09 924026 .0111 .0014 08/24/09 924152 .0212 .0023 09/01/09 924262					.0143	.0017	06/01/09	922675
	, ,				.0203	.0023	06/08/09	922791
.0210 .0023 06/22/09 923055 .0250 .0027 06/29/09 923167 .0161 .0018 07/06/09 923278 .0227 .0025 07/13/09 923405 .0129 .0015 07/20/09 923532 .0258 .0028 07/27/09 923676 .0167 .0019 08/03/09 923777 .0295 .0031 08/10/09 923908 .0237 .0026 08/17/09 924026 .0111 .0014 08/24/09 924152 .0212 .0023 09/01/09 924262					.0199	.0022	06/15/09	922938
.0161 .0018 07/06/09 923278 .0227 .0025 07/13/09 923405 .0129 .0015 07/20/09 923532 .0258 .0028 07/27/09 923676 .0167 .0019 08/03/09 923777 .0295 .0031 08/10/09 923908 .0237 .0026 08/17/09 924026 .0111 .0014 08/24/09 924152 .0212 .0023 09/01/09 924262	•	•			.0210	.0023	06/22/09	923055
.0227 .0025 07/13/09 923405 .0129 .0015 07/20/09 923532 .0258 .0028 07/27/09 923676 .0167 .0019 08/03/09 923777 .0295 .0031 08/10/09 923908 .0237 .0026 08/17/09 924026 .0111 .0014 08/24/09 924152 .0212 .0023 09/01/09 924262					.0250	.0027	06/29/09	923167
.0129 .0015 07/20/09 923532 .0258 .0028 07/27/09 923676 .0167 .0019 08/03/09 923777 .0295 .0031 08/10/09 923908 .0237 .0026 08/17/09 924026 .0111 .0014 08/24/09 924152 .0212 .0023 09/01/09 924262			•	•	.0161	.0018	07/06/09	923278
.0258       .0028       07/27/09       923676         .0167       .0019       08/03/09       923777         .0295       .0031       08/10/09       923908         .0237       .0026       08/17/09       924026         .0111       .0014       08/24/09       924152         .0212       .0023       09/01/09       924262					.0227	.0025	07/13/09	923405
.0167       .0019       08/03/09       923777         .0295       .0031       08/10/09       923908         .0237       .0026       08/17/09       924026         .0111       .0014       08/24/09       924152         .0212       .0023       09/01/09       924262		•	•		.0129	.0015	07/20/09	923532
.0295 .0031 08/10/09 923908 .0237 .0026 08/17/09 924026 .0111 .0014 08/24/09 924152 .0212 .0023 09/01/09 924262		•			.0258	.0028	07/27/09	923676
.0237 .0026 08/17/09 924026 .0111 .0014 08/24/09 924152 .0212 .0023 09/01/09 924262					.0167	.0019	08/03/09	923777
.0111 .0014 08/24/09 924152 .0212 .0023 09/01/09 924262				·	.0295	.0031	08/10/09	923908
.0212 .0023 09/01/09 924262					.0237	.0026	08/17/09	924026
•			,		.0111	.0014	08/24/09	924152
·					.0212	.0023	09/01/09	924262
.0275 .0029 09/08/09 924410					.0275	.0029	09/08/09	924410
.0234 .0026 09/14/09 924506					.0234	.0026	09/14/09	924506
0213 0023 09/21/09 924618					.0213		09/21/09	924618
.0156 .0018 09/28/09 924721					.0156	.0018	09/28/09	924721

Station	Location	<u>Description</u>	Analysis Nuclide	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
3109	PM5 DECATUR	8.0 MILES S	GROSS BETA		-		
			GROSS BETA				
		•		.0186	.0021	10/05/09	924844
				.0134	.0015	10/13/09	924940
				.0109	.0014	10/19/09	925033
				.0197	.0022	10/26/09	925215
				.0177	.0020	11/02/09	925347
				.0289	.0031	11/09/09	925463
•	•			.0249	.0027	11/16/09	925556
		•		.0283	.0030	11/23/09	925690
	•			.0207	.0023	11/30/09	925820
,a		•		.0170	.0019	12/07/09	925911
30			,	.0236	.0026	12/14/09	925999
1,				.0223	.0024	12/21/09	926152
			GAMMA SCAN (GELI)		.002	12.2.7.00	020.02
			AC-228	•		-	
				.0062	.0017	04/13/09	921785
			BE-7				
	•			.1118	.0093	01/20/09	920433
			•	.1319	0119	02/16/09	920875
				.1697	.0131	03/16/09	921318
•			·	.1413	.0124	04/13/09	921785
_				.1128	.0085	05/11/09	922338
				.1215	.0107	06/08/09	922836
				.1048	.0092	07/06/09	923323
			•	.1048	.0109	08/03/09	923822
				.1118	.0093	09/01/09	924312
				.0865	.0063	09/28/09	924766

Station	Location	Description	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
3109	PM5 DECATUR	8.0 MILES S		•			•	
			GAMMA S	SCAN (GELI)				
				BE-7				
					.0791	.0081	10/26/09	925266
•				•	.0955	.0074	11/23/09	925735
					.0831	.0061	12/21/09	926197
				BI-214		-		
					.0122	.0020	01/20/09	920433
					.0264	.0029	02/16/09	920875
					.0170	.0020	03/16/09	921318
					.0091	.0013	04/13/09	921785
					.0178	.0020	05/11/09	922338
1	•	,			.0148	.0019	06/08/09	922836
31	•				.0071	.0014	07/06/09	923323
1					.0097	.0013	08/03/09	923822
					0106	.0015	09/01/09	924312
					.0134	.0016	09/28/09	924766
			*		.0076	.0015	10/26/09	925266
	· *				.0139	.0021	11/23/09	925735
					.0068	.0013	12/21/09	926197
				K-40	.0000	.0010	12/2 1/05	320137
		,		11-40	.0080	.0054	03/16/09	921318
					.0269	.0101	04/13/09	921785
			•		.0165	.0064	07/06/09	923323
		•			.0191	.0079	08/03/09	923822
						•		
		,	•	•	.0198	.0084	09/01/09	924312
		•			.0166	.0050	09/28/09	924766
	•				.0080	.0073	12/21/09	926197

				÷			
Station 3109	Location PM5 DECATUR	Description 8.0 MILES S	Analysis Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
3109	PIVIS DECATOR	0.0 MILES 3	GAMMA SCAN (GELI)				
			PB-212				
	•		,	.0020	.0006	04/13/09	921785
•	•			.0011	.0007	07/06/09	923323
			•	.0021	.0008	08/03/09	923822
				.0010	.0006	09/01/09	924312
		•		.0008	.0009	11/23/09	925735
			PB-214				
••				.0121	.0013	01/20/09	920433
		,		.0264	.0022	02/16/09	920875
				.0146	.0014	03/16/09	921318
1			•	.0113	.0012	04/13/09	921785
32				.0172	.0019	05/11/09	922338
1				.0075	.0015	06/08/09	922836
				.0084	.0013	07/06/09	923323
				.0083	.0015	08/03/09	923822
				.0081	.0014	09/01/09	924312
				.0132	.0016	09/28/09	924766
	·			.0060	.0013	10/26/09	925266
		•		.0147	.0016	11/23/09	925735
•				.0038	.0007	12/21/09	926197
		•	TL-208				/
				.0000	.0003	01/20/09	920433
			•	.0006	.0004	07/06/09	923323
				.0005	.0003	08/03/09	923822
				.0013	.0004	09/01/09	924312

Station 3203	Location LM3	Description 1.9 MILES NNE	Analysis GROSS I	<u>Nuclide</u> BETA	<u>Activity</u>	<u>Error</u>	Date Collected	<u>Lab Number</u>
					.0263	.0028	12/30/08	920085
					.0205	.0023	01/05/09	920168
					.0228	.0025	01/13/09	920262
		,			.0290	.0031	01/21/09	920393
					.0328	.0037	01/26/09	920547
				•	.0230	.0026	02/02/09	920635
	•				.0196	.0022	02/09/09	920730
•					.0208	.0023	02/16/09	920835
			•		.0275	.0030	02/23/09	920988
- 33					.0234	.0025	03/03/09	921073
ယ်		•		•	.0288	.0031	03/09/09	921166
•					.0172	.0020	03/16/09	921278
					.0211	.0023	03/24/09	921449
•					.0119	.0015	03/30/09	921537
					.0161	.0018	04/06/09	921636
•	• .				.0190	.0021	04/13/09	921745
					.0145	.0017	04/20/09	921874
					.0205	.0023	04/27/09	922083
			•		.0240	.0026	05/04/09	922182
					.0119	.0015	05/11/09	922298
					.0144	.0017	05/19/09	922431
		·			.0146	.0017	05/27/09	922555
					.0180	.0021	06/01/09	922680
					.0217	.0024	06/08/09	922796
					.0196	.0022	06/16/09	922949
					.0173	.0020	06/23/09	923057

Station 3203	Location LM3	Description 1.9 MILES NNE	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
			GROSS E	BETA				
•					.0237	.0026	06/30/09	923173
					.0161	.0019	07/06/09	923283
		•			.0238	.0026	07/13/09	923416
					.0187	.0021	07/20/09	923534
					.0248	.0027	07/27/09	923681
					.0166	.0019	08/03/09	923782
				-	.0277	.0030	08/10/09	923919
					.0145	.0017	08/24/09	924157
					.0228	.0025	09/01/09	924267
L (A)					.0301	.0032	09/08/09	924421
34 -		•		•	.0275	.0030	09/14/09	924508
•					.0206	.0023	09/22/09	924623
•					.0158	.0019	09/28/09	924726
					.0197	.0022	10/06/09	924855
					.0143	.0017	10/13/09	924942
	·	•		•	.0116	.0015	10/19/09	925038
	•				.0220	.0024	10/26/09	925223
					.0172	.0019	11/03/09	925359
					.0285	.0031	11/09/09	925465
			•		.0234	.0025	11/16/09	925562
					.0264	.0028	11/23/09	925695
					.0196	.0022	12/01/09	925831
:					.0180	.0021	12/07/09	925913
					.0246	.0026	12/15/09	926005
					.0240	.0026	12/21/09	926157

Station 3203	Location LM3	<u>Description</u> 1.9 MILES NNE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	<u>Lab Number</u>
			GAMMA	SCAN (GELI)				
			,	AC-228		,		i
					.0022	.0013	01/21/09	920434
					.0032	.0017	05/11/09	922339
					.0036	.0016	09/01/09	924313
		•		BE-7	•			
		,			.1230	.0096	01/21/09	920434
		•			.1192	.0086	02/16/09	920876
					1469	.0119	03/16/09	921319
	•				.1219	.0102	04/13/09	921786
					.1208	.0101	05/11/09	922339
1					.1447	.0093	06/08/09	922837
35					.0956	.0112	07/06/09	923324
1					.1205	.0088	08/03/09	923823
•					.1395	.0109	09/01/09	924313
		•		·	.1057	.0098	09/28/09	924767
					.0950	.0090	10/26/09	925267
					.1221	.0104	11/23/09	925736
			•		.0763	.0066	12/21/09	926198
				BI-214				
					.0173	.0021	01/21/09	920434
					.0107	.0017	02/16/09	920876
					.0314	.0030	03/16/09	921319
					.0194	.0019	04/13/09	921786
			÷		.0192	.0017	05/11/09	922339
	•	•	•		.0051	.0014	06/08/09	922837
			,		.0114	.0012	07/06/09	923324
					.0179	.0018	08/03/09	923823

Station 3203	Location LM3	Description £	Analysis	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
3203	LIVIS		SAMMA S	SCAN (GELI)				
		`	OMINIM C	BI-214	•			
				B1 214	.0158	.0022	09/01/09	924313
					.0182	.0022	09/28/09	924767
					.0248	.0023	10/26/09	925267
					.0190	.0019	11/23/09	925736
		•			.0101	.0014	12/21/09	926198
•			•	K-40	,			
					.0404	.0095	01/21/09	920434
					.0009	.0066	02/16/09	920876
					.0140	.0060	04/13/09	921786
1		•			.0259	.0096	05/11/09	922339
36				•	.0070	.0056	08/03/09	923823
1		•			.0060	.0074	09/01/09	924313
		•			.0086	.0056	11/23/09	925736
					.0140	.0065	12/21/09	926198
				PB-212				
			*		.0024	.0006	01/21/09	920434
					.0022	.0005	05/11/09	922339
				PB-214				
	•				.0212	.0019	01/21/09	920434
		•	•		.0104	.0015	02/16/09	920876
					.0312	.0026	03/16/09	921319
				•	.0201	.0020	04/13/09	921786
				•	.0183	.0016	05/11/09	922339
					.0074	.0012	06/08/09	922837
					.0104	.0010	07/06/09	923324
		,	, <del>s</del>		.0172	.0020	08/03/09	923823

Station 3203	<u>Location</u> LM3	Description 1.9 MILES NNE	Analysis Nuclide	Activity	Error	Date Collected	<u>Lab Number</u>
*	•		GAMMA SCAN (GELI)				
			PB-214				
				.0176	.0023	. 09/01/09 .	924313
		·		.0193	.0026	09/28/09	924767
		,		.0228	.0022	10/26/09	925267
•				.0190	.0021	11/23/09	925736
	•			.0091	.0013	12/21/09	926198
			TL-208				
				.0009	.0004	01/21/09	920434
				.0010	.0005	05/11/09	922339
			•	.0000	.0005	09/01/09	924313
- 3204 37	LM-4	0.9 MILES SE					
7 -			GROSS BETA				
•	·			0000	0000	40/20/09	020000
			·	.0266	.0029	12/30/08	920088
				.0204	.0023	01/05/09	920170
				0223	.0024	01/12/09	920265
				.0308	.0036	01/20/09	920395
+				.0339	.0037	01/26/09	920550
i		,		.0242	.0027	02/02/09	920637
	•			.0216	.0024	02/09/09	920733
			•	.0245	.0027	02/16/09	920837
				.0282	.0030	02/23/09	920991
•		•	•	.0215	.0024	03/02/09	921075
•	•			.0293	.0031	03/09/09	921169
		•		.0166	.0019	03/16/09	921280
•				.0232	.0025	03/23/09	921452
				.0148	.0017	03/30/09	921539

Station 3204	<u>Location</u> LM-4	Description 0.9 MILES SE	Analysis GROSS E	Nuclide BETA	<u>Activity</u>	Error	Date Collected	Lab Number
					.0169	.0019	04/06/09	921639
		•			.0200	.0022	04/13/09	921747
					.0142	.0017	04/20/09	921877
•					.0203	.0022	04/27/09	922085
					.0167	.0021	05/11/09	922300
				٠	.0138	.0016	05/18/09	922434
		•			.0146	.0016	05/27/09	922557
					.0187	.0022	06/01/09	922683
					.0212	.0023	06/08/09	922798
။ ယ					.0180	.0020	06/15/09	922952
38 -					.0194	.0021	06/23/09	923059
		*			.0230	.0025	06/29/09	923178
					.0154	.0018	07/06/09	923285
					.0240	.0026	07/13/09	923419
	•	•		*	.0185	.0021	07/20/09	923536
	,				.0252	.0027	07/27/09	923684
		•			.0152	.0018	08/03/09	923784
					.0263	.0028	08/10/09	923922
					.0259	.0028	08/17/09	924030
					.0117	.0014	08/24/09	924160
					.0235	.0025	09/01/09	924269
					.0283	.0030	09/08/09	924424
					.0253	.0028	09/14/09	924510
		•			.0220	.0024	09/21/09	924626
					.0156	.0018	09/28/09	924728
					.0180	.0020	10/05/09	924858

Station 3204	<u>Location</u> LM-4	<u>Description</u> 0.9 MILES SE	<u>Analysis</u> N	<u>uclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
			GROSS BET	Ά				
					.0167	.0019	10/13/09	924944
	s.	•			.0124	.0015	10/19/09	925041
	, · ·				.0155	.0018	10/26/09	925225
					.0181	.0020	11/02/09	925362
					.0286	.0031	11/09/09	925467
•		•			.0225	.0025	11/16/09	925565
	•				.0276	.0030	11/23/09	925697
					.0225	.0025	11/30/09	925834
					.0183	.0021	12/07/09	925915
ι ω					.0229	.0025	12/15/09	926008
39 -					.0237	.0026	12/21/09	926159
•		•	GAMMA SCA	AN (GELI)				-
		•	A	C-228				
		,			.0036	.0023	01/20/09	920435
					.0029	.0016	07/06/09	923325
			Bl	≣-7				
		,			.1033	.0077	01/20/09	920435
					.1245	.0115	02/16/09	920877
•					.1651	.0125	03/16/09	921320
					.1391	.0119	04/13/09	921787
					.1706	.0136	05/11/09	922340
					.1211	.0098	06/08/09	922838
			•		.1036	.0083	07/06/09	923325
		,			.1260	.0083	08/03/09	923824
					.1119	.0091	09/01/09	924314
					.1132	.0108	09/28/09	924768

		1	•					
Station	Location	<u>Description</u>	<u>Analysis</u>	Nuclide	<b>Activity</b>	<u>Error</u>	Date Collected	Lab Number
3204	LM-4	0.9 MILES SE						
			GAMMA S	SCAN (GELI)		•		
·				BE-7	A-7-7	0000	40/00/00	005000
					.0777	.0068	10/26/09	925268
					.0989	.0071	11/23/09	925737
					.0836	.0094	12/21/09	926199
				BI-214				
					.0140	.0017	01/20/09	920435
					.0191	.0026	02/16/09	920877
			•		.0242	.0029	03/16/09	921320
					.0259	.0030	04/13/09	921787
				•	.0333	.0037	05/11/09	922340
4					.0151	.0019	06/08/09	922838
40 -					.0130	.0018	07/06/09	923325
•					.0121	.0015	08/03/09	923824
•					.0152	.0016	09/01/09	924314
					.0185	.0016	09/28/09	924768
					.0228	.0026	10/26/09	925268
				•	.0230	.0023	11/23/09	925737
					.0199	.0021	12/21/09	926199
				K-40				
		•			.0109	.0074	01/20/09	920435
					.0345	.0108	05/11/09	922340
	-				.0112	.0071	07/06/09	923325
				•	.0060	.0053	09/28/09	924768
					0037	.0070	11/23/09	925737
				PB-212				•
					.0008	.0005	10/26/09	925268

Station 3204	Location LM-4	Description 0.9 MILES SE	Analysis Nuclide  GAMMA SCAN (GELI)	<u>Activity</u>	<u>Error</u>	Date Collected	<u>Lab Number</u>
			PB-214	.0160	.0021	01/20/09	920435
			•	.0172	.0021	02/16/09	920877
•				.0228	.0028	03/16/09	921320
	•			.0319	.0020	04/13/09	921787
•				.0307	.0027	05/11/09	922340
		•		.0150	.0015	06/08/09	922838
				.0135	.0016	07/06/09	923325
				.0120	.0013	08/03/09	923824
				.0128	.0015	09/01/09	924314
1				.0204	.0017	09/28/09	924768
41				.0215	.0022	10/26/09	925268
ı		•		.0237	.0016	11/23/09	925737
				.0228	.0018	12/21/09	926199
3205	RM-3	15 MILES NNW					
			GROSS BETA				
				.0228	.0025	12/30/08	920091
				.0168	.0020	01/05/09	920172
				.0226	.0025	01/12/09	920268
				.0270	.0029	01/20/09	920397
		•		.0305	.0033	01/26/09	920553
*				.0248	.0027	02/02/09	920639
				.0192	.0021	02/09/09	920736
		•		.0211	.0023	02/16/09	920839
•				.0254	.0028	02/23/09	920994
•				.0230	.0025	03/02/09	921077

Station 3205	Location RM-3	Description 15 MILES NNW	Analysis GROSS B	Nuclide BETA	Activity	<u>Error</u>	Date Collected	<u>Lab Number</u>
					.0281	.0030	03/09/09	921172
					.0164	.0019	03/16/09	921282
		·			.0219	.0024	03/23/09	921455
					.0130	0016	03/30/09	921541
					.0181	.0020	04/06/09	921642
					.0177	.0020	04/13/09	921749
					.0157	.0018	04/20/09	921880
					.0203	.0023	04/27/09	922087
					.0264	.0029	05/04/09	922188
1			•		.0110	.0014	05/11/09	922302
42 .	•				.0134	.0016	05/18/09	922437
1.	•				.0132	.0015	05/26/09	922559
					.0172	.0020	06/01/09	922686
					.0210	.0023	06/08/09	922800
				•	.0196	.0022	06/15/09	922955
					.0209	.0023	06/22/09	923061
					.0207	.0023	06/29/09	923182
	•				.0142	.0017	07/06/09	923287
					.0225	.0025	07/13/09	923422
		·			.0180	.0020	07/20/09	923538
					.0255	.0028	07/27/09	923687
	·				.0178	.0020	08/03/09	923786
					.0249	.0027	08/10/09	923925
					.0255	.0028	08/17/09	924032
					.0124	.0015	08/24/09	924163
					.0227	.0025	09/01/09	924271

						· .	
Station 3205	Location RM-3	<u>Description</u> 15 MILES NNW	Analysis Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
,0200	1	TO MILLO MITT	GROSS BETA				
					•		
				.0320	.0034	09/08/09	924427
				.0281	.0031	09/14/09	924512
				.0222	.0024	09/21/09	924629
				.0147	.0017	09/28/09	924730
			•	.0176	.0020	10/05/09	924861
				.0140	.0016	10/13/09	924946
				.0103	.0014	10/19/09	925044
٠		•		.0200	.0022	10/26/09	925227
			•	.0178	.0020	11/02/09	925365
4			•	.0284	.0030	11/09/09	925469
43				.0249	.0027	11/16/09	925568
•				.0265	.0029	11/23/09	925699
	•		•	.0225	.0025	11/30/09	925837
				.0178	.0020	12/07/09	925917
			-	.0231	.0025	12/14/09	926011
	-			.0229	.0025	12/21/09	926161
			GAMMA SCAN (GELI)				•
		, .	BE-7			č.	
			•	.1083	.0096	01/20/09	920436
		,		.1341	.0109	02/16/09	920878
				.1590	.0104	03/16/09	921321
				.1440	.0101	04/13/09	921788
				.0564	.0105	05/11/09	922341
				.1308	.0084	06/08/09	922839
			• •	.1155	.0120	07/06/09	923326
		•		.1119	.0113	08/03/09	923825

Station	Location	Description	Analysis Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number	
3205	RM-3	15 MILES NNW		<del></del>		,		
		`	GAMMA SCAN (GELI)					
	•	•	BE-7			r		
		•		.1116	.0109	09/01/09	924315	
				.1039	.0092	09/28/09	924769	
				.0981	.0091	10/26/09	925269	
			: .	.1296	.0112	11/23/09	925738	
				.0794	.0074	12/21/09	926200	
			BI-214			•		
		·		.0280	.0029	01/20/09	920436	
		•		.0181	.0019	02/16/09	920878	
	•			.0187	.0019	03/16/09	921321	
4		• .		.0223	.0018	04/13/09	921788	
4				.0524	.0036	05/11/09	922341	,
• .	•			.0104	.0017	06/08/09	922839	
				.0140	.0018	07/06/09	923326	
				.0180	.0019	08/03/09	923825	
				.0071	.0014	09/01/09	924315	
		•		.0099	.0015	09/28/09	924769	
		•		.0058	.0013	10/26/09	925269	٠
				.0403	.0035	11/23/09	925738	
				.0160	.0021	12/21/09	926200	
			K-40					
	•			.0112	.0062	02/16/09	920878	
				.0011	.0076	03/16/09	921321	
				.0118	.0066	04/13/09	921788	
		•		.0074	.0065	06/08/09	922839	
				.0058	.0052	07/06/09	923326	
				.0204	.0130	09/01/09	924315	

Station 3205	Location RM-3	Description 15 MILES NNW	Analysis Nuclide	Activity	<u>Error</u>	Date Collected	Lab Number
	2		GAMMA SCAN (GELI)	•	,		
			K-40	0440	0405	00/00/00	004760
				.0119	.0105	09/28/09	924769
				.0072	.0055	10/26/09	925269
•				.0099	.0065	11/23/09	925738
		•		.0043	.0082	12/21/09	926200
	•		PB-212				
				.0004	.0007	03/16/09	921321
				.0001	.0006	09/28/09	924769
		•		.0017	.0006	12/21/09	926200
			PB-214				•
i N	•			.0301	.0027	01/20/09	920436
45		•	•	.0168	.0020	02/16/09	920878
1	•			.0154	.0021	03/16/09	921321
				.0246	.0017	04/13/09	921788
				.0315	.0041	05/11/09	922341
				.0111	.0021	06/08/09	922839
				.0118	.0017	07/06/09	923326
	•			.0174	.0024	08/03/09	923825
				.0071	.0013	09/01/09	924315
				.0120	.0012	09/28/09	924769
•				.0041	.0012	10/26/09	925269
				.0378	.0025	11/23/09	925738
	,	•		.0123	.0014	12/21/09	926200
	•		TL-208	.0120	.0014	12121100	020200
			12-200	.0003	.0003	03/16/09	921321
		•		.0024	.0006	12/21/09	926200

Station 2116	Location RM-2 DAYTON TN		Description 15.0 MILES SW	Analysis GAMMA	Nuclide SCAN (GELI)	<u>Activity</u>	Error	Date Collected	Lab Number
					BI-214	4740	,	40,000,000	000007
		. •				.1719	.0246	12/30/08	920097
						.0394	.0094	01/20/09	920405
						.0597	.0135	01/26/09	920559
						.0750	.0153	02/02/09	920643
~						.0514	.0125	02/16/09	920847
						.0376	.0089	02/23/09	921000
						.0353	.0070	03/02/09	921081
						.0343	.0103	03/16/09	921290
						.0518	.0124	03/23/09	921461
. 46						.0145	.0073	03/30/09	921545
5						.0120	.0056	04/20/09	921886
						.0210	.0081	05/26/09	922563
						.0076	.0063	06/08/09	922808
						.0305	.0082	06/22/09	923065
			•			.0328	.0093	06/29/09	923189
						.0190	.0059	07/07/09	923295
			• .			.0646	.0116	07/13/09	923428
				•		.0251	.0086	07/27/09	923693
						.0373	.0075	08/03/09	923794
						.0394	.0102	08/10/09	923931
						.0423	.0107	08/17/09	924036
					•	.0297	.0105	08/24/09	924169
	•					.0341	.0079	09/08/09	924433
						.0264	.0093	09/21/09	924635
						.0459	.0096	09/28/09	924738
	•					.0411	.0100	10/05/09	924867

Station 2116	Location RM-2 DAYTON TN	Description 15.0 MILES SW	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				BI-214				
					.0226	.0079	10/26/09	925238
	•				.0344	.0082	11/02/09	925371
					.0366	.0095	11/09/09	925473
					.0391	.0099	11/16/09	925574
					.0209	.0071	11/23/09	925707
		•			.0272	.0090	11/30/09	925843
					.0156	.0068	12/07/09	925921
			•	•	.0665	.0129	12/14/09	926017
		•			.0259	.0090	12/21/09	926169
4				K-40				
47 -					.2434	.0573	01/20/09	920405
•					.4389	.0924	01/26/09	920559
		•			.4974	.0754	02/23/09	921000
		5			.2926	.0634	03/16/09	921290
					.2342	.0636	04/13/09	921757
	•	•			.5203	.0987	06/01/09	922692
	·				.2765	.0544	06/22/09	923065
	·				.2341	.0513	06/29/09	923189
					1952	.0477	07/27/09	923693
					.3769	.0512	08/03/09	923794
					.2014	.0525	08/10/09	923931
					3549	.0869	08/17/09	924036
				•	.2351	.0514	09/08/09	924433
					.1778	.0585	09/21/09	924635
					.2636	.0528	09/28/09	924738
		·			.2116	.0586	10/26/09	925238

Station 2116	Location RM-2 DAYTON TN	Description 15.0 MILES SW	Analysis	Nuclide	Activity	<u>Error</u>	Date Collected	<u>Lab Number</u>
			GAMMA	SCAN (GELI) K-40				
	•				.3700	.0666	11/09/09	925473
	•				.2414	.0558	11/16/09	925574
					.3085	.0556	11/23/09	925707
					.3969	.0712	11/30/09	925843
					.2035	.0491	12/14/09	926017
•				NO ACTIVITY DETE	ECTED		•	
					.0000	.0000	02/09/09	920742
					.0000	.0000	06/15/09	922961
					.0000	.0000	10/13/09	924950
1				PB-212				
48				•	.0053	.0052	01/05/09	920176
1		•			.0014	.0048	06/29/09	923189
					.0097	.0045	11/30/09	925843
	•			PB-214	0.00		10/00/00	000007
					.2770	.0264	12/30/08	920097
		•			.0356	.0079	01/05/09	920176
					.0394	.0098	01/12/09	920274
					.0414	.0120	01/20/09	920405
		•			.0358	.0111	01/26/09	920559
					.0650	.0142	02/02/09	920643
					.0962	.0105	02/16/09	920847
					.0312	.0074	02/23/09	921000
					.0316	.0093	03/02/09	921081
					.0185	.0070	03/09/09	921178
•					.0340	.0095	03/16/09	921290
	·	•			.0482	.8800.	03/23/09	921461

## Table 2 RADIOACTIVITY IN CHARCOAL FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 12/28/2008 - 12/25/2009

							•	
Station 2116	Location RM-2 DAYTON TN	Description 15.0 MILES SW	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
2110		10.0 MILEO 077	GAMMA :	SCAN (GELI) PB-214				
					.0265	.0113	03/30/09	921545
•				•	.0293	.0102	04/06/09	921648
		•			.0334	.0098	04/27/09	922094
		•			.0263	.0116	05/04/09	922194
					.0326	.0058	05/11/09	922310
					.0432	.0104	05/18/09	922443
					.0141	.0078	05/26/09	922563
					.0272	.0103	06/01/09	922692
		•			.0277	.0065	06/22/09	923065
1 4			-		.0253	.0078	06/29/09	923189
49 -					.0154	.0065	07/07/09	923295
•		•			.0583	.0107	07/13/09	923428
		•			.0401	.0074	07/20/09	923542
					.0243	.0079	07/27/09	923693
•					.0237	.0076	08/03/09	923794
					.0334	.0093	08/10/09	923931
					.0431	.0096	08/17/09	924036
					.0267	.0080	08/24/09	924169
	•				:0433	.0072	09/01/09	924279
. •					.0337	.0089	09/08/09	924433
					.0652	.0089	09/14/09	924516
					.0268	.0096	09/21/09	924635
					.0722	.0108	09/28/09	924738
					.0297	.0070	10/05/09	924867
	·				.0345	.0106	10/19/09	925050
	•				.0333	.0083	10/26/09	925238

Station 2116	Location RM-2 DAYTON TN	Description 15.0 MILES SW	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
	2 2.11 (0.11 )	70.0 IIII220 077	GAMMA	SCAN (GELI) PB-214				
					.0214	.0088	11/02/09	925371
	•				.0543	.0095	11/09/09	925473
					.0114	.0062	11/16/09	925574
					.0519	.0198	11/23/09	925707
					.0292	.0079	11/30/09	925843
			•		.0305	.0099	12/07/09	925921
		•			.0754	.0118	12/14/09	926017
	·.				.0194	.0080	12/21/09	926169
3101	LM1	0.5 MILES SSW						
- 50			GAMMA	SCAN (GELI) AC-228				
ı					.0264	.0117	11/09/09	925453
	•			BI-214			,	
					.0519	.0112	12/30/08	920062
					.0271	.0086	01/06/09	920156
					.0488	.0117	01/13/09	920244
					.0983	.0161	01/20/09	920378
			,		.0833	.0168	01/26/09	920524
	•	•			.0784	.0154	02/09/09	920713
					.0504	.0104	02/17/09	920819
					.0292	.0100	03/09/09	921149
					.0843	.0140	03/24/09	921426
					.0242	.0087	03/31/09	921525
					.0539	.0132	04/07/09	921619
		••			.0175	.0065	04/14/09	921729
					.0279	.0088	04/20/09	921851

Bi-214	Station 3101	<u>Location</u> LM1	Description 0.5 MILES SSW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	<u>Lab Number</u>	,
1.0718				GAMMA						
1.0185					BI-214	.0718	.0193	05/05/09	922164	
1.0228		•								
.0560										
.0072					•					
1.0326   .0086   .06/22/09   .923045   .0285   .0067   .06/30/09   .923149   .0619   .0107   .07/07/09   .92368   .0415   .0103   .0714/09   .923393   .0296   .0081   .08/04/09   .923767   .0504   .0120   .08/10/09   .923896   .0349   .0107   .08/17/09   .924016   .0284   .0098   .08/25/09   .924140   .0940   .0151   .09040   .0151   .09040   .0151   .09040   .0909/09   .924398   .0252   .0069   .09/22/09   .924606   .0359   .0094   .09/29/09   .924711   .1247   .0354   .10/06/09   .924832   .00473   .0093   .0076   .0909/09   .924832   .00473   .0093   .0076   .00940   .926808   .0061   .0116   .0061   .0116   .0061   .011709   .0064   .0061   .0064   .0064   .00664   .00664   .00664   .00664   .00664   .00664   .00664   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666   .00666		•			•			*		
1.0285   .0067   .06/30/09   .923149   .0619   .0107   .07/07/09   .923268   .0415   .0103   .07/14/09   .923393   .0296   .0081   .0804/09   .923767   .0504   .0120   .08/10/09   .923896   .0349   .0107   .08/17/09   .924016   .0284   .0098   .0825/09   .924140   .0940   .0151   .09/01/09   .924252   .0353   .0076   .09/09/09   .924398   .0252   .0069   .09/22/09   .924606   .0359   .0094   .09/29/09   .924711   .1247   .0354   .10/06/09   .924832   .0473   .0093   .10/20/09   .92535   .0615   .0144   .11/09/09   .92535   .0615   .0144   .11/09/09   .925345   .0579   .0126   .11/24/09   .925544   .0579   .0126   .11/24/09   .925588   .0552   .0144   .12/01/09   .925808   .0522   .0139   .12/07/09   .925901   .0522   .0139   .12/07/09   .925901   .0522   .0139   .12/07/09   .925901   .0522   .0139   .12/07/09   .925901   .0522   .0139   .12/07/09   .925901   .0522   .0139   .12/07/09   .925901   .0522   .0139   .12/07/09   .925901   .0522   .0139   .12/07/09   .925901   .0522   .0139   .12/07/09   .925901   .0522   .0139   .12/07/09   .925901   .0522   .0139   .12/07/09   .925901   .0522   .0139   .12/07/09   .925901   .0522   .0139   .12/07/09   .025901   .0522   .0139   .12/07/09   .0252680   .0522   .0139   .12/07/09   .0252680   .0522   .0139   .12/07/09   .025901   .0522   .0139   .12/07/09   .025901   .0522   .0139   .12/07/09   .025901   .0522   .0139   .12/07/09   .025901   .0522   .0139   .12/07/09   .025901   .0522   .0139   .12/07/09   .025901   .0522   .0139   .12/07/09   .025901   .0522   .0139   .12/07/09   .025901   .0522   .0139   .02620   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .02520   .025200   .025200   .025200										
1.0619					* •					
1.0415							•			
1.0296						•				
		•			•	.0296	.0081	08/04/09	.923767	
.0349					•	.0504	.0120	08/10/09	923896	
.0940       .0151       .09/01/09       .924252         .0353       .0076       .09/09/09       .924398         .0252       .0069       .09/22/09       .924606         .0359       .0094       .09/29/09       .924711         .1247       .0354       .10/06/09       .924832         .0473       .0093       .10/20/09       .925021         .0136       .0061       .11/03/09       .925335         .0615       .0144       .11/09/09       .925453         .0178       .0064       .11/17/09       .925640         .0579       .0126       .11/24/09       .925680         .0852       .0144       .12/01/09       .925808         .0522       .0139       .12/07/09       .925901						.0349	.0107	08/17/09	924016	
.0353       .0076       09/09/09       924398         .0252       .0069       09/22/09       924606         .0359       .0094       09/29/09       924711         .1247       .0354       10/06/09       924832         .0473       .0093       10/20/09       925021         .0136       .0061       11/03/09       925335         .0615       .0144       11/09/09       925453         .0178       .0064       11/17/09       925544         .0579       .0126       11/24/09       925680         .0852       .0144       12/01/09       925808         .0522       .0139       12/07/09       925901						.0284	.0098	08/25/09	924140	
.0252       .0069       09/22/09       924606         .0359       .0094       09/29/09       924711         .1247       .0354       10/06/09       924832         .0473       .0093       10/20/09       925021         .0136       .0061       11/03/09       925335         .0615       .0144       11/09/09       925453         .0178       .0064       11/17/09       925544         .0579       .0126       11/24/09       925680         .0852       .0144       12/01/09       925808         .0522       .0139       12/07/09       925901		•			<b>k</b>	.0940	.0151	09/01/09	924252	
.0359 .0094 09/29/09 924711 .1247 .0354 10/06/09 924832 .0473 .0093 10/20/09 925021 .0136 .0061 11/03/09 925335 .0615 .0144 11/09/09 925453 .0178 .0064 11/17/09 925544 .0579 .0126 11/24/09 925680 .0852 .0144 12/01/09 925808 .0522 .0139 12/07/09 925901						.0353	.0076	09/09/09	924398	
.1247       .0354       10/06/09       924832         .0473       .0093       10/20/09       925021         .0136       .0061       11/03/09       925335         .0615       .0144       11/09/09       925453         .0178       .0064       11/17/09       925544         .0579       .0126       11/24/09       925680         .0852       .0144       12/01/09       925808         .0522       .0139       12/07/09       925901						.0252	.0069	09/22/09	924606	
.0473 .0093 10/20/09 925021 .0136 .0061 11/03/09 925335 .0615 .0144 11/09/09 925453 .0178 .0064 11/17/09 925544 .0579 .0126 11/24/09 925680 .0852 .0144 12/01/09 925808 .0522 .0139 12/07/09 925901			•			.0359	.0094	09/29/09	924711	
.0136 .0061 11/03/09 925335 .0615 .0144 11/09/09 925453 .0178 .0064 11/17/09 925544 .0579 .0126 11/24/09 925680 .0852 .0144 12/01/09 925808 .0522 .0139 12/07/09 925901						.1247	.0354	10/06/09	924832	
.0615 .0144 11/09/09 925453 .0178 .0064 11/17/09 925544 .0579 .0126 11/24/09 925680 .0852 .0144 12/01/09 925808 .0522 .0139 12/07/09 925901						.0473	.0093	10/20/09	925021	
.0178 .0064 11/17/09 925544 .0579 .0126 11/24/09 925680 .0852 .0144 12/01/09 925808 .0522 .0139 12/07/09 925901						.0136	.0061	11/03/09	925335	
.0579 .0126 11/24/09 925680 .0852 .0144 12/01/09 925808 .0522 .0139 12/07/09 925901						.0615	.0144	11/09/09	925453	
.0852 .0144 12/01/09 925808 .0522 .0139 12/07/09 925901				•		.0178	.0064	11/17/09	925544	
.0522 .0139 12/07/09 925901						.0579	.0126	11/24/09	925680	
•						.0852	.0144	12/01/09	925808	
.0712 .0116 12/14/09 925987						.0522	.0139	12/07/09	925901	
			•			.0712	.0116	12/14/09	925987	

Station   Coation   Coat									
SAMMA SCAN (GELI)   BI-214   .0218   .0069   .12/21/09   .926142     K-40				<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
BI-214	÷			GAMMA :	SCAN (GELI)				
K-40   2.098   .0320   12/30/08   9200524   2.190   .0666   01/26/09   920524   2.190   .0666   01/26/09   920524   3.123   .0738   02/09/09   920713   2.2958   .0624   0.3/09/09   921149   2.2054   .0483   0.3/24/09   921426   2.2054   .0483   0.3/24/09   921426   2.2099   .0567   0.4077/09   921619   2.2999   .0667   0.4077/09   921619   2.2999   .0667   0.4077/09   921426   2.2054   .0483   0.3/24/09   922408   2.3729   .0711   0.0602/09   922408   2.3729   .0711   0.0602/09   922408   2.2581   .0530   0.06/20/09   923045   2.2581   .0530   0.06/20/09   923045   2.2857   0.0477   0.7077/09   923268   2.2581   .0530   0.06/20/09   923149   2.2685   .0576   0.714/09   923398   .0576   0.714/09   923398   .0577   .0614   0.8/17/09   923767   .0576   0.714/09   923767   .0576   0.714/09   923767   .0577   .0614   0.8/17/09   923408   .0577   .0614   0.8/17/09   924016   .0576   .0714/09   923408   .0577   .0614   0.8/17/09   924140   .0576   .0714/09   924140   .0576   .0714/09   924016   .0576   .0714/09   924016   .0576   .0714/09   924016   .0576   .0714/09   924016   .0576   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .0714/09   .07									
2098   0.320   12/30/08   920622   2190   0.666   01/26/09   920524   3123   0.738   02/09/09   920524   3123   0.738   0.624   0.309/09   921149   2.958   0.624   0.309/09   921149   2.9054   0.483   0.324/09   921426   2.909   0.567   0.407/09   921619   0.603   0.4144/09   921729   0.603   0.4144/09   921729   0.603   0.4144/09   921729   0.603   0.4144/09   921729   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603   0.603						.0218	.0069	12/21/09	926142
1910   .0666   .01/26/09   .920524   .3123   .0738   .0209/09   .920713   .2958   .0624   .03/09/09   .921149   .2054   .0483   .03/24/09   .921426   .2909   .0567   .04/07/09   .921619   .2909   .0567   .04/07/09   .921619   .2909   .0567   .04/07/09   .921619   .2909   .0567   .04/07/09   .921619   .2909   .0711   .0603   .04/14/09   .921729   .2909   .0711   .0602/09   .922408   .2369   .0711   .0602/09   .922408   .2369   .0443   .06/22/09   .923045   .2581   .0530   .06/30/09   .923149   .2581   .0530   .06/30/09   .923149   .2581   .0556   .07/14/09   .923268   .2021   .0576   .07/17/09   .923268   .2021   .0576   .07/17/09   .923268   .2021   .0576   .07/17/09   .923767   .2340   .0561   .08/25/09   .924140   .2340   .0561   .08/25/09   .924140   .2340   .0561   .08/25/09   .924140   .2340   .0561   .08/25/09   .924140   .2340   .0561   .08/25/09   .924140   .2340   .0561   .08/25/09   .924140   .2340   .0561   .08/25/09   .924140   .2340   .0561   .08/25/09   .924140   .2340   .0561   .08/25/09   .924140   .2340   .0561   .08/25/09   .924140   .2340   .0561   .08/25/09   .924140   .2340   .0561   .08/25/09   .924140   .2360   .0561   .08/25/09   .924140   .2340   .0561   .08/25/09   .924140   .2340   .0561   .08/25/09   .924382   .2125   .0613   .11/03/09   .92452   .2125   .0613   .11/03/09   .924532   .2125   .0613   .11/03/09   .925355   .22653   .0582   .11/09/09   .925355   .22653   .0582   .11/09/09   .925355   .22653   .0582   .11/09/09   .925453   .22653   .22653   .0582   .11/09/09   .925453   .22653   .22653   .0582   .11/09/09   .925453   .22653   .22653   .22653   .0582   .11/09/09   .925453   .22653   .22653   .0582   .11/09/09   .225951   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .22653   .226			•		K-40				
3123   0.738   02/09/09   920713     2958   0.624   0.309/09   921149     2054   0.483   0.3/24/09   921426     2099   0.567   0.4/07/09   921426     2199   0.603   0.4/14/09   921729     1.871   0.454   0.5/19/09   922408     3729   0.711   0.602/09   922663     2369   0.443   0.6/22/09   923045     2369   0.443   0.6/22/09   923045     2369   0.443   0.6/22/09   923149     22857   0.477   0.707/09   923268     2021   0.576   0.7/14/09   923393     1.938   0.458   0.804/09   923767     3577   0.614   0.8/17/09   924160     2340   0.561   0.8/25/09   924140     1.345   0.501   0.9/01/09   924252     1.948   0.468   0.9/09/09   924398     1.263   0.425   0.9/22/09   924606     2693   0.533   10/06/09   924382     2693   0.533   10/06/09   924382     2693   0.533   10/06/09   924535     2653   0.582   11/09/09   925453     2653   0.582   11/09/09   925453     2856   0.684   11/09/09   925453     2857   0.684   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   925453     2858   0.582   11/09/09   9									
1.958   .0624   .03/09/09   .921149   .2054   .0483   .03/24/09   .921426   .2090   .0567   .04/07/09   .921619   .2090   .0567   .04/07/09   .921619   .2090   .0567   .04/07/09   .921619   .2090   .0567   .04/07/09   .921619   .2090   .0603   .04/14/09   .921729   .2091   .2091   .2092   .2091   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2092   .2			•						
1.2054						.3123	.0738	02/09/09	
1919   10603   04/14/09   921619     1919   10603   04/14/09   921729     1871   10454   05/19/09   922408     3729   10711   06/02/09   923045     2369   1043   06/22/09   923045     2581   10530   06/30/09   923149     2857   10477   07/07/09   923268     2021   10576   07/14/09   923393     1938   10458   08/04/09   923767     3577   10614   08/17/09   924016     2340   10561   08/25/09   924140     1345   10501   09/01/09   924525     1948   10468   09/09/09   924398     1263   10425   09/22/09   924606     2693   10533   10/06/09   924832     2125   10613   11/03/09   92535     2653   10582   11/09/09   925453     2653   10582   11/09/09   925453     2857   10840   12/07/09   925901	,	·							
1919   .0603   .04/14/09   .921729     1871   .0454   .05/19/09   .922408     3729   .0711   .06/02/09   .92263     2369   .0443   .06/22/09   .923045     2581   .0530   .06/30/09   .923149     2857   .0477   .07/07/09   .92368     2021   .0576   .07/14/09   .92393     1938   .0458   .08/04/09   .923767     3577   .0614   .08/17/09   .92416     2340   .0561   .08/25/09   .924140     1345   .0501   .09/01/09   .92452     1948   .0468   .09/09/09   .924398     1263   .0425   .09/22/09   .924606     2693   .0533   .10/06/09   .924832     2125   .0613   .11/03/09   .92535     2653   .0582   .11/09/09   .925951     2050   .0610   .0640   .07/09   .925951     2060   .0640   .0640   .07/09   .00501     2060   .0640   .0640   .07/09   .00501     2060   .0640   .0640   .07/09   .00501     2060   .0640   .0640   .0640   .07/09   .00501     2060   .0640   .0640   .0640   .0640   .0640     2060   .0640   .0640   .0640   .0640   .0640     2060   .0640   .0640   .0640   .0640   .0640     2060   .0640   .0640   .0640   .0640   .0640     2060   .0640   .0640   .0640   .0640   .0640     2060   .0640   .0640   .0640   .0640   .0640     2060   .0640   .0640   .0640   .0640   .0640     2060   .0640   .0640   .0640   .0640   .0640     2060   .0640   .0640   .0640   .0640     2060   .0640   .0640   .0640   .0640     2060   .0640   .0640   .0640   .0640     2060   .0640   .0640   .0640   .0640     2060   .0640   .0640   .0640   .0640     2060   .0640   .0640   .0640     2060   .0640   .0640   .0640   .0640     2060   .0640   .0640   .0640     2060   .0640   .0640   .0640     2060   .0640   .0640   .0640     2060   .0640   .0640   .0640     2060   .0640   .0640   .0640     2060   .0640   .0640   .0640     2060   .0640   .0640   .0640     2060   .0640   .0640   .0640     2060   .0640   .0640   .0640     2060   .0640   .0640   .0640     2060   .0640   .0640   .0640     2060   .0640   .0640   .0640     2060   .0640   .0640   .0640     2060   .0640   .0640   .0640     2060   .0640   .0640   .0640     2060   .0640   .0640   .0640     206						.2054	.0483	03/24/09	921426
1871 0.454 05/19/09 922408 3729 0.711 06/02/09 922663 2369 0.443 06/22/09 923045 2581 0.530 06/30/09 923149 2857 0.477 07/07/09 923268 22021 0.576 07/14/09 923393 1.938 0.458 08/04/09 923767 3.577 0.614 08/17/09 924016 2340 0.561 08/25/09 924140 2340 0.561 08/25/09 924140 1345 0.501 09/01/09 924252 1948 0.468 09/09/09 924398 1263 0.425 09/02/09 924398 1263 0.425 09/02/09 924606 2693 0.533 10/06/09 924398 12125 0.613 11/03/09 925335 2653 0.582 11/09/09 925453 4851 0.840 12/07/09 925901		·				.2909	.0567	04/07/09	921619
3729						1919	.0603	04/14/09	921729
. 2369 .0443 .06/22/09 .923045 .2581 .0530 .06/30/09 .923149 .2857 .0477 .07/07/09 .923268 .2021 .0576 .07/14/09 .923393 .1938 .0458 .08/04/09 .923767 .3577 .0614 .08/17/09 .924016 .2340 .0561 .08/25/09 .924140 .1345 .0501 .09/01/09 .924252 .1948 .0468 .09/09/09 .924398 .1263 .0425 .09/22/09 .924606 .2693 .0533 .10/06/09 .924832 .2125 .0613 .11/03/09 .925335 .2653 .0582 .11/09/09 .925453 .4851 .0840 .12/07/09 .925901						.1871	.0454	05/19/09	922408
.2369       .0443       06/22/09       923045         .2581       .0530       06/30/09       923149         .2857       .0477       07/07/09       923268         .2021       .0576       07/14/09       923393         .1938       .0458       08/04/09       923767         .3577       .0614       08/17/09       924016         .2340       .0561       08/25/09       924140         .1345       .0501       09/01/09       924252         .1948       .0468       09/09/09       924398         .1263       .0425       09/22/09       924606         .2693       .0533       10/06/09       924832         .2125       .0613       11/03/09       925335         .2653       .0582       11/09/09       925453         .4851       .0840       12/07/09       925901						.3729	.0711	06/02/09	922663
.2857       .0477       07/07/09       923268         .2021       .0576       07/14/09       923393         .1938       .0458       08/04/09       923767         .3577       .0614       08/17/09       924016         .2340       .0561       08/25/09       924140         .1345       .0501       09/01/09       924252         .1948       .0468       09/09/09       924398         .1263       .0425       09/22/09       924606         .2693       .0533       10/06/09       924832         .2125       .0613       11/03/09       925335         .2653       .0582       11/09/09       925453         .4851       .0840       12/07/09       925901	•					.2369	.0443	06/22/09	923045
.2021       .0576       07/14/09       923393         .1938       .0458       08/04/09       923767         .3577       .0614       08/17/09       924016         .2340       .0561       08/25/09       924140         .1345       .0501       09/01/09       924252         .1948       .0468       09/09/09       924398         .1263       .0425       09/22/09       924606         .2693       .0533       10/06/09       924832         .2125       .0613       11/03/09       925335         .2653       .0582       11/09/09       925453         .4851       .0840       12/07/09       925901						.2581	.0530	06/30/09	923149
.1938       .0458       08/04/09       923767         .3577       .0614       08/17/09       924016         .2340       .0561       08/25/09       924140         .1345       .0501       09/01/09       924252         .1948       .0468       09/09/09       924398         .1263       .0425       09/22/09       924606         .2693       .0533       10/06/09       924832         .2125       .0613       11/03/09       925335         .2653       .0582       11/09/09       925453         .4851       .0840       12/07/09       925901						.2857	.0477	07/07/09	923268
.3577       .0614       08/17/09       924016         .2340       .0561       08/25/09       924140         .1345       .0501       09/01/09       924252         .1948       .0468       09/09/09       924398         .1263       .0425       09/22/09       924606         .2693       .0533       10/06/09       924832         .2125       .0613       11/03/09       925335         .2653       .0582       11/09/09       925453         .4851       .0840       12/07/09       925901						.2021	.0576	07/14/09	923393
.2340       .0561       08/25/09       924140         .1345       .0501       09/01/09       924252         .1948       .0468       09/09/09       924398         .1263       .0425       09/22/09       924606         .2693       .0533       10/06/09       924832         .2125       .0613       11/03/09       925335         .2653       .0582       11/09/09       925453         .4851       .0840       12/07/09       925901						.1938	.0458	08/04/09	923767
.1345 .0501 09/01/09 924252 .1948 .0468 09/09/09 924398 .1263 .0425 09/22/09 924606 .2693 .0533 10/06/09 924832 .2125 .0613 11/03/09 925335 .2653 .0582 11/09/09 925453 .4851 .0840 12/07/09 925901						.3577	.0614	08/17/09	924016
.1345 .0501 09/01/09 924252 .1948 .0468 09/09/09 924398 .1263 .0425 09/22/09 924606 .2693 .0533 10/06/09 924832 .2125 .0613 11/03/09 925335 .2653 .0582 11/09/09 925453 .4851 .0840 12/07/09 925901	•					.2340	.0561	08/25/09	924140
1263       .0425       09/22/09       924606         .2693       .0533       10/06/09       924832         .2125       .0613       11/03/09       925335         .2653       .0582       11/09/09       925453         .4851       .0840       12/07/09       925901						.1345		09/01/09	924252
.1263       .0425       .09/22/09       .924606         .2693       .0533       .10/06/09       .924832         .2125       .0613       .11/03/09       .925335         .2653       .0582       .11/09/09       .925453         .4851       .0840       .12/07/09       .925901						1948	.0468	09/09/09	924398
.2693       .0533       10/06/09       924832         .2125       .0613       11/03/09       925335         .2653       .0582       11/09/09       925453         .4851       .0840       12/07/09       925901								09/22/09	924606
.2125 .0613 .11/03/09 925335 .2653 .0582 .11/09/09 925453 .4851 .0840 .12/07/09 925901									
.2653 .0582 11/09/09 925453 .4851 .0840 12/07/09 925901									
.4851 .0840 12/07/09 925901									
·		<i>.</i>							
						.2703	.0382	12/14/09	925987

Station 3101	Location LM1	Description 0.5 MILES SSW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA:	SCAN (GELI)				. •
		•		NO ACTIVITY DETEC				
					.0000	.0000	02/03/09	920623
			-		.0000	.0000	03/02/09	921061
	• ,				.0000	.0000	05/11/09	922283
	•				.0000	.0000	06/15/09	922926
				PB-212	•			
					.0014	.0032	01/06/09	920156
					.0033	.0040	03/16/09	921263
				•	.0031	.0048	09/14/09	924496
					.0038	.0034	10/27/09	925205
	•				.0077	.0042	12/07/09	925901
53				PB-214				
•			-		.0430	.0098	12/30/08	920062
		-			.0685	.0114	01/13/09	920244
		•			.0755	.0092	01/20/09	920378
					.0727	.0138	01/26/09	920524
	•				.0805	.0126	02/09/09	920713
				,	.0468	.0103	02/17/09	920819
					.0463	.0150	02/23/09	920965
			•		.0349	.0094	03/09/09	921149
		•		,	.0317	.0068	03/16/09	921263
					.0876	.0115	03/24/09	921426
					.0444	.0154	03/31/09	921525
					.0440	.0089	04/07/09	921619
					.0245	.0089	04/14/09	921729
					.0526	.0090	04/20/09	921851
		•			.0307	.0125	04/28/09	922068
		•			.0007	.0120	0 1/20/00	022000

Station 3101	Location LM1	Description 0.5 MILES SSW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)		•		
				PB-214	.0728	.0144	05/05/09	922164
					.0175	.0066	05/19/09	922408
					.0506	.0114	06/02/09	922663
					.0074	.0052	06/09/09	922781
					.0242	.0052	06/30/09	923149
					.0588	.0036	07/07/09	923268
					.0505	.0097	07/14/09	923393
					.0324	.0094	07/14/09	923522
					.0715	.0094	07/27/09	923664
4					.0370	.0089	08/04/09	923767
54					.0604	.0112	08/10/09	923896
t					.0273	.0088	08/17/09	924016
		•	•		.0273	.0073	08/25/09	924140
	•				.0873	.0073	09/01/09	924252
					.0355	.0082	09/09/09	924398
					.0599	.0003	09/14/09	924496
					.0292	.0076	09/22/09	924606
					.0393	.0076	09/29/09	924711
					.0203	.0098	10/06/09	924832
					.0203	.0096	10/15/09	924930
		r			.0455	.0000	10/13/09	925021
								925205
					.0280	.0061	10/27/09	
					.0527	.0132	11/03/09	925335
					.0785	.0129	11/09/09	925453
			•		.0287	.0073	11/17/09	925544
					.0348	.0093	11/24/09	925680

Station 3101	Location LM1	Description 0.5 MILES SSW	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	<u>Date Collected</u>	Lab Number
	•		GAMMA	SCAN (GELI) PB-214				
	•			10-214	.0702	.0178	12/01/09	925808
					.0258	.0079	12/07/09	925901
					.0567	.0090	12/14/09	925987
				•	.0259	.0085	12/21/09	926142
				TL-208				
					.0067	.0029	02/17/09	920819
3102	LM2	0.4 MILES NNE						
			GAMMA	SCAN (GELI)				
				BI-214				
1	•				.0418	.0113	12/30/08	920066
55		•			.0615	.0132	01/13/09	920248
1					.0762	.0108	01/20/09	920381
		•			.0566	.0121	01/26/09	920528
					:0882	.0143	02/09/09	920717
					.0701	.0127	02/17/09	920822
					.0569	.0129	02/23/09	920969
					.0498	.0109	03/02/09	921064
	•				.0250	.0083	03/09/09	921153
					.0475	.0125	03/16/09	921266
		•			.0815	.0143	03/23/09	921430
					.0403	.0093	03/30/09	921528
					.0670	.0130	04/06/09	921623
					.0187	.0085	04/13/09	921732
	•				.0388	.0105	04/20/09	921855
					.0246	.0117	04/27/09	922071
					.0364	.0117	05/04/09	922168
					.0304	.0107	03/04/08	322 100

				•				•
Station 3102	Location LM2	Description 0.4 MILES NNE	<u>Analysis</u>	Nuclide	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
3102	LIVIZ	U.4 WILES INNE	GAMMA	SCAN (GELI)				
		•	OAIVIIVIA .	BI-214				
				DI ZIII	.0345	.0105	05/19/09	922412
,					.0313	.0090	05/26/09	922546
		•			.0413	.0078	06/02/09	922667
					.0551	.0134	07/14/09	923397
				•	.0511	.0125	07/27/09	923668
	•				.0290	.0094	08/04/09	923770
					.0486	.0133	08/10/09	923900
					.0470	.0118	08/17/09	924019
					.0317	.0086	08/25/09	924144
1	-				.0599	.0165	09/01/09	924255
56					.0284	.0078	09/08/09	924402
•					.0863	.0159	09/14/09	924499
					.0342	.0085	09/22/09	924610
				•	.0489	.0135	10/20/09	925025
•		•			.0191	.0083	10/27/09	925208
					.0357	.0113	11/03/09	925339
					.0689	.0158	11/09/09	925456
					.0238	.0095	11/17/09	925548
					.0318	.0091	11/24/09	925683
					.0389	.0100	12/01/09	925812
					.0346	.0124	12/07/09	925904
					.0907	.0124	12/14/09	925991
				K-40	.0307	.0137	12/14/09	923991
				1\ <del>-4</del> U	.2418	.0970	01/13/09	920248
					.2621	.0630	01/20/09	920381
					.4177	.0815	01/26/09	920528

Station 3102	Location LM2	Description 0.4 MILES NNE	Analysis	Nuclide	Activity	Error	Date Collected	Lab Number
		•	GAIVINA	SCAN (GELI) K-40				
			,	N-40	.4359	.0904	02/09/09	920717
	,				.2536	.0524	02/17/09	920822
					.3183	.0702	02/23/09	920969
					.2939	.0892	03/09/09	921153
					.3951	.0857	03/23/09	921430
					.3543	.0672	04/13/09	921732
					.2221	.0580	04/20/09	921855
					.2723	.0542	04/27/09	922071
	•				.3944	.0651	05/11/09	922286
(h	-	•			.2453	.0553	06/30/09	923154
57 -	·				.2219	.0455	07/14/09	923397
•					.2828	.0534	07/27/09	923668
	•				.1651	.0540	08/04/09	923770
					.1949	.0524	08/17/09	924019
					.1246	.0450	08/25/09	924144
				•	.2553	.0581	09/01/09	924255
					.3050	.0578	09/14/09	924499
					.4284	.0808	09/22/09	924610
					.5421	.1080	10/20/09	925025
					.2864	.0515	10/27/09	925208
			4		.4908	.0751	11/09/09	925456
					.3147	.0525	11/17/09	925548
					.2029	.1073	12/14/09	925991
					.3863	.0820	12/21/09	926145
	·			NO ACTIVITY DETECT	TED			
	•				.0000	.0000	06/08/09	922784

* *									
<u>Station</u>	<b>Location</b>		<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
3102	LM2	•	0.4 MILES NNE	٠					
				GAMMA	SCAN (GELI)	· · · · · · · · · · · · · · · · · · ·			
					NO ACTIVITY				
					i	.0000	.0000	06/15/09	922930
						.0000	.0000	06/23/09	923048
					PB-212				
						.0092	.0052	02/23/09	920969
-	,					.0053	.0038	03/09/09	921153
			•			.0134	.0065	03/16/09	921266
	•	•				.0067	.0051	03/23/09	921430
						.0001	.0048	06/30/09	923154
						.0128	.0049	09/22/09	924610
1					PB-214				
58						.0433	.0074	12/30/08	920066
1						.0465	.0089	01/06/09	920159
		•				.0747	.0142	01/13/09	920248
				•	•	.0884	.0101	01/20/09	920381
						.0573	.0158	01/26/09	920528
						.0306	.0117	02/03/09	920626
						.0706	.0188	02/09/09	920717
						.0753	.0097	02/17/09	920822
						.0429	.0127	02/23/09	920969
						.0674	.0126	03/02/09	921064
			·			.0290	.0088	03/09/09	921153
						.0415	.0126	03/16/09	921266
			•			.0825	.0122	03/23/09	921430
	-					.0439	.0080	03/30/09	921528
						.0773	.0123	04/06/09	921623
						.0370	.0087	04/13/09	921732
						.0010	.0001	0 17 10/00	021102

Station 3102	Location LM2	Description 0.4 MILES NNE	Analysis GAMMA	Nuclide SCAN (GELI)	Activity	<u>Error</u>	Date Collected	Lab Number
				PB-214		*		
					.0347	.0118	04/20/09	921855
					.0281	.0100	04/27/09	922071
					.0210	.0059	05/04/09	922168
	•		•		.0409	.0130	05/11/09	922286
					.0348	.0073	05/19/09	922412
					.0358	.0112	06/02/09	922667
					.0607	.0114	06/30/09	923154
			•		.0507	.0126	07/07/09	923271
					.0577	.0115	07/14/09	923397
5					.0212	.0094	07/20/09	923525
59 -					.0526	.0114	07/27/09	923668
••					.0284	.0093	08/04/09	923770
					.0368	.0110	08/10/09	923900
					.0397	.0105	08/17/09	924019
					.0449	.0093	08/25/09	924144
					.0625	.0119	09/01/09	924255
		•			.0383	.0056	09/08/09	924402
					.0622	.0090	09/14/09	924499
		•			.0285	.0088	09/22/09	924610
					.0382	.0093	09/29/09	924714
					.0239	.0082	10/06/09	924836
					.0161	.0046	10/15/09	924933
					.0556	.0159	10/20/09	925025
					.0269	.0078	10/27/09	925208
			•	•	.0547	.0128	11/09/09	925456
					.0286	.0109	11/17/09	925548

Station 3102	Location LM2	Description 0.4 MILES NNE	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
0.02		5	GAMMA :	SCAN (GELI) PB-214				
				15211	.0396	.0095	11/24/09	925683
					.0555	.0108	12/01/09	925812
					.0356	.0079	12/07/09	925904
					.0776	.0085	12/14/09	925991
					.0138	.0064	12/21/09	926145
				TL-208				•
					.0063	.0025	08/04/09	923770
3106	PM2 SPRING CITY	7.0 MILES NW						
1			GAMMA :	SCAN (GELI) BI-214				
60				•	.0400	.0103	12/30/08	920069
ĭ					.0421	.0126	01/05/09	920161
	·				.0400	.0098	01/12/09	920251
	•				.0851	.0145	01/20/09	920383
					.0822	.0137	01/26/09	920531
					.0504	.0120	02/02/09	920628
					.0568	.0106	02/09/09	920720
					.0605	.0111	02/16/09	920824
				•	.0399	.0103	02/23/09	920972
	•	•			.0454	.0108	03/02/09	921066
				•	.0348	.0086	03/16/09	921268
					.0490	1.0113	03/23/09	921433
					.0341	.0094	03/30/09	921530
					.0713	.0114	04/06/09	921626
					.0260	.0083	05/04/09	922171
					0192	.0096	05/11/09	922288

Station 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	<u>Lab Number</u>
			GAMMA	SCAN (GELI)				
				BI-214	•			
					.0254	.0071	05/18/09	922415
	•				.0629	.0165	06/01/09	922670
					.0146	.0065	06/08/09	922786
				•	.0243	.0087	06/22/09	923050
,	·	•			.0321	.0083	06/29/09	923159
					.0459	.0133	07/06/09	923273
	,				.0557	.0113	07/13/09	923400
					.0393	.0093	07/20/09	923527
					.0502	.0112	07/27/09	923671
_	•				.0371	.0097	08/03/09	923772
61		•			.0407	.0127	08/10/09	923903
•	•				.0390	.0082	08/17/09	924021
					.0716	.0122	08/24/09	924147
		•			.0761	.0119	09/01/09	924257
		•			.0667	.0111	09/08/09	924405
					.0987	.0200	09/14/09	924501
					.0418	.0099	09/21/09	924613
			•		.0318	.0090	09/28/09	924716
					.0408	.0108	10/05/09	924839
		•			.0158	.0077	10/13/09	924935
	•				.0261	.0102	10/26/09	925210
					.0488	.0158	11/02/09	925342
					.0678	.0151	11/09/09	925458
					.2057	.0292	11/30/09	925815
					.0623	.0097	12/07/09	925906
					.0397	.0116	12/14/09	925994

Station 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	Analysis	Nuclide	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
0.00	<u></u>	7.0 111120 1111	GAMMA	SCAN (GELI) K-40				
					.2919	.0510	12/30/08	920069
					.2687	.0534	01/12/09	920251
					.2505	.0513	01/20/09	920383
					.5110	.0718	01/26/09	920531
		•			.2796	.0579	02/09/09	920720
					.3339	.0846	02/16/09	920824
	,				.3778	.0692	03/02/09	921066
					.3651	.0705	03/09/09	921156
					.3810	.0660	03/16/09	921268
- 6					.3261	.0659	03/23/09	921433
62 -					.4788	.0731	03/30/09	921530
•				•	.3317	.0786	04/06/09	921626
			•		.2745	.0457	05/11/09	922288
					.5400	.0838	05/18/09	922415
	4	•			.2297	.0664	06/01/09	922670
					.2609	.0492	06/08/09	922786
					.3667	.0779	07/06/09	923273
					.4361	.0667	07/20/09	923527
•					.4324	.0742	08/03/09	923772
					.3255	.0583	08/10/09	923903
	•				.1972	.0373	08/17/09	924021
					.2083	.0557	09/08/09	924405
					.1821	.0559	10/05/09	924839
				•	.3404	.0556	10/13/09	924935
	·				.3583	.0525	10/26/09	925210
					.2672	.0583	11/02/09	925342

Station 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	Analysis	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				-
		, •		K-40				
	-				.3315	.0822		925458
					.2596	.0551	11/23/09	925685
					.3388	.0695	11/30/09	925815
					.3611	.0676	12/14/09	925994
				NO ACTIVIT	TY DETECTED			
					.0000	.0000	06/15/09	922933
		*		PB-212		11.1		
				,	.0096	.0043	01/05/09	920161
					.0111	.0044	03/02/09	921066
_		•			.0057	.0043	03/23/09	921433
63					.0097	.0053	04/06/09	921626
•	·				.0018	.0051	09/21/09	924613
				PB-214				•
					.0613	.0115	12/30/08	920069
					.0392	.0080	01/05/09	920161
•					.0610	.0110	01/12/09	920251
					.0837	.0146	01/20/09	920383
					.0884	.0186	01/26/09	920531
		•			.0647	.0130	02/02/09	920628
		,			.0523	.0108	02/09/09	920720
		,	••		.0883	.0153	02/16/09	920824
					.0396	.0083	02/23/09	920972
	•				.0551	.0106	03/02/09	921066
				•	.0184	.0069	03/09/09	921156
	·				.0341	.0098	03/16/09	921268
*					.0419	.0113	03/23/09	921433

<b>.</b>			A	A. 17.1		_		
Station	Location	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
3106	PM2 SPRING CITY	7.0 MILES NW	Ċ A BABA A	SCAN (GELI)	. •			
			GAIVIIVIA	PB-214				
					.0352	.0098	03/30/09	921530
		• •	•		.0728	.0141	04/06/09	921626
					.0226	.0061	04/13/09	921734
			•		.0170	.0088	04/20/09	921858
					.0214	.0077	04/27/09	922073
			•		.0358	.0084	05/04/09	922171
					.0315	.0075	- 05/11/09	922288
					.0269	.0114	05/18/09	922415
		•			.0099	.0045	05/26/09	922548
- 64					.0610	.0113	06/01/09	922670
4		•		•	.0408	.0104	06/22/09	923050
-					.0352	.0063	06/29/09	923159
	the second second		•		.0353	.0081	07/06/09	923273
				•	.0808	.0104	07/13/09	923400
					.0306	.0076	07/20/09	923527
					.0551	.0099	07/27/09	923671
					.0257	.0071	08/03/09	923772
	•	•	-		.0260	.0081	08/10/09	923903
		•	•		.0506	.0111	08/17/09	924021
					.0634	.0115	08/24/09	924147
		•			.0794	.0100	09/01/09	924257
					.0689	.0113	09/08/09	924405
					.0709	.0198	09/14/09	924501
					.0344	.0103	09/21/09	924613
					.0227	.0074	09/28/09	924716
•				•	.0321	.0089	10/05/09	924839

Station 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	Analysis Nuclide	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
			GAMMA SCAN (GELI)		•		
			PB-214	. 0450	0079	10/26/09	925210
		•		.0458	.0078	11/02/09	925342
				.0423	.0096		9253 <del>4</del> 2 925458
				.0621	.0131	11/09/09 11/16/09	925 <del>4</del> 56 925551
				.0332	.0084	11/23/09	925685
				.0180	.0069	11/30/09	925815
				.0719	.0130		925906
				.0456	.0117	12/07/09	
			•	.0248	.0075	12/14/09	925994
4. 0407	D142	40.4 MH EO MNE		.0103	.0059	12/21/09	926147
3107	PM3	10.4 MILES NNE	GAMMA SCAN (GELI)				·
•			BI-214	منه	2007	40,000,000	000074
				.0413	.0097	12/29/08	920071
			·	.0296	.0095	01/06/09	920163
				.0518	.0105	01/13/09	920253
			•	.1002	.0156	01/20/09	920385
				.0584	.0134	01/26/09	920533
	•			.0920	.0155	02/02/09	920630
				.0609	.0113	02/09/09	920722
				.0588	.0101	02/16/09	920826
		•		.0459	.0087	. 03/02/09	921068
		• •	·	.0542	.0101	03/23/09	921435
		•	-	.0194	.0085	03/30/09	921532
				.0601	.0128	04/06/09	921628
		•		.0284	.0086	04/20/09	921860
·				.0142	.0080	04/27/09	922075

Station 3107	Location PM3	Description 10.4 MILES NNE	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) BI-214				
	•				.0383	.0083	05/04/09	922173
		,			.0218	.0071	05/11/09	922290
			•		.0272	.0094	05/18/09	922417
	•				.0241	.0094	05/26/09	922550
					.0583	.0160	06/01/09	922672
	•				.0352	.0095	06/29/09	923162
					.0476	.0119	07/06/09	923275
					.0507	.0096	07/13/09	923402
					.0398	.0104	07/20/09	923529
(					.0473	.0116	07/27/09	923673
- 66			,		.0530	.0153	08/03/09	923774
. •					.0354	.0079	08/10/09	923905
					.0670	.0148	08/17/09	924023
					.0627	.0132	08/24/09	924149
		. *			.0550	.0102	09/01/09	924259
					.0462	.0114	09/08/09	924407
		•			.1200	.0221	09/14/09	924503
		4			.0420	.0115	09/21/09	924615
•					.0217	.0091	09/28/09	924718
					.0226	.0086	10/05/09	924841
					.0734	.0158	11/02/09	925344
					.0429	0118	11/09/09	925460
	·				.0425	.0128	11/16/09	925553
					.0351	.0118	11/23/09	925687
	•				.0465	.0123	11/30/09	925817
					.0837	.0212	12/14/09	925996

Station 3107	Location PM3	Description 10.4 MILES NNE	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
	· .		GAMMA S	SCAN (GELI) BI-214				
					.0276	.0101	12/21/09	926149
				K-40				
*					.2017	.0372	12/29/08	920071
					.2689	.0437	01/06/09	920163
			·		.4997	.0841	01/13/09	920253
					.2673	.0830	01/20/09	920385
					.2611	.0540	01/26/09	920533
•					.3805	.0961	02/02/09	920630
					.3736	.0544	02/09/09	920722
- 67		*			.3949	.0780	02/16/09	920826
7 -					.3432	.0582	02/23/09	920974
•				•	.1641	.0527	03/02/09	921068
					.1711	.0423	03/23/09	921435
		,		•	.1948	.0405	03/30/09	921532
					.2382	.0572	04/06/09	921628
		,			.4061	.0799	04/20/09	921860
	•				.3335	.0569	05/18/09	922417
					.3231	.0697	05/26/09	922550
					.4037	.1025	06/01/09	922672
					.2208	.0418	07/06/09	923275
					.3044	.0586	07/27/09	923673
		•			.2369	.0521	08/17/09	924023
i					.4484	.0964	09/14/09	924503
					.2225	.0514	09/28/09	924718
					.2285	.0768	10/05/09	924841
					.2902	.0552	11/09/09	925460
	•				·	·	· · · · - <del>-</del>	

Station   Description   Description   Analysis   Nuclide   Activity   Error   Date Collected   Lab Number			•						
CAMMA SCAN (GELI)   K-40   2960   .0.746   .11/16/09   .925553   .4347   .0.796   .11/23/09   .925687   .3256   .0.630   .12/21/09   .925149   .11/23/09   .925149   .11/23/09   .925149   .11/23/09   .925149   .11/23/09   .925149   .11/23/09   .925149   .11/23/09   .925149   .11/23/09   .925149   .11/23/09   .925149   .11/23/09   .925149   .11/23/09   .925149   .11/23/09   .925149   .11/23/09   .925149   .11/23/09   .925149   .11/23/09   .925149   .11/23/09   .11/23/09   .925149   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09   .11/23/09	Station	Location	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
K-40	3107	PM3	10.4 MILES NNE						
2960 0.746 11/16/09 925553 4347 0.7796 11/23/09 925687 3256 0.630 12/21/09 926149 NO ACTIVITY DETECTED 0.000 0.000 10/13/09 924937 PB-212 0.063 0.039 04/27/09 922075 PB-214 0.063 0.039 04/27/09 922075 PB-214 0.0649 0.122 12/29/08 920071 0.0342 0.085 01/06/09 920163 0.0491 0.094 01/13/09 92053 0.0777 0.156 01/20/09 920385 0.0777 0.156 01/20/09 920385 0.0544 0.010 01/26/09 920385 0.0544 0.010 01/26/09 92053 0.0544 0.010 01/26/09 92053 0.0544 0.010 01/26/09 92053 0.0544 0.010 01/26/09 92053 0.0544 0.010 01/26/09 92053 0.0544 0.010 01/26/09 92053 0.0544 0.010 01/26/09 92053 0.0544 0.010 0.0126/09 92053 0.0544 0.010 0.0126/09 92053 0.0544 0.010 0.0126/09 92053 0.0544 0.010 0.0126/09 92053 0.0544 0.010 0.0126/09 92053 0.0544 0.010 0.0126/09 92053 0.0544 0.010 0.0126/09 92053 0.0544 0.010 0.0126/09 92053 0.0544 0.010 0.0126/09 92053 0.0544 0.010 0.0126/09 92053 0.0544 0.010 0.0126/09 92053 0.0544 0.010 0.0126/09 92053 0.0544 0.010 0.0126/09 92053 0.0544 0.010 0.0126/09 92053 0.0544 0.010 0.0126/09 92053 0.0544 0.010 0.0126/09 92053 0.0544 0.010 0.0126/09 92053 0.0554 0.0554 0.0123 0.0009/09 92153 0.0554 0.0554 0.0123 0.0009/09 92153 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.0554 0.055		•		GAMMA					
A347   .0796   11/23/09   925687   .3256   .0630   12/21/09   926149     NO ACTIVITY DETECTED     .0000   .0000   .0000   .01/13/09   924937     PB-212   .0130   .0039   .04/27/09   922075     PB-214   .0649   .0122   12/29/08   920071     .0342   .0085   .01/06/09   920163     .0491   .0094   .0172/09   920253     .0777   .0156   .01/20/09   920385     .0777   .0156   .01/20/09   920385     .0544   .0100   .01726/09   920533     .0544   .0100   .01726/09   920533     .0630   .0123   .02/09/09   920722     .0742   .0112   .02/16/09   920826     .0171   .0064   .02/23/09   920722     .0172   .0152   .0092   .03/02/09   920722     .0174   .0108   .03/23/09   921158     .0413   .0109   .03/16/09   921158     .0417   .0108   .03/23/09   921158     .0418   .0417   .0108   .03/23/09   921435     .0405   .0099   .03/09/09   921628     .0672   .0100   .04/06/09   921628     .0672   .0100   .04/06/09   921628     .0672   .0100   .04/06/09   921628     .0672   .0100   .04/06/09   921628     .0336   .0081   .04/13/09   921736     .0413   .0091   .04/06/09   .021628     .0672   .0100   .04/06/09   .021628     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .04/06/09   .021638     .0672   .0100   .0000   .00000   .00000     .000					K-40	<u>.</u>			
NO ACTIVITY DETECTED   NO ACTIVITY DETECTED     NO ACTIVITY DETECTED   NO 000   NO 0000   NO 00000   NO 000000   NO 00000   NO 000000   NO 00000   NO 00000   NO 00000   NO 00000   NO 00000   NO 000000   NO 0000000   NO 000000   NO 0000000   NO 00000000   NO 00000000   NO 000000000   NO 0000000000						· · · · · · · · · · · · · · · · · · ·			
NO ACTIVITY DETECTED   10000   10/13/09   924937   PB-212   10063   10056   04/13/09   921736   10130   10039   04/27/09   922075   PB-214   10064   10122   12/29/08   920071   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10064   10					•				
PB-212 PB-214 PB-214  PB-214					•		.0630	12/21/09	926149
PB-212					NO ACTIVITY D				
PB-214  PB-214  PB-214  PB-214  1 0649 0.122 12/29/08 920071  0.0342 0.0085 01/06/09 920163  0.0491 0.0094 01/13/09 92053  0.0777 0.156 01/20/09 920385  0.0544 0.0100 01/26/09 920533  0.0860 0.175 02/02/09 920533  0.0860 0.175 02/02/09 920533  0.0860 0.175 02/02/09 920533  0.0860 0.175 02/02/09 920532  0.0742 0.0112 02/16/09 920826  0.0742 0.0112 02/16/09 920826  0.0171 0.064 02/23/09 920826  0.0171 0.064 02/23/09 920974  0.0897 0.0123 03/02/09 920168  0.0252 0.0092 03/09/09 921158  0.0413 0.0109 03/16/09 921158  0.0417 0.0108 03/23/09 921158  0.0417 0.0108 03/23/09 921435  0.0405 0.0099 03/30/09 921532  0.0672 0.100 04/06/09 921628  0.0672 0.100 04/06/09 921628			·			.0000	.0000	10/13/09	924937
PB-214  PB-214  PB-214  PB-214  PB-214  .0649 .0122 12/29/08 920071 .0342 .0085 01/06/09 920163 .0491 .0094 01/13/09 920253 .0777 .0156 01/20/09 920385 .0544 .0100 01/26/09 920533 .0544 .0100 01/26/09 920533 .0630 .0123 02/09/09 920630 .0630 .0123 02/09/09 920722 .0742 .0112 02/16/09 920826 .0171 .0064 02/23/09 920974 .0697 .0123 03/02/09 920974 .0697 .0123 03/02/09 920974 .0697 .0123 03/02/09 92168 .0252 .0092 03/09/09 921158 .0413 .0109 03/16/09 921270 .0417 .0108 03/23/09 921435 .0417 .0108 03/23/09 921435 .0416 .0099 03/30/09 921532 .0672 .0100 04/06/09 921628 .0672 .0100 04/06/09 921628 .0672 .0100 04/06/09 921628			. *		PB-212		0050	0.444.0400	004700
PB-214  1 0.0649 0.122 12/29/08 920071 1 0.0342 0.0085 01/06/09 920163 1 0.0491 0.094 01/13/09 920253 1 0.0777 0.156 01/20/09 920385 1 0.0544 0.100 01/26/09 920533 1 0.0860 0.175 02/02/09 920630 1 0.0860 0.175 02/02/09 920630 1 0.0630 0.123 02/09/09 920722 1 0.0742 0.112 02/16/09 920826 1 0.171 0.064 02/23/09 920974 1 0.0697 0.123 03/02/09 921068 1 0.0252 0.092 03/09/09 921158 1 0.0413 0.109 03/16/09 921158 1 0.0417 0.108 03/23/09 921135 1 0.0405 0.099 03/30/09 9211532 1 0.0672 0.100 04/06/09 921628 1 0.0672 0.100 04/06/09 921628 1 0.0336 0.0081 04/13/09 921736			· .		•				
1						.0130	.0039	04/27/09	922075
\$\begin{array}{c c c c c c c c c c c c c c c c c c c					PB-214		0400	40/00/00	020074
.0491 .0094 .01/13/09 .920253 .0777 .0156 .01/20/09 .920385 .0544 .0100 .01/26/09 .920533 .0860 .0175 .02/02/09 .920630 .0630 .0123 .02/09/09 .920722 .0742 .0112 .02/16/09 .920826 .0171 .0064 .02/23/09 .920974 .0697 .0123 .03/02/09 .921068 .0252 .0092 .03/09/09 .921158 .0413 .0109 .03/16/09 .921270 .0417 .0108 .03/23/09 .921435 .0405 .0099 .03/30/09 .921532 .0672 .0100 .04/06/09 .921628 .0336 .0081 .04/13/09 .921736				•					
.0777       .0156       01/20/09       920385         .0544       .0100       01/26/09       920533         .0860       .0175       02/02/09       920630         .0630       .0123       02/09/09       920722         .0742       .0112       02/16/09       920826         .0171       .0064       02/23/09       920974         .0697       .0123       03/02/09       921068         .0252       .0092       03/09/09       921158         .0413       .0109       03/16/09       921270         .0417       .0108       03/23/09       921435         .0405       .0099       03/30/09       921532         .0672       .0100       04/06/09       921628         .0336       .0081       04/13/09       921736									
.0544       .0100       01/26/09       920533         .0860       .0175       02/02/09       920630         .0630       .0123       02/09/09       920722         .0742       .0112       02/16/09       920826         .0171       .0064       02/23/09       920974         .0697       .0123       03/02/09       921068         .0252       .0092       03/09/09       921158         .0413       .0109       03/16/09       921270         .0417       .0108       03/23/09       921435         .0405       .0099       03/30/09       921532         .0672       .0100       04/06/09       921628         .0336       .0081       04/13/09       921736	•			•					
.0860       .0175       02/02/09       920630         .0630       .0123       02/09/09       920722         .0742       .0112       02/16/09       920826         .0171       .0064       02/23/09       920974         .0697       .0123       03/02/09       921068         .0252       .0092       03/09/09       921158         .0413       .0109       03/16/09       921270         .0417       .0108       03/23/09       921435         .0405       .0099       03/30/09       921532         .0672       .0100       04/06/09       921628         .0336       .0081       04/13/09       921736		•			•	· ·			
.0630       .0123       02/09/09       920722         .0742       .0112       02/16/09       920826         .0171       .0064       02/23/09       920974         .0697       .0123       03/02/09       921068         .0252       .0092       03/09/09       921158         .0413       .0109       03/16/09       921270         .0417       .0108       03/23/09       921435         .0405       .0099       03/30/09       921532         .0672       .0100       04/06/09       921628         .0336       .0081       04/13/09       921736		•							
.0742       .0112       .02/16/09       .920826         .0171       .0064       .02/23/09       .920974         .0697       .0123       .03/02/09       .921068         .0252       .0092       .03/09/09       .921158         .0413       .0109       .03/16/09       .921270         .0417       .0108       .03/23/09       .921435         .0405       .0099       .03/30/09       .921532         .0672       .0100       .04/06/09       .921628         .0336       .0081       .04/13/09       .921736		• .	•						
.0171 .0064 02/23/09 920974 .0697 .0123 03/02/09 921068 .0252 .0092 03/09/09 921158 .0413 .0109 03/16/09 921270 .0417 .0108 03/23/09 921435 .0405 .0099 03/30/09 921532 .0672 .0100 04/06/09 921628 .0336 .0081 04/13/09 921736					•				
.0697 .0123 03/02/09 921068 .0252 .0092 03/09/09 921158 .0413 .0109 03/16/09 921270 .0417 .0108 03/23/09 921435 .0405 .0099 03/30/09 921532 .0672 .0100 04/06/09 921628 .0336 .0081 04/13/09 921736				•					
.0252 .0092 03/09/09 921158 .0413 .0109 03/16/09 921270 .0417 .0108 03/23/09 921435 .0405 .0099 03/30/09 921532 .0672 .0100 04/06/09 921628 .0336 .0081 04/13/09 921736						•			
.0413 .0109 03/16/09 921270 .0417 .0108 03/23/09 921435 .0405 .0099 03/30/09 921532 .0672 .0100 04/06/09 921628 .0336 .0081 04/13/09 921736				•					
.0417 .0108 03/23/09 921435 .0405 .0099 03/30/09 921532 .0672 .0100 04/06/09 921628 .0336 .0081 04/13/09 921736		•			•				the state of the s
.0405 .0099 03/30/09 921532 .0672 .0100 04/06/09 921628 .0336 .0081 04/13/09 921736						.0413	.0109	03/16/09	921270
.0672 .0100 04/06/09 921628 .0336 .0081 04/13/09 921736						.0417	.0108	03/23/09	
.0336 .0081 04/13/09 921736			* 4 - 4			.0405	.0099	03/30/09	921532
		• .				.0672	.0100	04/06/09	921628
.0249 .0092 04/20/09 921860						.0336	.0081	04/13/09	921736
						.0249	.0092	04/20/09	921860

		•							
Station 3107	Location PM3	Description 10.4 MILES NNE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	<u>Lab Number</u>	
3107	1 1010	10.4 WILLO WILL	GAMMA	SCAN (GELI)					
		•		PB-214	•				
	·	•			.0172	.0061	04/27/09	922075	
			•		.0306	.0103	05/04/09	922173	
					.0282	.0122	05/18/09	922417	
					.0201	.0060	05/26/09	922550	
					.0712	.0151	06/01/09	922672	
					.0056	.0045	06/08/09	922788	
		•			.0539	.0143	06/15/09	922935	
	•		*		.0252	.0074	06/22/09	923052	
			÷		.0285	.0103	06/29/09	923162	
- 6					.0447	.0114	07/06/09	923275	
69 -			•		.0679	.0111	07/13/09	923402	
•		,			.0277	.0093	07/20/09	923529	
					.0580	.0126	07/27/09	923673	
					.0311	.0078	08/03/09	923774	
	·				.0650	.0122	08/10/09	923905	
	•				.0635	.0132	08/17/09	924023	
		,			.0641	.0112	08/24/09	924149	
		•			.0474	.0118	09/01/09	924259	
	-				.0402	.0083	09/08/09	924407	
	•				.1146	.0185	09/14/09	924503	
					.0382	.0086	09/21/09	924615	
	•	•			.0396	.0104	09/28/09	924718	
•					.0303	.0100	10/05/09	924841	
				•	.0226	.0083	10/19/09	925030	
					.0255	.0085	10/26/09	925212	
	•				.0687	.0127	11/02/09	925344	

<u>Station Location</u> <u>Description</u> <u>Analysis Nuclide</u> <u>Activity</u> <u>Error Date</u> 3107 PM3 10.4 MILES NNE	e Collected Lab Number
GAMMA SCAN (GELI) PB-214	
	11/09/09 925460
	11/16/09 925553
	11/23/09 925687
	11/30/09 925817
	12/07/09 925908
· · · · · · · · · · · · · · · · · · ·	12/14/09 925996
	12/21/09 926149
3108 PM4 7.6 MILES NE/ENE	12/2 1/03
GAMMA SCAN (GELI)	
BI-214	•
	12/29/08 920073
.0431 .0101	01/05/09 920165
.0423 .0100	01/12/09 920255
.0734 .0159	01/20/09 920387
.0506 .0165	01/26/09 920535
.0546	02/02/09 920632
.0415 .0139	02/09/09 920724
.0547 .0089	02/16/09 920828
.0437 .0113	03/02/09 921070
	03/09/09 921160
.0285 .0081	03/16/09 921272
	03/24/09 921437
.0396 .0106	03/30/09 921534
	04/06/09 921630
·	04/13/09 921738
	04/20/09 921862

Station 3108	Location PM4	Description 7.6 MILES NE/ENE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	<u>Lab Number</u>
			GAMMA	SCAN (GELI) BI-214				
	•			51-21-4	.0296	.0104	05/11/09	922292
					.0361	.0085	05/18/09	922419
					.0228	.0088	05/26/09	922552
•					.0368	.0099	06/01/09	922674
•					.0375	.0090	06/15/09	922937
			=		.0246	.0091	06/29/09	923165
				•	.0410	.0108	07/07/09	923277
	•			•	.0455	.0114	07/13/09	923404
		• .			.0513	.0124	07/20/09	923531
1					.0384	.0086	07/27/09	923675
71					.0469	.0093	08/03/09	923776
1					.0419	.0095	08/10/09	923907
					.0371	.0111	08/17/09	924025
					.0567	.0164	08/24/09	924151
					.0323	.0088	09/01/09	924261
					.0508	.0130	09/08/09	924409
					.0620	.0159	09/14/09	924505
		•	•		.0417	.0092	09/28/09	924720
		•			.1159	.0262	10/05/09	924843
					.0421	.0117	10/19/09	925032
					.0314	.0074	10/26/09	925214
					.0295	.0076	11/02/09	925346
		,			.0775	.0144	11/09/09	925462
					.0481	.0097	11/23/09	925689
			·		.0196	.0106	11/30/09	925819
					.0476	.0105	12/07/09	925910

Station 3108	Location PM4	Description 7.6 MILES NE/ENE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				BI-214	.0401	.0102	12/14/09	925998
						.0102	12/14/09	926151
		•		17.40	.0246	.0003	12/2 1/09	920131
				K-40	.4484	.0894	12/29/08	920073
					3085	.0546	01/05/09	920165
			•		.2960	.0530	01/26/09	920535
				•		.0376	03/02/09	921070
					.1585		03/09/09	921160
					.2739	.0688		
					.4401	.0801	03/16/09	921272
- 7					.2087	.0427	03/24/09	921437
72 -					.3560	.0799	03/30/09	921534
•					.3507	.0773	04/13/09	921738
					.2037	.0552	04/20/09	921862
					.4627	.0698	05/11/09	922292
					.2446	.0692	05/26/09	922552
					.4579	.1047	06/08/09	922790
					.4742	.0802	06/15/09	922937
		•			.3297	.0670	06/23/09	923054
		•			.4158	.0703	.06/29/09	923165
					.3118	.0646	07/13/09	923404
	•				1891	.0413	07/20/09	923531
	·				.2849	.0481	08/03/09	923776
		,			.3285	.0541	08/10/09	923907
	¥				.3104	.0523	08/17/09	924025
					.2576	.0563	08/24/09	924151
			,		.2499	.0440	09/01/09	924261

# Table 2 RADIOACTIVITY IN CHARCOAL FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 12/28/2008 - 12/25/2009

Station 3108	<u>Location</u> PM4	Description 7.6 MILES NE/ENE	Analysis	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
*	•	•	GAMMA S	SCAN (GELI)				,
				K-40				
				•	.4135	.0642	09/08/09	924409
				•	.2082	.0643	09/14/09	924505
					.2608	.0585	09/28/09	924720
•	•				.3369	.0574	10/05/09	924843
	•				.4394	.0942	10/19/09	925032
					.4680	.0689	10/26/09	925214
	•			•	.2618	.0676	11/02/09	925346
		•			.1773	.0471	11/16/09	925555
	•		• *.		.2465	.0537	12/07/09	925910
` ~}					.1682	.0589	12/14/09	925998
73 -				•	.3958	.0499	12/21/09	926151
•				NO ACTIVITY DE	TECTED			
					.0000	.0000	05/04/09	922175
		·		PB-212				
	•				.0144	.0068	04/13/09	921738
` .					.0131	.0044	06/08/09	922790
					.0091	.0036	06/15/09	922937
					.0123	.0046	06/23/09	923054
	•				.0074	.0050	07/13/09	923404
	•				.0117	.0043	10/26/09	925214
		•		**	.0048	.0039	11/02/09	925346
		•			.0001	.0039	11/30/09	925819
		•			.0082	.0041	12/07/09	925910
		,		PB-214				
	. •				.0834	.0143	12/29/08	920073
•		•			.0297	.0102	01/05/09	920165

Station 3108	Location PM4	Description 7.6 MILES NE/ENE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
0.00		, , o , , , , , , , , , , , , , , , , ,	GAMMA	SCAN (GELI) PB-214	·		٠.	
					.0432	.0074	01/12/09	920255
					.0566	.0071	01/20/09	920387
				÷	.0614	.0122	01/26/09	920535
	,				.0500	.0137	02/02/09	920632
					.0561	.0095	02/09/09	920724
	· ·				.0639	.0104	02/16/09	920828
	·				.0243	.0082	02/23/09	920976
					.0438	.0067	03/02/09	. 921070
•					.0309	.0115	03/09/09	921160
- 74					.0347	.0090	03/16/09	921272
4					.0553	.0101	03/24/09	921437
•	·				.0425	.0099	03/30/09	921534
	• • • • • • • • • • • • • • • • • • • •		* .		.0813	.0125	04/06/09	921630
					0260	.0083	04/13/09	921738
	•				.0298	.0074	04/20/09	921862
					.0351	.0078	04/27/09	922077
					.0204	.0078	05/11/09	922292
	•				.0297	.0081	05/18/09	922419
					.0341	.0102	06/01/09	922674
					.0103	.0074	06/08/09	922790
		·			.0297	.0096	06/15/09	922937
•					.0411	.0106	06/23/09	923054
		,			.0219	.0059	06/29/09	923165
					.0492	.0085	07/07/09	923277
•					.0786	.0139	07/13/09	923404
		•			.0634	.0093	07/20/09	923531

Station 3108	<u>Location</u> PM4		Description 7.6 MILES NE/ENE	Analysis	Nuclide	. <u>Ac</u>	ctivity	÷.	Error	Date Collected	Lab Number
				GAMMA	SCAN (GELI)					•	
			-		PB-214						
							0306		.0085	07/27/09	923675
	•			,			0354		.0066	08/03/09	923776
					•		0335		.0081	08/10/09	923907
						and the second s	0428		.0085	08/17/09	924025
	,						0517		.0097	08/24/09	924151
							0409		.0080	09/01/09	924261
							0359		.0098	09/08/09	924409
							0693		.0132	09/14/09	924505
							0328		.0054	09/21/09	924617
. 75							0480		.0135	09/28/09	924720
01					4		0342		.0076	10/05/09	924843
							0366		.0092	10/13/09	924939
							0337	~	.0075	10/19/09	925032
	•		•				0177		.0069	10/26/09	925214
							0252		.0069	11/02/09	925346
•		•					0655		.0125	11/09/09	925462
÷				,			0280		.0067	11/16/09	925555
	•				•		0400	,	.0121	11/23/09	925689
							0429		.0089	12/07/09	925910
							0493		.0090	12/14/09	925998
							0348		.0118	12/21/09	926151
3109	PM5 DECATUR		8.0 MILES S								
	•			GAMMA	SCAN (GELI)						
					BI-214		1181		.0201	12/29/08	920076
	,						0394		.0201	01/12/09	920076
							UJ94		.0104	01/12/09	920200

Station 3109	Location PM5 DECATUR	<u>Description</u> 8.0 MILES S	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
	•			BI-214	2.42	0000	0.4.100.100	000000
				•	.0487	.0088	01/20/09	920389
	1				.0534	.0138	02/02/09	920634
					.0387	.0100	02/09/09	920727
					.0777	.0129	02/16/09	920830
			- + ·		.0115	.0072	02/23/09	920979
				•	.0583	.0117	03/02/09	921072
		•			.0268	.0088	03/16/09	921274
					.0818	.0176	03/23/09	921440
			•		.0617	.0124	04/06/09	921633
. 76					.0263	.0074	04/20/09	921865
ο\ • ],					.0203	.0090	05/04/09	922178
					.0280	.0095	05/18/09	922422
					.0224	.0087	05/26/09	922554
•	•			*	.0316	.0105	06/01/09	922677
					.0207	.0078	06/15/09	922940
					.0318	.0112	06/29/09	923169
	,				.0384	.0114	07/06/09	923279
					.0578	.0113	07/13/09	923407
					.0606	.0125	07/20/09	923533
		•			.0386	.0084	07/27/09	923678
					.0541	.0113	08/03/09	923778
					.0455	.0109	08/17/09	924027
					.0762	.0125	08/24/09	924154
	:	•			.0597	.0121	09/01/09	924263
		•			.0497	.0106	09/08/09	924412
		•			.0625	.0128	09/14/09	924507

				*		•		•
Station	Location	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	Date Collected	<u>Lab Number</u>
3109	PM5 DECATUR	8.0 MILES S		•	• •			
			GAMMA S	SCAN (GELI)				
	•			BI-214				
					.0353	.0107	09/21/09	924620
					.0374	.0111	09/28/09	924722
				•	.0179	.0082	10/26/09	925216
	•			•	.0587	.0130	11/02/09	925349
			•	•	.0470	.0108	11/09/09	925464
		•			.0240	.0095	11/23/09	925691
	•				.0146	.0069	11/30/09	925822
					.0386	.0110	12/07/09	925912
					.0360	.0102	12/14/09	926001
- 7				K-40	**		•	
77 -			•	, ,	.2430	.0716	01/12/09	920258
					.2742	.0518	02/02/09	920634
					.2575	.0654	03/16/09	921274
				•	.2561	0751	04/06/09	921633
					.3536	.0727	05/04/09	922178
			•	• *	.2525	.0554	05/11/09	922294
		•			.1548	.0600	05/18/09	922422
				•	.3580	.0619	05/26/09	922554
					.4019	.0927	06/01/09	922677
					.2784	.0464	06/08/09	922792
					.2382	.0553	06/15/09	922940
	·				.3071	.0563	06/29/09	923169
					.3418	.0721	07/06/09	923279
-	•		•		.1496	.0549	07/13/09	923407
		•			.2261	.0530	08/17/09	924027
				•	.2008	.0555	08/24/09	924154

## Table 2 RADIOACTIVITY IN CHARCOAL FILTER WATTS BAR NUCLEAR PLANT PCI/M3 - 0.037 BQ/M3 12/28/2008 - 12/25/2009

Station   Ocation   Ocat						•			
GAMMA SCAN (GELI) K-40  2282 .0536 09/01/09 924263 .2716 .0584 09/08/09 924412 .4662 .0666 09/14/09 924507 .3437 .0559 09/21/09 924507 .3437 .0559 09/21/09 924502 .2357 .0388 10/26/09 925216 .1646 .0455 11/02/09 925349 .4036 .0907 11/09/09 925464 .4689 .0830 11/23/09 925464 .4689 .0830 11/23/09 925691 .3296 .0478 11/30/09 925822 .2923 .0663 12/14/09 926001  NO ACTIVITY DETECTED .0000 .0000 09/22/09 920604 .0000 .0000 09/22/09 920366 .0000 .0000 09/22/09 920654 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 .0000 09/22/09 920664 .0000 09/22/09 920664 .0000 09/22/09 920664 .0000 09/22/09 920664 .0000 09/22/09 920664				<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
K-40  2282	3109	PM5 DECATUR	8.0 MILES S				•		
				GAMMA					
2716			,	•	K-40		0500	00/04/00	00.4000
1,4662			•	•		·			•
3437   0.559   0.9/21/09   924620	•				*				
PB-212  PB-212  1354  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .0000  .									
1646 .0455 11/02/09 925349 4036 .0907 11/09/09 925464 4036 .0907 11/09/09 925464 4689 .0830 11/23/09 925691 3296 .0478 11/30/09 925822 2923 .0663 12/14/09 926001  NO ACTIVITY DETECTED .0000 .0000 .03/30/09 921536 .0000 .0000 .0000 06/22/09 923056 .0000 .0000 .0000 12/21/09 926153  PB-212 .0117 .0066 02/02/09 926634 .0084 .0045 07/27/09 923678  PB-214 .1354 .0219 12/29/08 92076 .0283 .0100 01/05/09 920167 .0283 .0100 01/05/09 920167 .0578 .0118 01/12/09 920258 .0512 .0114 01/20/09 920389 .0512 .0114 01/20/09 920389 .0512 .0114 01/20/09 920389 .0584 .0163 02/02/09 920634 .0584 .0163 02/02/09 920634 .0584 .0163 02/02/09 920634		•							
Here the second of the second									
Herein He	•								
3296 .0478 11/30/09 925822 .2923 .0663 12/14/09 926001  NO ACTIVITY DETECTED  .0000 .0000 .03/30/09 921536 .0000 .0000 .06/22/09 923056 .0000 .0000 .0000 12/21/09 926153  PB-212  .0117 .0066 02/02/09 923678 .0084 .0045 07/27/09 923678  PB-214  .1354 .0219 12/29/08 920076 .0283 .0100 01/05/09 920167 .0283 .0100 01/05/09 920167 .0578 .0118 01/12/09 920258 .0512 .0114 01/20/09 920389 .0512 .0114 01/20/09 920389 .0642 .0144 01/26/09 920538 .0584 .0163 02/02/09 920634 .0584 .0163 02/02/09 920634				•					
.2923 .0663 12/14/09 926001  NO ACTIVITY DETECTED  .0000 .0000 03/30/09 921536 .0000 .0000 06/22/09 923056 .0000 .0000 12/21/09 926153  PB-212  .0117 .0066 02/02/09 920634 .0084 .0045 07/27/09 923678  PB-214  .1354 .0219 12/29/08 920676 .0283 .0100 01/05/09 920167 .0578 .0118 01/12/09 920258 .0578 .0118 01/12/09 920258 .0512 .0114 01/20/09 920389 .0642 .0144 01/26/09 920389 .0584 .0163 02/02/09 920634 .0393 .0103 02/09/09 920727		•	•						
NO ACTIVITY DETECTED  1.0000 .0000 .03/30/09 921536 .0000 .0000 .06/22/09 923056 .0000 .0000 .0000 12/21/09 926153  PB-212  1.0117 .0066 02/02/09 920634 .0084 .0045 07/27/09 923678  PB-214  PB-214  1.354 .0219 12/29/08 920076 .0283 .0100 01/05/09 920167 .0283 .0100 01/05/09 920167 .0578 .0118 01/12/09 920258 .0512 .0114 01/20/09 920389 .0512 .0114 01/20/09 920389 .0642 .0144 01/26/09 920538 .0584 .0163 02/02/09 920634 .0393 .0103 02/09/09 920727		•				.3296	.0478	11/30/09	925822
PB-212 PB-214 PB-215 PB-215 PB-216 PB-216 PB-216 PB-216 PB-217 PB-216 PB-217 PB-216 PB-216 PB-217 PB-216 PB-217 PB-216 PB-217 PB-216 PB-217 PB-216 PB	- 7			•		.2923	.0663	12/14/09	926001
.0000 .0000 06/22/09 923056 .0000 .0000 12/21/09 926153  PB-212  .0117 .0066 02/02/09 920634 .0084 .0045 07/27/09 923678  PB-214  .1354 .0219 12/29/08 920076 .0283 .0100 01/05/09 920167 .0578 .0118 01/12/09 920258 .0512 .0114 01/20/09 920389 .0642 .0144 01/26/09 920538 .0584 .0163 02/02/09 920634 .0393 .0103 02/09/09 920727	<b>∞</b> .	,			NO ACTIVITY		•		
PB-212  PB-212  .0117						•		•	
PB-212  .0117 .0066 02/02/09 920634 .0084 .0045 07/27/09 923678  PB-214  .1354 .0219 12/29/08 920076 .0283 .0100 01/05/09 920167 .0578 .0118 01/12/09 920258 .0512 .0114 01/20/09 920389 .0642 .0144 01/26/09 920538 .0584 .0163 02/02/09 920634 .0393 .0103 02/09/09 920727						.0000		06/22/09	923056
.0117 .0066 02/02/09 920634 .0084 .0045 07/27/09 923678  PB-214  .1354 .0219 12/29/08 920076 .0283 .0100 01/05/09 920167 .0578 .0118 01/12/09 920258 .0512 .0114 01/20/09 920389 .0642 .0144 01/26/09 920538 .0584 .0163 02/02/09 920634 .0393 .0103 02/09/09 920727						.0000	.0000	12/21/09	926153
PB-214 PB-214  .1354 .0219 .12/29/08 .0283 .0100 .01/05/09 .0287 .0578 .0118 .0512 .0114 .01/20/09 .02038 .0642 .0144 .01/26/09 .02038 .0584 .0163 .02/02/09 .02057 .0393 .0103 .02/09/09 .020727		•			PB-212				
PB-214  1.354 0.0219 1.2/29/08 920076 0.0283 0.0100 01/05/09 920167 0.0578 0.0118 01/12/09 920258 0.0512 0.0114 01/20/09 920389 0.0642 0.0144 01/26/09 920538 0.0584 0.0584 0.0163 02/02/09 920634 0.0393 0.0103 02/09/09 920727		•							
.1354 .0219 12/29/08 920076 .0283 .0100 01/05/09 920167 .0578 .0118 01/12/09 920258 .0512 .0114 01/20/09 920389 .0642 .0144 01/26/09 920538 .0584 .0163 02/02/09 920634 .0393 .0103 02/09/09 920727		•	·			.0084	.0045	07/27/09	923678
.0283 .0100 01/05/09 920167 .0578 .0118 01/12/09 920258 .0512 .0114 01/20/09 920389 .0642 .0144 01/26/09 920538 .0584 .0163 02/02/09 920634 .0393 .0103 02/09/09 920727					PB-214			•	
.0578       .0118       01/12/09       920258         .0512       .0114       01/20/09       920389         .0642       .0144       01/26/09       920538         .0584       .0163       02/02/09       920634         .0393       .0103       02/09/09       920727									
.0512 .0114 01/20/09 920389 .0642 .0144 01/26/09 920538 .0584 .0163 02/02/09 920634 .0393 .0103 02/09/09 920727		•	•						
.0642 .0144 01/26/09 920538 .0584 .0163 02/02/09 920634 .0393 .0103 02/09/09 920727			•						
.0584 .0163 02/02/09 920634 .0393 .0103 02/09/09 920727			·			i i			
.0393 .0103 02/09/09 920727			,			•			
					•	.0584	.0163	02/02/09	920634
.0721 .0091 02/16/09 920830	-	,				.0393	.0103	02/09/09	920727
					•	.0721	.0091	02/16/09	920830

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								•
Station 3109	Location PM5 DECATUR	Description 8.0 MILES S	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
	T NIO DEGRATOR	0.0 MILLO 0	GAMMA	SCAN (GELI) PB-214				
				15211	.0748	.0111	03/02/09	921072
,					.0245	.0090	03/09/09	921163
	•				.0344	.0092	03/16/09	921274
	•				.0780	.0109	03/23/09	921440
	•				.0447	.0120	04/06/09	921633
					.0299	.0092	04/13/09	921740
			•	•	.0400	.0107	04/20/09	921865
			,		.0349	.0095	04/27/09	922079
		'			.0258	.0073	05/04/09	922178
		*	•		.0299	.0094	05/11/09	922294
79					.0443	.0102	05/18/09	922422
•					.0276	.0083	05/26/09	922554
					.0453	.0126	06/01/09	922677
					.0491	.0091	06/15/09	922940
		· · · · · · · · · · · · · · · · · · ·	*		.0526	.0092	06/29/09	923169
	•			•	.0374	.0095	07/06/09	923279
				•	.0708	.0139	07/13/09	923407
		the second of			.0369	.0101	07/20/09	923533
v *	•		•		.0230	.0085	07/27/09	923678
		•			.0468	.0089	08/03/09	923778
					.0505	.0116	08/10/09	923910
			,		.0572	.0108	08/17/09	924027
					.0685	.0124	08/24/09	924154
	· .		•		.0375	.0094	09/01/09	924263
					.0484	.0116	09/08/09	924412
		•			.0595	.0113	09/14/09	924507

Station   Location   Description   Analysis   Nuclide   Activity   Error   Date Collected   Lab Nur	
GAMMA SCAN (GELI) PB-214  .0459 .0096 09/21/09 9246 .0334 .0075 09/28/09 9247 .0487 .0102 10/05/09 9248 .0108 .0050 10/13/09 9248 .0389 .0180 10/19/09 9250	<u>mber</u>
PB-214  .0459 .0096 09/21/09 9246 .0334 .0075 09/28/09 9246 .0487 .0102 10/05/09 9246 .0108 .0050 10/13/09 9246 .0389 .0180 10/19/09 9250	
.0334 .0075 09/28/09 924 .0487 .0102 10/05/09 924 .0108 .0050 10/13/09 924 .0389 .0180 10/19/09 9250	
.0487 .0102 10/05/09 9248 .0108 .0050 10/13/09 9249 .0389 .0180 10/19/09 9250	320
.0108 .0050 10/13/09 9249 .0389 .0180 10/19/09 9250	722
.0389 .0180 10/19/09 9250	346
	<b>941</b>
.0305 .0112 10/26/09 925	)35
	216
.0685 .0132 11/02/09 925	349
.0773 .0127 .11/09/09 .9254	<b>464</b>
.0314 .0107 11/16/09 925	558
.0160 .0051 11/23/09 9256	391
.0160 .0051 17/25/09 9250 .0155 .0060 11/30/09 9250	322
.0309 .0061 12/07/09 9259	<b>912</b>
.0409 .0089 12/14/09 9260	<b>)</b> 01 -
3203 LM3 1.9 MILES NNE	
GAMMA SCAN (GELI)	
BI-214	
.1391 .0166 12/30/08 9200	
.0352 .0123 01/05/09 920	
.0489 .0097 01/13/09 9202	
.0608 .0130 01/21/09 9203	
.0657 .0234 01/26/09 9209	
.0550 .0129 02/02/09 9206	
.0266 .0103 02/09/09 920	
.0568 .0113 02/16/09 9208	
.0361 .0099 02/23/09 9209	<del>3</del> 90
.0233 .0081 03/09/09 921	

Station 3203	Location LM3	<u>Description</u> 1.9 MILES NNE	<u>Analysis</u>	<u>Nuclide</u>		<u>Activity</u>	Error	Date Collected	<u>Lab Number</u>
0200	LIVIO	1.0 MILLO MAL	GAMMA	SCAN (GELI)		•			
				BI-214					
						.0397	.0080	03/16/09	921279
	•					.0418	.0088	03/24/09	921451
	• .		•			.0433	.0094	04/06/09	921638
	•	•				.0188	.0076	04/13/09	921746
	•	•				.0342	.0090	04/20/09	921876
•		•				.0298	.0084	05/11/09	922299
				•		.0166	.0062	05/19/09	922433
						.0321	.0109	06/01/09	922682
			,	,		.0329	.0110	06/16/09	922951
<u></u>		ř				.0767	.0140	07/13/09	923418
<u>&amp;</u> 1	•				•	.0258	.0071	07/20/09	923535
1						.0428	.0109	07/27/09	923683
•				• *	•	.0436	.0082	08/03/09	923783
	•				•	.0431	.0111	08/10/09	923921
						.0351	.0105	08/24/09	924159
_	•					.0445	.0094	09/01/09	924268
		,				.0674	.0135	09/08/09	924423
	4.		•	•		.0646	.0132	09/14/09	924509
						.0359	.0121	09/28/09	924727
		•				.0267	.0090	10/06/09	924857
•						.0374	.0091	10/19/09	925040
						.0576	.0109	11/09/09	925466
•	,		•			.0639	.0109	11/16/09	925564
*		1				.0097	.0057	12/01/09	925833
						.0376	.0141	12/07/09	925914
	•					.0354	.0097	12/15/09	926007

								_		
Station	<u>Location</u>	•	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	Activity	•	Error	Date Collected	<u>Lab Number</u>
3203	LM3		1.9 MILES NNE	0.444.4	00411 (0511)					
				GAMMA	SCAN (GELI) BI-214		,			
					DI-2 14	.0293		.0095	12/21/09	926158
					K-40	.0200		.0000		525.55
			•			.3598	*	.0566	01/13/09	920264
						.2786		.0558	01/21/09	920394
						.4454		.0949	01/26/09	920549
				,		.3252		.0582	03/16/09	921279
						.2529		.0571	03/24/09	921451
•		Y.				.3333		.0842	03/30/09	921538
		•				.2334		.0417	04/20/09	921876
ı						2300	•	.0540	05/19/09	922433
<b>8</b> 2						.3049		.0635	06/16/09	922951
1				•		.3149	•	.0597	07/13/09	923418
						.3947		.0654	08/03/09	923783
• *						.2379		.0681	09/08/09	924423
						.2601		.0694	09/14/09	924509
			•	•		.2555		.0581	09/28/09	924727
						.3913	. ,	.0569	10/06/09	924857
•						.2704		.0551	11/09/09	925466
			•		•	.3291		.0610	11/16/09	925564
•					NO ACTIVITY					
•	,					.0000		.0000	05/27/09	922556
						.0000		.0000	06/08/09	922797
						.0000		.0000	06/23/09	923058
			•			.0000		.0000	10/13/09	924943
					PB-212	,				
				•		.0052		.0063	02/23/09	920990

Station 3203	Location LM3	Description 1.9 MILES NNE	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
0200	2.110		GAMMA S	SCAN (GELI)				
				PB-212	•			
					.0017	.0039	04/13/09	921746
				•	.0012	.0041	04/20/09	921876
					.0063	.0068	07/20/09	923535
	•				.0070	.0056	09/28/09	924727
				PB-214				
			•		.1389	.0228	12/30/08	920087
					.0490	.0099	01/05/09	920169
					.0388	.0097	01/13/09	920264
	<u>.</u>		•		.0895	.0138	01/21/09	920394
I .				1.	.0685	.0183	01/26/09	920549
83	•				.0645	.0094	02/02/09	920636
1					.0368	.0106	02/09/09	920732
	•	:	•		.0443	.0094	02/16/09	920836
	*				.0211	.0079	02/23/09	920990
				•	.0237	.0077	03/03/09	921074
					.0266	.0104	03/09/09	921168
				•	.0327	.0108	03/16/09	921279
					.0518	.0119	03/24/09	921451
		•		•	.0292	.0093	03/30/09	921538
		•			.0459	.0090	04/06/09	921638
					.0243	.0060	04/20/09	921876
	•				.0276	.0077	04/27/09	922084
			,		.0150	.0073	05/04/09	922184
					.0416	.0103	05/19/09	922433
					.0681	.0142	06/01/09	922682
	•				.0356	.0058	06/16/09	922951

Station	Location	Description	Analysis Nuclide	<u>Activity</u>	Error	Date Collected	<u>Lab Number</u>
3203	LM3	1.9 MILES NNE		,			
		•	GAMMA SCAN (GELI)				
			PB-214		0070	00/00/00	000475
				.0280	.0079	06/30/09	923175
				.0642	.0133	07/06/09	923284
				.0896	.0108	07/13/09	923418
				.0335	.0084	07/20/09	923535
				.0394	.0094	07/27/09	923683
			•	.0435	.0123	08/03/09	923783
			•	.0350	.0095	08/10/09	923921
		•		.0717	.0117	08/24/09	924159
				.0286	.0069	09/01/09	924268
1				.0504	.0100	09/08/09	924423
<b>8</b> 4	•	•		.0513	.0108	09/14/09	924509
<u>.</u>		•	•	.0322	.0106	09/22/09	924625
	•			.0342	.0109	09/28/09	924727
	•			.0319	.0104	10/06/09	924857
	• .	•		.0367	.0116	10/19/09	925040
			e e	.0335	.0058	10/26/09	925224
	•			.0387	.0088	11/03/09	925361
				.0597	.0108	11/09/09	925466
				.0588	.0089	11/16/09	925564
				.0275	.0113	11/23/09	925696
				.0348	.0084	12/07/09	925914
				.0329	.0083	12/15/09	926007
	•						
		•		.0277	.0069	12/21/09	926158

					•	•			•
Station	<u>Location</u>	<u>Description</u>	<u>Analysis</u> <u>I</u>	<u>Nuclide</u>	Ac	<u>tivity</u>	<u>Error</u>	Date Collected	<u>Lab Number</u>
3204	LM-4	0.9 MILES SE				•			
1			GAMMA SO					•	
			•	AC-228	(	0533	.0208	01/26/09	920552
				31-214	,•	JJJJ	.0200	01/20/03	920302
			•	31-214	٠. ٠	0913	.0137	12/30/08	920090
				•		0534	.0100	01/05/09	920171
. *						0361	.0106	01/12/09	920267
						1128	.0257	01/20/09	920396
		·				0885	.0218	01/26/09	920552
						1020	.0138	02/02/09	920638
		٠,				0443	.0111	02/09/09	920735
í	·.			,		0554	.0143	02/16/09	920838
<b>8</b> 5						0280	.0087	02/23/09	920993
1,	•					0494	.0110	03/02/09	921076
					· .(	0613	.0119	03/23/09	921454
					.(	0148	.0080	04/13/09	921748
	•					0410	.0118	04/27/09	922086
						0477	.0218	05/11/09	922301
					.(	0410	.0164	06/01/09	922685
•					.0	0155 [°]	.0061	06/23/09	923060
	· .				.(	0420	.0087	07/06/09	923286
					.0	0429	.0120	07/13/09	923421
	•				.(	0170	.0068	08/03/09	923785
	1				.0	0138	.0089	08/10/09	923924
		•			.0	0303	.0097	08/17/09	924031
		•			.0	0516	.0088	08/24/09	924162
					).	0441	.0082	09/01/09	924270
	•	·			.0	0509	.0118	09/14/09	924511

Station 3204	Location LM-4	Description 0.9 MILES SE	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
	·	O.O MILLO OL	GAMMA S	SCAN (GELI) BI-214				
				DI-214	.0355	.0089	09/21/09	924628
-				• •	.0374	.0106	09/28/09	924729
-		•			.0350	.0088	10/19/09	925043
•	•				.0317	.0066	10/19/09	925226
	•				.0527	.0119	11/02/09	925364
		*			.0622	.0107	11/09/09	925468
					.0322	.0115	11/16/09	925567
					.0379	.0097	11/30/09	925836
· · · · · · · · · · · · · · · · · · ·	•	,			.0466	.0126	12/07/09	925916
<b>∞</b>					.0464	.0121	12/15/09	926010
- 98	•			K-40	,		40000	
					.2350	.0562	12/30/08	920090
					.2793	.0654	01/05/09	920171
					.1707	.0477	01/12/09	920267
	•				.5575	.1378	01/20/09	920396
•					.5116	.0978	01/26/09	920552
	•				.2484	.0518	02/09/09	920735
	·				.3409	.0605	02/23/09	920993
					.3238	.0766	03/02/09	921076
					.3825	.0621	03/23/09	921454
		•			.3071	.0551	04/27/09	922086
			*		.3376	.0584	06/01/09	922685
		•			.2281	.0534	06/23/09	923060
•	1				.2868	.0659	07/27/09	923686
,					.2682	.0554	08/10/09	923924
	·				2436	.0640	08/17/09	924031
					.2.100	.00.0	00, , , , 00	<b>52.55</b> .

<b>Station</b>	Location	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
3204	LM-4	0.9 MILES SE					•	
			GAMMA :	SCAN (GELI)			•	
	•			K-40				
	•	•	•		.3782	.0845	08/24/09	924162
•			•	•	.2716	.0501	09/01/09	924270
					.3913	.0716	09/14/09	924511
					.2743	.0523	09/28/09	924729
					.2656	.0682	10/26/09	925226
		•	•		.1984	.0562	11/09/09	925468
	•	· ·	•		.2657	.0655	11/16/09	925567
			,		.2091	.0529	12/07/09	925916
					.2288	.0458	12/15/09	926010
1		·			.4820	:0711	12/21/09	926160
87		•		NO ACTIVIT	Y DETECTED	•		
	•				.0000	.0000	03/09/09	921171
	•				.0000	.0000	05/27/09	922558
		•			.0000	.0000	06/08/09	922799
			•		.0000	.0000	06/29/09	923180
•					.0000	.0000	09/08/09	924426
	•			•	.0000	.0000	10/05/09	924860
				PB-212				
	•	·	•		.0121	.0053	03/02/09	921076
		·			.0025	.0040	04/06/09	921641
	,		•	PB-214				
	•		•		.0614	.0123	12/30/08	920090
				•	.0408	.0097	01/05/09	920171
	*	•			.0341	.0084	01/12/09	920267
				**	.1236	.0196	01/20/09	920396
			•		.0528	.0158	01/26/09	920552

Station 3204	<u>Location</u> LM-4	.*	Description 0.9 MILES SE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
-	•	•		GAMMA	SCAN (GELI)			• •	
					PB-214		8444	00100100	000000
				* :	•	.0751	.0141	02/02/09	920638
						.0307	.0101	02/09/09	920735
			•		*.	.0745	.0124	02/16/09	920838
					•	.0494	.0164	03/02/09	921076
						.0394	0117	03/16/09	921281
	-		•			0737	.0124	03/23/09	921454
						.0205	.0072	03/30/09	921540
		, in the second		*		.0327	.0088	04/06/09	921641
_						.0262	.0080	04/13/09	921748
- 88				•	•	.0128	.0037	04/20/09	921879
<b>00</b>						.0292	.0090	04/27/09	922086
						.0534	.0152	05/11/09	922301
					•	.0272	.0093	05/18/09	922436
						.0519	.0127	06/01/09	922685
						.0171	.0077	06/15/09	922954
						.0049	.0052	06/23/09	923060
				•		.0666	.0138	07/13/09	923421
	•					.0349	.0115	07/20/09	923537
			•			.0229	.0077	07/27/09	923686
					•	.0384	.0119	08/03/09	923785
						.0373	.0108	08/10/09	923924
						.0503	.0101	08/17/09	924031
						.0383	.0121	08/24/09	924162
						.0431	.0091	09/01/09	924270
	,					.0430	.0120	09/14/09	924511
						.0391	.011 <del>7</del>	09/21/09	924628

Station 3204	Location LM-4		Description 0.9 MILES SE		<u>uclide</u>	Activity	Error	Date Collected	Lab Number
		•		GAMMA SC	AN (GELI) B-214				
		•		. •	D-2 1 <del>4</del>	.0294	.0105	09/28/09	924729
			*	,		.0077	.0054	10/13/09	924945
						.0366	.0100	10/19/09	925043
					v	.0247	.0070	10/26/09	925226
						.0347	.0074	11/02/09	925364
						.0621	.0079	11/09/09	925468
	•					.0325	.0101	11/16/09	925567
•					•	.0406	.0133	11/23/09	925698
,					•	.0351	.0078	11/30/09	925836
<u>.</u>	*		•		•	.0410	.0131	12/07/09	925916
89						.0636	.0115	12/15/09	926010
3205	RM-3		15 MILES NNW						
		•		GAMMA SC					
				В	l-214				
			•			.1553	.0170	12/30/08	920093
	•					.0516	.0103	01/12/09	920270
		,				.0447	.0114	01/20/09	920398
					•	.0945	.0158	01/26/09	920555
				-		.0428	.0101	02/02/09	920640
						.0492	.0121	02/09/09	920738
•			•	•		.0637	.0134	02/16/09	920840
	•					.0656	.0126	03/02/09	921078
				•		.0277	.0086	03/16/09	921283
						.0569	.0128	03/23/09	921457
		•	á.			.0199	.0081	03/30/09	921542
						.0256	.0078	04/13/09	921750

Station 3205	Location RM-3 WB	Description 15 MILES NNW	<u>Analysis</u>	<u>Nuclide</u>		Activity	<u>Error</u>	Date Collected	Lab Number
	•		GAMMA S	SCAN (GELI)					
				BI-214	•	. '.			
	•					.0141	.0086	04/27/09	922088
•				•		.0493	.0102	05/18/09	922439
						.0446	.0095	06/01/09	922688
						.0491	.0122	06/15/09	922957
				•		.0441	.0135	06/29/09	923184
	•			4		.0411	.0127	07/06/09	923288
						.0596	.0133	07/13/09	923424
			-			.0352	.0114	07/20/09	923539
	•					.0270	.0078	07/27/09	923689
		*				.1279	.0236	08/10/09	923927
90 .						.0342	.0097	08/17/09	924033
•				,		.0305	.0080	08/24/09	924165
						.0359	.0099	09/01/09	924272
	•			·		.0434	0087	09/08/09	924429
		•				.0678	.0143	09/14/09	924513
						.0272	.0088	09/28/09	924731
					*	.0365	.0093	10/05/09	924863
						.0461	.0132	10/19/09	925046
						.0155	.0079	10/26/09	925228
		1				.0339	.0101	11/02/09	925367
				•		.0780	.0129	11/09/09	925470
	•	4		•		.0331	.0089	11/16/09	925570
						.0386	.0104	11/23/09	925700
		•				.0430	.0090	12/07/09	925918
*						.0602	.0144	12/14/09	926013
			,						

Station 3205	Location RM-3		Description 15 MILES NNW	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	<u>Lab Number</u>
				GAMMA S	SCAN (GELI) K-40				
						.2381	.0604	01/12/09	920270
		• .				.3729	.0776	01/26/09	920555
,						.3440	.0657	02/02/09	920640
						.2777	.0547	02/09/09	920738
	•					.3931	.0643	02/16/09	920840
		•	•			.2577	.0556	03/09/09	921174
						.4986	.0713	03/16/09	921283
`			•			.3217	.0682	03/23/09	921457
				•		.2365	.0592	03/30/09	921542
,						.2718	.0570	04/13/09	921750
91						.2280	.0595	04/27/09	922088
ı						.2559	.0573	05/26/09	922560
						.3630	.0809	06/01/09	922688
						.3581	.0757	06/15/09 ⁻	922957
						.1468	.0533	07/06/09	923288
		•				.3585	.0820	07/13/09	923424
						.3503	.0623	08/10/09	923927
	,	*				.3767	.0636	09/08/09	924429
	•		•			.2647	.0535	10/05/09	924863
				•	,	.3288	.0807	10/26/09	925228
						.2226	.0657	11/16/09	925570
					•	.3161	.0597	11/23/09	925700
	•					.3693	.0810	12/07/09	925918
					NO ACTIVITY DE				
	•					.0000	.0000	06/08/09	922801
						.0000	.0000	09/21/09	924631
					i i				

Station 3205	Location RM-3	Description 15 MILES NNW	<u>Analysis</u>	Nuclide		Activity	<u>Error</u>	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) NO ACTIVITY	DETECTED	<b>)</b>			
					DETECTEL	.0000	.0000	12/21/09	926162
			•	PB-212					
	,	Ŷ.				.0081	.0044	02/02/09	920640
			•			.0071	.0045	11/30/09	925839
			•	PB-214				•	
• •						1428	.0154	12/30/08	920093
			•			.0522	.0121	01/05/09	920173
						.0479	.0128	01/12/09	920270
				•		.0628	.0082	01/20/09	920398
ı					•	.0726	.0167	01/26/09	920555
9			•			.0546	.0093	02/02/09	920640
ı						.0340	.0089	02/09/09	920738
		•				.0655	.0129	02/16/09	920840
						.0242	.0109	02/23/09	920996
						.0648	.0113	03/02/09	921078
						.0178	.0060	03/09/09	921174
				-,	•	.0321	.0091	03/16/09	921283
	•	·				.0727	.0111	03/23/09	921457
						.0243	.0062	03/30/09	921542
.*			•			.0433	.0110	04/06/09	921644
						.0362	.0078	04/13/09	921750
					•	.0212	.0056	04/20/09	921882
						.0446	.0091	05/04/09	922190
		•				.0448	.0080	05/11/09	922303
	·					.0478	.0139	05/18/09	922439
	•	•				.0207	.0078	05/26/09	922560

Station 3205	Location RM-3	Description 15 MILES NNW	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
	NW-0	TO MILES MANY	GAMMA S	CAN (GELI) PB-214				
	·				.0202	.0140	06/01/09	922688
					.0317	.0089	06/15/09	922957
					.0179	.0063	06/22/09	923062
	<i>*</i>				.0356	.0108	06/29/09	923184
	,	•			.0289	.0067	07/06/09	923288
•			2		.0587	.0124	07/13/09	923424
					.0332	.0107	07/20/09	923539
					.0392	.0112	07/27/09	923689
,					.0334	.0108	08/03/09	923787
	•				.0377	.0108	08/10/09	923927
93			•		.0425	.0098	08/17/09	924033
1.					.0334	.0086	08/24/09	924165
					.0326	.0090	09/01/09	924272
					.0326	.0106	09/08/09	924429
	•	•		•	.0439	.0073	09/14/09	924513
	,	•			.0327	.0085	09/28/09	924731
	•				.0423	.0087	10/05/09	924863
				,	.0389	.0104	10/13/09	924947
		•			.0347	.0116	10/19/09	925046
	•				.0362	.0095	11/02/09	925367
	•	•			.0599	.0126	11/09/09	925470
					.0248	.0098	11/16/09	925570
					.0206	.0078	11/23/09	925700
					.0321	.0129	11/30/09	925839
		•			.0560	.0085	12/07/09	925918
					.0516	.0112	12/14/09	926013

Station 2116	Location RM-2 DAYTON TN	Description 15.0 MILES SW	Analysis	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			TRITIUM			•		
					.5508	.8062	12/30/08	920096
					.3091	.6784	01/12/09	920273
				•	.1667	.5417	01/26/09	920558
					.7024	.5560	02/09/09	920741
					.2901	.5615	02/23/09	920999
	•				.8833	.6427	03/09/09	921177
		•			1.0339	.6741	03/23/09	921460
					.3223	.7640	04/06/09	921647
					1.1575	.7965	04/20/09	921885
- 9					.2894	1.0259	05/04/09	922193
94 -					.2640	1.2419	05/18/09	922442
•					.7166	1.3055	06/01/09	922691
٠ .					1.2428	1.4741	06/15/09	922960
					- 1.6720	2.4062	06/29/09	923188
				•	1.2506	1,1874	07/13/09	923427
					1.1271	1.2074	07/27/09	923692
					5062	1.3225	08/10/09	923930
					1.3950	1.2645	08/24/09	924168
					1.7590	1.2089	09/08/09	924432
			•		.1473	1.2870	09/21/09	924634
		,	•		.1564	1.0475	10/05/09	924866
•					.5684	.9597	10/19/09	925049
-				•	7770	1.1182	11/02/09	925370
		•			2.1709	.9043	11/16/09	925573
					2.5642	.9938	11/30/09	925842
		•			1.7634	.7872	12/14/09	926016

Station 3101	Location LM1	Description 0.5 MILES SSW		<u>luclide</u>	Activity	<u>Error</u>	Date Collected	<u>Lab Number</u>
			TRITIUM					
			•		.9076	.6944	12/30/08	920061
					.3377	.8023	01/13/09	920243
		,			.2031	.5074	01/26/09	920523
					.7387	.5423	02/09/09	920712
		•			1.0745	.5925	02/23/09	920964
					.2286	.6026	03/09/09	921148
					.4369	.6663	03/24/09	921425
					1.0992	.8503	04/07/09	921618
			•		.3496	.7595	04/20/09	921850
1 .	·				.0443	.9369	05/05/09	922163
95					1.6906	1.1418	05/19/09	922407
. 1			•		.2884	1.2254	06/02/09	922662
			•		.9595	1.6498	06/15/09	922925
		•	·		7293	1.4683	06/30/09	923148
•	•	•			72 <del>9</del> 3 1.5357	1.5556	07/14/09	923392
				•	.8265	1.5801	07/14/09	923663
					.0185	1.6082	08/10/09	923895
					3.2682	1.6410	08/25/09	924139
					4.9204	1.8123	09/09/09	924139
	•				4.920 <del>4</del> 2.8176	1.7140	09/22/09	924605
•		•		•				924831
					4.1153	2.3465	10/06/09	925020
		•			2.0885	1.1225	10/20/09	
					.5912	1.1108	11/03/09	925334
٠.	•	`		·	13.8349	1.7998	11/17/09	925543
			·		2.5601	.9816	12/01/09	925807
			•		2.3159	.8057	12/14/09	925986

TRITIUM  1714	Station 3102	<u>Location</u> LM2	Description  0.4 MILES NNE	Analysis	Nuclide		Activity	Error	Date Collected	Lab Number
. 9239		•		TRITIUM	•		•			
9239   6932   01/13/09   920247     1882   5257   01/26/09   920527     2426   5.292   02/09/09   920716     22779   5909   02/23/09   920968     1.087   5.883   03/09/09   921152     1.0773   8.662   03/23/09   921429     1.0773   8.662   03/23/09   921429     1.0773   8.662   03/23/09   921429     1.0773   8.662   03/23/09   921429     1.0774   1.0279   05/04/09   921652     1.0775   1.0279   05/04/09   92167     1.0279   05/04/09   922167     1.0279   05/04/09   922167     1.0279   05/04/09   922167     1.0279   05/04/09   922411     1.0279   05/04/09   922411     1.0279   05/04/09   922411     1.0279   05/04/09   922411     1.0279   05/04/09   922167     1.0279   05/04/09   922167     1.0279   05/04/09   922167     1.0279   05/04/09   922167     1.0279   05/04/09   922167     1.0279   05/04/09   922167     1.0279   05/04/09   923163     1.0279   05/04/09   923163     1.0279   05/04/09   923163     1.0279   05/04/09   923163     1.0279   05/04/09   923163     1.0279   05/04/09   924143     1.0279   05/04/09   924143     1.0279   05/04/09   924143     1.0279   05/04/09   924143     1.0279   05/04/09   924143     1.0279   05/04/09   924143     1.0279   05/04/09   924143     1.0279   05/04/09   924143     1.0279   05/04/09   924143     1.0279   05/04/09   924143     1.0279   05/04/09   924143     1.0279   05/04/09   924143     1.0279   05/04/09   924143     1.0279   05/04/09   924143     1.0279   05/04/09   924143     1.0279   05/04/09   924143     1.0279   05/04/09   924143     1.0279   05/04/09   925024     1.0279   05/04/09   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04/09     1.0279   05/04						-	.1714	.6906	12/30/08	920065
- 1882										920247
	-					_			01/26/09	920527
1.2779   1.5909   02/23/09   920968     1.087									02/09/09	920716
1087								· ·		920968
1.0773	_								03/09/09	921152
3011			,						03/23/09	921429
1.5521 .9084 04/20/09 921854 1.7370 1.0279 05/04/09 922167 1.5386 1.1193 05/19/09 922411 1.5202 1.2005 06/02/09 922666 1.7667 1.4955 06/15/09 922929 1.3012 1.3783 06/30/09 923153 1.8634 1.5451 07/14/09 923396 1.8634 1.5451 07/14/09 923396 1.8634 1.5451 07/17/09 923667 1.20265 1.5178 08/10/09 923899 1.5233 1.6276 08/25/09 924143 1.39259 1.6152 09/08/09 92401 1.6230 1.4811 09/22/09 924609 1.33488 1.4601 10/06/09 924835 1.3003 1.0931 11/03/09 925024 1.3003 1.0931 11/03/09 925024 1.3003 1.0931 11/03/09 925034 1.8670 1.5861 11/17/09 925547 1.8670 1.5861 11/17/09 925547				•					04/06/09	921622
1.7370 1.0279 05/04/09 922167  5.5386 1.1193 05/19/09 922411 5.5202 1.2005 06/02/09 922666 7667 1.4955 06/15/09 922929  3.012 1.3783 06/30/09 923153 1.8634 1.5451 07/14/09 923396 2.8280 1.4325 07/27/09 923667 2.0265 1.5178 08/10/09 923899 3.5233 1.6276 08/25/09 924143 3.9259 1.6152 09/08/09 924401 6.6230 1.4811 09/22/09 924609 3.3488 1.4601 10/06/09 924835 3.3833 1.2608 10/20/09 925024 1.3003 1.0931 11/03/09 925024 1.3003 1.0931 11/03/09 925338 11.8670 1.5861 11/17/09 925547 2.8122 9875 12/01/09 925811		•							04/20/09	921854
							1.7370	1.0279	05/04/09	922167
.7667       1.4955       06/15/09       922929        3012       1.3783       06/30/09       923153         1.8634       1.5451       07/14/09       923396         2.8280       1.4325       07/27/09       923667         2.0265       1.5178       08/10/09       923899         3.5233       1.6276       08/25/09       924143         3.9259       1.6152       09/08/09       924401         6230       1.4811       09/22/09       924609         3.3488       1.4601       10/06/09       924835         3.3833       1.2608       10/20/09       925024         1.3003       1.0931       11/03/09       925338         11.8670       1.5861       11/17/09       925547         2.8122       .9875       12/01/09       925811	8						.5386	1.1193	05/19/09	922411
- 3012	1						.5202	1.2005	06/02/09	922666
1.8634       1.5451       07/14/09       923396         2.8280       1.4325       07/27/09       923667         2.0265       1.5178       08/10/09       923899         3.5233       1.6276       08/25/09       924143         3.9259       1.6152       09/08/09       924401         6230       1.4811       09/22/09       924609         3.3488       1.4601       10/06/09       924835         3.3833       1.2608       10/20/09       925024         1.3003       1.0931       11/03/09       925338         11.8670       1.5861       11/17/09       925547         2.8122       .9875       12/01/09       925811		•					.7667	1.4955	06/15/09	922929
2.8280       1.4325       07/27/09       923667         2.0265       1.5178       08/10/09       923899         3.5233       1.6276       08/25/09       924143         3.9259       1.6152       09/08/09       924401         .6230       1.4811       09/22/09       924609         3.3488       1.4601       10/06/09       924835         3.3833       1.2608       10/20/09       925024         1.3003       1.0931       11/03/09       925338         11.8670       1.5861       11/17/09       925547         2.8122       .9875       12/01/09       925811							.3012	. 1.3783	06/30/09	923153
2.0265       1.5178       08/10/09       923899         3.5233       1.6276       08/25/09       924143         3.9259       1.6152       09/08/09       924401         .6230       1.4811       09/22/09       924609         3.3488       1.4601       10/06/09       924835         3.3833       1.2608       10/20/09       925024         1.3003       1.0931       11/03/09       925338         11.8670       1.5861       11/17/09       925547         2.8122       .9875       12/01/09       925811							1.8634	1.5451	07/14/09	923396
3.5233       1.6276       08/25/09       924143         3.9259       1.6152       09/08/09       924401         .6230       1.4811       09/22/09       924609         3.3488       1.4601       10/06/09       924835         3.3833       1.2608       10/20/09       925024         1.3003       1.0931       11/03/09       925338         11.8670       1.5861       11/17/09       925547         2.8122       .9875       12/01/09       925811							2.8280	1.4325	07/27/09	923667
3.9259       1.6152       09/08/09       924401         6230       1.4811       09/22/09       924609         3.3488       1.4601       10/06/09       924835         3.3833       1.2608       10/20/09       925024         1.3003       1.0931       11/03/09       925338         11.8670       1.5861       11/17/09       925547         2.8122       .9875       12/01/09       925811							2.0265	1.5178	08/10/09	923899
.6230       1.4811       09/22/09       924609         3.3488       1.4601       10/06/09       924835         3.3833       1.2608       10/20/09       925024         1.3003       1.0931       11/03/09       925338         11.8670       1.5861       11/17/09       925547         2.8122       .9875       12/01/09       925811	-						3.5233	1.6276	08/25/09	924143
3.3488       1.4601       10/06/09       924835         3.3833       1.2608       10/20/09       925024         1.3003       1.0931       11/03/09       925338         11.8670       1.5861       11/17/09       925547         2.8122       .9875       12/01/09       925811			•				3.9259	1.6152	09/08/09	924401
3.3833       1.2608       10/20/09       925024         1.3003       1.0931       11/03/09       925338         11.8670       1.5861       11/17/09       925547         2.8122       .9875       12/01/09       925811		•	,	*			.6230	1.4811	09/22/09	924609
1.3003       1.0931       11/03/09       925338         11.8670       1.5861       11/17/09       925547         2.8122       .9875       12/01/09       925811		. · ·				,	3.3488	1.4601	10/06/09	924835
11.8670 1.5861 11/17/09 925547 2.8122 .9875 12/01/09 925811				*			3.3833	1.2608	10/20/09	925024
2.8122 .9875 12/01/09 925811							1.3003	1.0931	11/03/09	925338
							11.8670	1.5861	11/17/09	925547
2.3913 .8165 12/14/09 925990							2.8122	.9875	12/01/09	925811
		· •					2.3913	.8165	12/14/09	925990

Station	<u>Location</u>	Description	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
3106	PM2 SPRING CITY	7.0 MILES NW		<u> </u>			
			TRITIUM				
		,		.2322	.6855	12/30/08	920068
				7490	.6179	01/12/09	920250
				.0431	.4604	01/26/09	920530
				.3234	.5311	02/09/09	920719
	•	•		.8235	.5855	02/23/09	920971
				.9799	1.6172	03/09/09	921155
				.3098	.6238	03/23/09	921432
				.4765	.7499	04/06/09	921625
	i T			.1744	.7536	04/20/09	921857
¥-	•			.4397	1.0252	05/04/09	922170
97			•	.1401	1.1841	05/18/09	922414
•		•		1.1305	1.3927	06/01/09	922669
		•	No.	1.4780	1.6033	06/15/09	922932
* *				1.5310	1.8413	06/29/09	923158
				2.1736	1.6144	07/13/09	923399
				.9501	1.6096	07/27/09	923670
-				1.8714	1.7919	08/10/09	923902
		•		.5292	1.5555	08/24/09	924146
				1.8075	1.7139	09/08/09	924404
				.4035	1.7669	09/21/09	924612
				0568	1.6411	10/05/09	924838
	•			5014	1.4110	10/19/09	925027
	ř			7099	1.0217	11/02/09	925341
				1.4641	.8365	11/16/09	925550
	•			1.0669	.8687	11/30/09	925814
		•		1.8355	.7951	12/14/09	925993

- 1.510	Station 3109	Location PM5 DECATUR	Description 8.0 MILES S	Analysis TRITIUM	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
1.5582   1.6151   01/12/09   920257					_	1510	7522	12/29/08	920075
		·							
					, _			•	
1.5516   .5780   .52709   .5290978   .5296   .6943   .03709/09   .921162   .5296   .6943   .03709/09   .921162   .5253   .7253   .04709/09   .921632   .5253   .7293   .04709/09   .921632   .5253   .7293   .04709/09   .921644   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .7184   .									
1,5296   6,943   03/09/09   921162     1,4601   7,152   03/23/09   921439     1,5354   8,273   04/06/09   921632     5,5253   7,293   04/20/09   921864     5,5253   7,293   04/20/09   921864     6,2885   1,2160   05/18/09   922421     1,7184   1,2872   06/01/09   922676     1,7694   1,8519   06/15/09   922939     1,7694   1,8519   06/15/09   923168     4,0512   2,2914   07/13/09   923406     1,0058   1,3479   07/27/09   923406     1,0058   1,3479   07/27/09   923677     5,5247   1,5289   08/10/09   923909     2,2796   1,7367   08/24/09   924153     4,4507   1,9315   09/08/09   924411     - 6,6670   1,7506   09/21/09   924619     1,2183   1,4768   10/05/09   924845     1,3008   1,7050   10/19/09   925034     1,3008   1,7050   10/19/09   925034     - 8,087   1,0108   11/02/09   925575	•								
1.4601 7.7152 03/23/09 921439 1.5354 8.273 04/06/09 921632 1.5253 7.293 04/20/09 921864 1.5253 7.293 04/20/09 921864 1.2855 9630 05/04/09 922177 1.2585 1.2160 05/18/09 922421 1.7184 1.2872 06/01/09 922676 1.7694 1.8519 06/15/09 922939 1.7694 1.8519 06/15/09 923168 1.0058 1.3479 07/27/09 923168 1.0058 1.3479 07/27/09 923677 1.5247 1.5289 08/10/09 923909 1.2796 1.7367 08/24/09 924153 1.4507 1.9315 09/08/09 924111 1.2183 1.4768 10/05/09 924815 1.2183 1.4768 10/05/09 924815 1.3008 1.7050 10/19/09 925034 1.3008 1.7050 10/19/09 925034 1.3008 1.7050 10/19/09 925034 1.3008 1.7050 10/19/09 925034						4			
1.5354   1.8273   0.4/06/09   921632     1.5253   1.7293   0.4/20/09   921864     1.5258   1.2160   0.5/18/09   922177     1.5288   1.2160   0.5/18/09   922421     1.7184   1.2872   0.6/01/09   922676     1.7694   1.8519   0.6/15/09   922939     1.7694   1.8519   0.6/15/09   922939     1.0973   1.4138   0.6/29/09   923168     4.0512   2.2914   0.7/13/09   923677     1.0058   1.3479   0.7/27/09   923677     1.5289   0.8/10/09   923909     2.2796   1.7367   0.8/24/09   924153     4.4507   1.9315   0.9/08/09   924411     6.6670   1.7506   0.9/21/09   924619     1.2183   1.4768   1.0/05/09   924815     1.3008   1.7050   1.0/19/09   925034     1.3008   1.7050   1.0/19/09   925034     1.3008   1.7050   1.0/19/09   925348     1.3008   1.7050   1.0/19/09   925348     1.3008   1.7050   1.5359   11/16/09   925557	•				•				
1,5253   1,7293   04/20/09   921864     4,285   1,9630   05/04/09   922177     2,585   1,2160   05/18/09   922421     1,7184   1,2872   06/01/09   922676     1,7694   1,8519   06/15/09   922939     1,7694   1,8519   06/15/09   9223168     4,0512   2,2914   07/13/09   923406     1,0058   1,3479   07/27/09   923677     5,5247   1,5289   08/10/09   923909     2,2796   1,7367   08/24/09   924153     4,4507   1,9315   09/08/09   924411     -,6670   1,7506   09/21/09   924411     -,6670   1,7506   09/21/09   9244619     1,2183   1,4768   10/05/09   924845     1,3008   1,7050   10/19/09   925034     1,3008   1,7050   10/19/09   925348     1,3008   1,7050   11/16/09   925557									
					•			1	
1.7184       1.2872       06/01/09       922676         1.7694       1.8519       06/15/09       922939        0973       1.4138       06/29/09       923168         4.0512       2.2914       07/13/09       923406         1.0058       1.3479       07/27/09       923677         .5247       1.5289       08/10/09       923909         2.2796       1.7367       08/24/09       924153         4.4507       1.9315       09/08/09       924411        6670       1.7506       09/21/09       924619         1.2183       1.4768       10/05/09       924845         1.3008       1.7050       10/19/09       925034        8087       1.0108       11/02/09       925348         11.7100       1.5359       11/16/09       925557									
1.7694       1.8519       06/15/09       922939        0973       1.4138       06/29/09       923168         4.0512       2.2914       07/13/09       923406         1.0058       1.3479       07/27/09       923677         .5247       1.5289       08/10/09       923909         2.2796       1.7367       08/24/09       924153         4.4507       1.9315       09/08/09       924411        6670       1.7506       09/21/09       924619         1.2183       1.4768       10/05/09       924845         1.3008       1.7050       10/19/09       925034        8087       1.0108       11/02/09       925348         11.7100       1.5359       11/16/09       925557	•								
0973			,						
4.0512       2.2914       07/13/09       923406         1.0058       1.3479       07/27/09       923677         .5247       1.5289       08/10/09       923909         2.2796       1.7367       08/24/09       924153         4.4507       1.9315       09/08/09       924411        6670       1.7506       09/21/09       924619         1.2183       1.4768       10/05/09       924845         1.3008       1.7050       10/19/09       925034        8087       1.0108       11/02/09       925348         11.7100       1.5359       11/16/09       925557					· -		1.4138	06/29/09	
.5247       1.5289       08/10/09       923909         2.2796       1.7367       08/24/09       924153         4.4507       1.9315       09/08/09       924411        6670       1.7506       09/21/09       924619         1.2183       1.4768       10/05/09       924845         1.3008       1.7050       10/19/09       925034        8087       1.0108       11/02/09       925348         11.7100       1.5359       11/16/09       925557							2.2914		
2.2796       1.7367       08/24/09       924153         4.4507       1.9315       09/08/09       924411        6670       1.7506       09/21/09       924619         1.2183       1.4768       10/05/09       924845         1.3008       1.7050       10/19/09       925034        8087       1.0108       11/02/09       925348         11.7100       1.5359       11/16/09       925557		•				1.0058	1.3479	07/27/09	923677
4.4507       1.9315       09/08/09       924411        6670       1.7506       09/21/09       924619         1.2183       1.4768       10/05/09       924845         1.3008       1.7050       10/19/09       925034        8087       1.0108       11/02/09       925348         11.7100       1.5359       11/16/09       925557						.5247	1.5289	08/10/09	923909
6670				•		2.2796	1.7367	08/24/09	924153
1.2183       1.4768       10/05/09       924845         1.3008       1.7050       10/19/09       925034        8087       1.0108       11/02/09       925348         11.7100       1.5359       11/16/09       925557						4.4507	1.9315	09/08/09	924411
1.3008       1.7050       10/19/09       925034        8087       1.0108       11/02/09       925348         11.7100       1.5359       11/16/09       925557					-	.6670	1.7506	09/21/09	924619
8087 1.0108 11/02/09 925348 11.7100 1.5359 11/16/09 925557						1.2183	1.4768	10/05/09	924845
11.7100 1.5359 11/16/09 925557				•		1.3008	1.7050	10/19/09	925034
·					-	.8087	1.0108	11/02/09	925348
2.8809 1.0117 11/30/09 925821			•	.`		11.7100	1.5359	11/16/09	925557
		• •				2.8809	1.0117	11/30/09	925821

Station 3203	Location LM3	Description 1.9 MILES NNE	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
,			TRITIUM		•		•
	•			.4063	.7140	12/30/08	920086 ⁻
				.6842	.5802	01/13/09	920263
	•			.2680	.5442	01/26/09	920548
t				.8409	.5437	02/09/09	920731
				.3047	.5527	02/23/09	920989
			ř	.4629	.7641	03/09/09	921167
				1.0197	.9176	04/06/09	921637
				.4422	.7860	04/20/09	921875
		,		.0357	1.0062	05/04/09	922183
		,		.7897	1.0586	05/19/09	922432
99				.4860	1.3807	06/01/09	922681
•	•		•	.5579	1.2259	06/16/09	922950
	•		•	3276	1.4240	06/30/09	923174
			•	2.7414	1.4898	07/13/09	923417
				.8819	1.5841	07/27/09	923682
		•		.2153	1.3391	08/10/09	923920
				2.2000	1.3714	08/24/09	924158
			•	3.2495	1.5428	09/08/09	924422
				1628	1.4161	09/22/09	924624
		•		2.7757	1.4480	10/06/09	924856
	·		•	1.2207	1.0998	10/19/09	925039
				1.3967	1.0434	11/03/09	925360
				8.5874	1.3225	11/16/09	925563
•		•		2.6272	.9226	12/01/09	925832
				2.0135	.8173	12/15/09	926006

		•					
Station	Location	<u>Description</u>	Analysis Nuclide	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
3204	LM-4	0.9 MILES SE		•	•		
			TRITIUM				
•	•	•		1686	.5940	12/30/08	920089
				.4569	.6251	01/12/09	920266
		•		0183	.4877	01/26/09	920551
	· .			1650	.4828	02/09/09	920734
	•						
				.8516	.7385	02/23/09	920992
			•	.6824	.5385	03/09/09	921170
				1.0118	.6463	03/23/09	921453
			-	.7005	.8394	04/06/09	921640
				1560	.7864	04/20/09	921878
1				.5208	1.1705	05/04/09	922186
100				.2521	1.4218	05/18/09	922435
				1.3984	1.1113	06/01/09	922684
				1726	1.4615	06/15/09	922953
_			-	4088	1.5442	06/29/09	923179
				- 1.1421	1.3859	07/13/09	923420
•				.6954	1.2491	07/27/09	923685
				2.4726	1.5989	08/10/09	923923
				1.7778	1.4646	08/24/09	924161
				3.5893	1.5129	09/08/09	924425
,				.4948	1.6078	09/21/09	924627
	•		•	2.1935	1.4787	10/05/09	924859
				1.7766	1.2358	10/19/09	925042
							925363
-				6403	1.0443	11/02/09	
				12.3794	1.6701	11/16/09	925566
,		•		3.2441	.9458	11/30/09	925835
			•	2.6957	.9591	12/15/09	926009

Station 3205	Location RM-3	<u>Description</u> 15 MILES NNW	Analysis TRITIUM	Nuclide	<u>Activity</u>	<u>Error</u>	Date Collected	<u>Lab Number</u>
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
•					1.2268	.8412	12/30/08	920092
					.0441	.5350	01/12/09	920269
		•			.1698	.6067	01/26/09	920554
-					,6643	.5124	02/09/09	920737
		÷			.3353	.5402	02/23/09	920995
		•			1.3351	.6786	03/09/09	921173
					0311	.8873	03/23/09	921456
	`.				.7442	.7467	04/06/09	921643
		,	•		.3005	.7050	04/20/09	921881
<u> </u>					.5948	1.0614	05/04/09	922189
101					1.1520	1.2890	05/18/09	922438
1					1.2048	1.1257	06/01/09	922687
		•			1.6220	1.4172	06/15/09	922956
•					1979	1.7242	06/29/09	923183
	•				.3374	1.4579	07/13/09	923423
					1.4800	1.5855	07/27/09	923688
					1.6161	1.5975	08/10/09	923926
					1.6612	1.6752	08/24/09	924164
		•			.8756	1.5238	09/08/09	924428
					.8083	1.5494	09/21/09	924630
					.8386	1.3919	10/05/09	924862
	•	•			1.9712	1.1939	10/19/09	925045
	• •				.0814	1.0167	11/02/09	925366
	•				.4625	.8102	11/16/09	925569
					2.8493	.9669	11/30/09	925838
			*		1.7719	.7486	12/14/09	926012

Station 2215	Location KYLE FARM		Description 11.6 MILES ENE	Analysis IODINE-1	Nuclide 131		Activity	Error	Date Collected	<u>Lab Number</u>
,	•	*		IODINE-1	131			•		
		•	•			-	.0119	.0375	12/29/08	920098
							.0661	.0797	01/12/09	920277
						-	.0133	.0422	01/26/09	920560
					•		.0513	.0857	02/09/09	920745
							.0394	.0658	02/23/09	921001
						-	.0140	.0442	03/09/09	921182
							.0376	.0532	03/23/09	921462
						-	.0203	.0477	04/06/09	921652
							.0142	.0531	04/20/09	921887
<u>-</u>						-	.0247	.0581	05/04/09	922197
102							.0734	.0693	05/18/09	922444
1 .			•				.0441	.0736	06/01/09	922696
						_	.0148	.0468	06/15/09	922962
							.0771	.0930	06/29/09	923194
							.0135	.0506	07/13/09	923429
						_	.0175	.0553	07/27/09	923697
			•				.0651	.0678	08/10/09	923932
							.0618	.1072	08/24/09	924172
							.0091	.0582	09/08/09	924434
							.0150	.0562	09/21/09	924638
٠						s	.0134	.0424	10/05/09	924868
							.0395	.0560	10/19/09	925053
-							.0088	.0564	11/02/09	925372
		,	,				.0490	.0819	11/16/09	925577
					•		.0599	.0565	11/30/09	925844
							.0659	.0795	12/14/09	926020

Station 2215	Location KYLE FARM	Description 11.6 MILES ENE	Analysis	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	Date Collected	<u>Lab Number</u>
			GAMMA S	SCAN (GELI) AC-228	·			,
		•		. 10 220	8.3978	5.5409	02/09/09	920745
	,				15.0722	5.8772	06/01/09	922696
	•				3.8952	4.1043	09/08/09	924434
					358.4944	118.7339	11/02/09	925372
			•	BI-214				
		•			19.3244	4.4904	12/29/08	920098
					24.9115	4.0700	01/12/09	920277
					43.9303	4.6661	01/26/09	920560
					24.9621	4.7371	02/09/09	920745
<u>.</u>					49.0795	6.8087	02/23/09	921001
103					7.4845	3.9175	03/09/09	921182
1		•			31.0103	4.2571	03/23/09	921462
					42.3458	4.7442	04/06/09	921652
-					14.4275	5.8404	04/20/09	921887
			•		19.3042	5.3734	05/04/09	922197
				•	20.7970	4.8043	05/18/09	922444
					54.8783	19.1186	06/01/09	922696
					1.8035	3.1922	06/15/09	922962
					8.3495	4.7767	06/29/09	923194
				*	6.9159	3.2690	07/13/09	923429
					13.2472	4.3946	07/27/09	923697
					16.6430	4.1762	08/10/09	923932
	•				15.0500	4.2471	08/24/09	924172
					14.6944	3.4433	09/08/09	924434
		•			9.5097	3.2489	09/21/09	924638
		•			7.9211	9.2272	10/05/09	924868

Station	Location	<u>Description</u>	Analysis Nuclide	Activity	Error	Date Collected	<u>Lab Number</u>	
2215	KYLE FARM	11.6 MILES ENE				•		
•	•		GAMMA SCAN (GEL	.l)				
	*		BI-214	20.7702	6.2402	40/40/00	925053	
	•			26.7763	6.3493	10/19/09		
				18.0237	6.3466	11/02/09	925372	
	•			22.2451	4.7890	11/16/09	925577	
				22.4296	4.6801	11/30/09	925844	,
				18.7369	4.4783	12/14/09	926020	
			K-40		04.0577	40,000,000	000000	
	•	·		1231.8120	94.2577	12/29/08	920098	
				1268.6044	81.7894	01/12/09	920277	
1				1284.6166	97.4223	01/26/09	920560	
				1289.9675	85.5627	02/09/09	920745	
104				1272.4529	94.0805	02/23/09	921001	•
1				1387.8641	119.4442	03/09/09	921182	
*			• .	1370.2954	93.8964	03/23/09	921462	
				1191.5324	81.8548	04/06/09	921652	
				1300.9106	83.6802	04/20/09	921887	
				1311.0992	97.2599	05/04/09	922197	
				1319.4988	98.9996	05/18/09	922444	
•				1375.9876	97.1387	06/01/09	922696	
				1192.6391	89.1070	06/15/09	922962	
٠.		•	•	1420.1224	118.7375	06/29/09	923194	
		· .		1326.6539	79.2379	07/13/09	923429	
				1236.1155	90.8607	07/27/09	923697	
				1188.6138	80.0701	08/10/09	923932	
	•			1179.3054	89.2916	08/24/09	924172	
		•	•	1388.0563	89.8851	09/08/09	924434	
•				1264.5223	91.2463	09/21/09	924638	

Station 2215	Location KYLE FARM	Description 11.6 MILES ENE	Analysis Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
2213	IVILL I VIVINI	11:0 MILLS LIVE	GAMMA SCAN (GELI)			•	•
	•	•	K-40	·			
•		•		1317.0422	90.7712	10/05/09	924868
	•			1073.2146	79.3899	10/19/09	925053
				1336.9387	87.1978	11/02/09	925372
				1134.4569	100.7621	11/16/09	925577
				1325.7062	113.0774	11/30/09	925844
				1254.9781	98.2980	12/14/09	926020
			PB-212				, ,
				2.2349	1.6785	06/01/09	922696
		•		1.0517	2.8570	08/10/09	923932
<u></u>	•	•		3.0682	2.1918	10/19/09	925053
105				4.9042	2.8626	11/02/09	925372
1,				1.1104	2.8685	11/16/09	925577
	•			2.9274	2.1934	11/30/09	925844
			PB-214				
			•	16.7674	4.0565	12/29/08	920098
	×			15.7698	3.2999	01/12/09	920277
				26.0939	5.0919	01/26/09	920560
				26.6504	3.9764	02/09/09	920745
				36.6302	4.9190	02/23/09	921001
				7.0447	4.1044	03/09/09	921182
				21.9704	2.9105	03/23/09	921462
				24.5472	3.4879	04/06/09	921652
		•		8.4823	2.9660	04/20/09	921887
		,		16.5875	3.8034	05/04/09	922197
				9.7420	5.0377	05/18/09	922444
	f .		•	8.1348	3.1695	06/01/09	922696

Station 2215	Location KYLE FARM	Description 11.6 MILES ENE	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) PB-214			•	
					1.9082	3.8891	06/15/09	922962
	•				12.2836	4.1565	07/13/09	923429
		•			10.9161	3.9656	07/27/09	923697
					14.4204	3.8315	08/10/09	923932
					13.7649	3.4145	08/24/09	924172
	·				10.9696	2.7857	09/08/09	924434
					8.0834	3.2126	09/21/09	924638
			•		3.0842	2.7239	10/05/09	924868
	•				24.9763	6.1867	10/19/09	925053
<u> </u>					23.3897	5.5213	11/02/09	925372
106	\$ .				17.3328	5.9491	11/16/09	925577
1					18.3905	5.3470	11/30/09	925844
					12.0477	4.4288	12/14/09	926020
	•			TH-234	•			
					26.6470	23.2523	01/12/09	920277
				TL-208				
					.3023	1.1854	03/23/09	921462
		J			2.0598	1.5772	06/01/09	922696
			SR 89					
					1.0698	.9276	03/09/09	921182
				•	1.6067	1.0830	05/18/09	922444
					.2665	.8985	08/10/09	923932
					1.1259	1.0613	10/19/09	925053
		·	SR 90		1.1200	1.0010	10, 10,00	020000
					.1307	.5958	03/09/09	921182

			A color No. 191		_		
Station	Location	<u>Description</u>	Analysis Nuclide	<u>Activity</u>	<u>Error</u>	Date Collected	<u>Lab Number</u>
2215	KYLE FARM	11.6 MILES ENE	SR 90				
,			51( 30				,
,				2267	.6570	05/18/09	922444
			•	.4480	.5774	08/10/09	923932
				.3411	.6675	10/19/09	925053
2263	E. HOUSLEY FARM	24.0 MILES SSW					
	•	•	IODINE-131			4	
•		,					
				.0378	.0536	12/29/08	920059
				.0464	.0805	01/12/09	920241
1	•			.0680	.0820	01/26/09	920521
				.0712	.0671	02/09/09	920710
107				.0803	.0968	02/23/09	920962
I	•			.0664	.0692	03/09/09	921146
				.0383	.0543	03/23/09	921423
•				.0622	.0649	04/06/09	921616
•				.0646	.0674	04/20/09	921848
				.0506	.0845	05/05/09	922161
	•			.0806	.0973	05/18/09	922405
				0171	.0542	06/01/09	922660
	•			0324	.1024	06/15/09	922923
	•			.0843	.1017	06/29/09	923146
	•			.0161	.0602	07/13/09	· 923390
				.0537	.0896	07/27/09	923661
				.0381	.0637	08/10/09	923893
				.0840	.0793	08/24/09	924136
				.0123	.0462	09/09/09	924394
•				.0278	.0923	09/21/09	924603

Station 2263	Location E. HOUSLEY FARM	Description 24.0 MILES SSW	Analysis Nuclide	<u>Activity</u>	Error	Date Collected	<u>Lab Number</u>
			IODINE-131				
	•			.0707	.0737	10/05/09	924828
				.0147	.0551	10/19/09	925017
				.0083	.0534	11/02/09	925332
				0117	.0372	11/16/09	925541
				.0519	.0901	11/30/09	925805
			•	0127	.0401	12/14/09	925984
•	•		GAMMA SCAN (GELI)	10.2.		,	
		•	AC-228				
		· ·		7.6341	4.3135	01/26/09	920521
1 ·				13.7732	4.5537	02/09/09	920710
108				7.1178	5.4178	02/23/09	920962
ı				4.6642	4.4213	03/23/09	921423
				15.4425	6.1931	06/29/09	923146
•				26.1170	9.4836	07/13/09	923390
				11.9196	5.7685	08/24/09	924136
				3.2025	3.9895	11/16/09	925541
			BI-214				
			,	30.2523	4.8989	12/29/08	920059
				39.9438	4.5595	01/12/09	920241
•				21.0336	4.0676	01/26/09	920521
				21.5408	3.7167	02/09/09	920710
		·		35.5283	5.2158	02/23/09	920962
				30.0734	4.3633	03/09/09	921146
				33.6355	6.1677	03/23/09	921423
				17.5741	5.0693	04/06/09	921616
				11.5982	4.6045	04/20/09	921848

#### Table 4 RADIOACTIVITY IN MILK WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L

12/28/2008 - 12/25/2009

Station 2263	Location E. HOUSLEY FARM	Description 24.0 MILES SSW	Analysis GAMMA	Nuclide SCAN (GELI)	<u>Activity</u>	<u>Error</u>	Date Collected	<u>Lab Number</u>
	•			BI-214				
					7.7848	3.4591	05/05/09	922161
		•			13.7104	3.5007	05/18/09	922405
•					2.8198	2.5505	06/01/09	922660
					11.1768	4.2329	06/15/09	922923
					12.9032	4.3535	06/29/09	923146
					8.0885	2.6209	07/13/09	923390
		•			12.6422	4.3726	07/27/09	923661
,					17.6262	3.6757	08/10/09	923893
	,				15.1944	4.3611	08/24/09	924136
					14.6433	3.3856	09/09/09	924394
109					10.7507	3.1516	09/21/09	924603
'	•				6.4847	2.9070	10/05/09	924828
,					29.2042	5.5766	10/19/09	925017
•					15.3062	3.0542	11/02/09	925332
					10.3910	4.6141	11/16/09	925541
		<b>3</b>			68.1677	7.1504	11/30/09	925805
		43			22.4061	6.0294	12/14/09	925984
			•	K-40				
					1359.8187	77.7014	12/29/08	920059
					1303.0604	88.5771	01/12/09	920241
					1253.2376	93.3394	01/26/09	920521
		,			1308.9516	100.9637	02/09/09	920710
					1260.8183	88.7590	02/23/09	920962
					1317.9304	92.2739	03/09/09	921146
					1257.8448	89.0450	03/23/09	921423
					1430.7434	96.7563	04/06/09	921616

Station	Location	<u>Description</u>	Analysis	Nuclide		Activity	Error	Date Collected	Lab Number	
2263	E. HOUSLEY FARM	24.0 MILES SSW	<u>, 11,011,7010</u>	11001100		Activity	LITO	<u>Bate Collected</u>	<u>Lab Number</u>	
			GAMMA :	SCAN (GELI) K-40	)					
	* .					1390.3020	104.7384	04/20/09	921848	
						1347.1279	79.6847	05/05/09	922161	
						1326.1951	87.8832	05/18/09	922405	
		•	,			1408.9373	100.0500	06/01/09	922660	
			•			1202.5144	85.5380	06/15/09	922923	
						1436.3044	105.2612	06/29/09	923146	
			. *			1355.5035	103.0916	07/13/09	923390	
						1279.8278	89.4802	07/27/09	923661	
						1266.0989	92.8813	08/10/09	923893	
<u>.</u>				•		1271.1749	108.5144	08/24/09	924136	
110						1289.4622	93.7627	09/09/09	924394	
1						1347.0128	101.3760	09/21/09	924603	
						1342.9993	93.9115	10/05/09	924828	
				•		1262.9102	95.5188	10/19/09	925017	
						1289.6054	92.9884	11/02/09	925332	
·		·				1305.2475	93.3549	11/16/09	925541	
						1233.5402	88.2839	11/30/09	925805	
1	·					1254.7882	91.0010	12/14/09	925984	
				PA-234	•		•			
	,					43.2004	11.9997	05/18/09	922405	
				PB-212					•.	
		•				5.6198	1.7138	02/09/09	920710	
•		* .				3.1589	1.8261	03/09/09	921146	
•						4.1138	2.0354	04/06/09	921616	
						4.0111	2.3981	05/18/09	922405	
						4.4267	2.6018	06/29/09	923146	

Station 2263	Location  E. HOUSLEY FARM	Description 24.0 MILES SSW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
2200	E. 11000EE1 1740W	21.0 1111220 0011	GAMMA	SCAN (GELI)				
				PB-212				
					.3180	2.5299	07/13/09	923390
					2.3582	3.3613	08/24/09	924136
		;			1.0810	2.5626	09/09/09	924394
			•		.8889	1.6609	09/21/09	924603
					.6062	2.0714	10/05/09	924828
					.1053	2.2077	10/19/09	925017
					4.8040	2.1435	11/02/09	925332
	•				1.3355	2.5151	12/14/09	925984
				PB-214				
<u></u>				•	26.6520	4.1925	12/29/08	920059
111					31.1553	4.4475	01/12/09	920241
1 .			•		15.0331	4.8514	01/26/09	920521
					14.2271	3.7502	02/09/09	920710
					32.5264	4.9222	02/23/09	920962
•				•	19.8272	3.9152	03/09/09	921146
					30.5833	5.2562	03/23/09	921423
		,			14.4647	3.3171	04/06/09	921616
					6.4807	3.7235	04/20/09	921848
				•	1.3522	2.5565	05/05/09	922161
					6.6213	2.7563	05/18/09	922405
					3.3800	3.1328	06/01/09	922660
					11.1276	3.8495	06/15/09	922923
					8.8644	2.5011	06/29/09	923146
		ę			7.7038	3.3719	07/13/09	923390
					2.9231	2.8400	07/27/09	923661
1					8.1461	2.7231	08/10/09	923893

Camma Scan (Gell)	Station 2263	Location E. HOUSLEY FARM	Description 24.0 MILES SSW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
10.8298   3.9308   08/24/09   924136   11.7936   3.1922   0.909/09   924394   11.7936   3.1922   0.909/09   924828   11.7936   3.3688   0.80/21/09   924603   8.8882   4.4786   10/05/09   924828   20.2495   4.9051   10/19/09   925017   9.5028   3.1750   11/02/09   925332   2.0398   3.3687   11/16/09   925332   2.0398   3.3687   11/16/09   925541   656,7337   6.2881   11/30/09   925805   6.67337   6.2881   11/30/09   925805   6.67337   6.2881   11/30/09   925984   1.86520   3.0318   12/14/09   925984   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.209   1.209   920710   1.1370   0.309/09   921146   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.208   1.20				GAMMA					
11.7936   3.1922   09/09/09   924394   5.5346   3.3868   09/21/09   924603   6.56346   3.3868   09/21/09   924603   6.8882   4.4786   10/05/09   924603   6.202495   4.9051   10/19/09   925017   9.5028   3.1750   11/02/09   925332   6.7337   6.2881   11/30/09   925541   6.7337   6.2881   11/30/09   925605   6.7337   6.2881   11/30/09   925805   6.7337   6.2881   11/30/09   925805   18.6520   3.0318   12/14/09   925984   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   71.208   7					. 52.11	10.8298	3.9308	08/24/09	924136
1		v				11.7936		09/09/09	924394
B.8882   4.4786   10/05/09   924828   20.2495   4.9051   10/19/09   925017   9.5028   3.1750   11/02/09   925017   9.5028   3.1750   11/02/09   925322   2.0398   3.3687   11/16/09   925641   56.7337   6.2881   11/30/09   925805   18.6520   3.0318   12/14/09   925984   18.6520   3.0318   12/14/09   925984   18.6520   3.0318   12/14/09   920241   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.208   17.20									
1019/09   925017   9.5028   3.1750   11/02/09   925332   9.5038   3.3687   11/16/09   925332   9.50398   3.3687   11/16/09   925541   9.5028   3.0318   12/14/09   925805   9.5037   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084   9.5084									
9.5028 3.1750 11/02/09 925332 2.0398 3.3687 11/16/09 925541 56.7337 6.2881 11/30/09 925985 18.6520 3.0318 12/14/09 925984  TH-234  TL-208  2.03242 39.8397 01/12/09 920241  TL-208  2.9551 1.8570 02/09/09 920710 3.1710 1.1370 03/09/09 921146 5.7567 1.4671 04/06/09 92146 4.7067 1.2883 06/29/09 923146 4.7067 1.2883 06/29/09 923146 1.0961 1.4864 08/24/09 924136  SR 89  SR 89  4.431 1.0654 05/18/09 922405 1.0466 1.0000 08/10/09 923893 8130 .7554 10/19/09 925017  SR 90  SR 90									
2.0398 3.3687 11/16/09 925541 56.7337 6.2881 11/30/09 925805 18.6520 3.0318 12/14/09 925984  TH-234  20.3242 39.8397 01/12/09 920241  TL-208  2.9551 1.8570 02/09/09 920710 3.1710 1.1370 03/09/09 921146 5.7567 1.4671 04/06/09 921466 4.7067 1.2883 06/29/09 923146 4.7067 1.2883 06/29/09 923146 4.7067 1.2883 06/29/09 923146 4.7067 1.2883 06/29/09 924136  SR 89  SR 89  SR 89  SR 89  3.6613 05/18/09 923893 7.7300 6.6347 08/10/09 923893				•					
Fig. 1.0654 SR 89  1.0054 SR 89  1.0056 SR 89  1.0056 SR 90  1.0056 SR 90  1.0056 SR 90  1.0056 SR 89  1.0057 SR 90  1.0056 SR 89  1.0056 SR 8									
18.6520 3.0318 12/14/09 925984 TH-234 20.3242 39.8397 01/12/09 920241 TL-208  TL-208 2.9551 1.8570 02/09/09 920710 3.1710 1.1370 03/09/09 921146 5.7567 1.4671 04/06/09 921616 4.7067 1.2883 06/29/09 923146 1.0961 1.4864 08/24/09 924136  SR 89  SR 89  4.431 1.0654 05/18/09 922405 1.0466 1.0000 08/10/09 923893 - 8130 7.554 10/19/09 925017  SR 90  SR 90  3.633 6.613 05/18/09 922405 - 3.633 6.613 05/18/09 923893 - 3.7300 6.6347 08/10/09 923893									
TH-234  TL-208  20.3242 39.8397 01/12/09 920241  TL-208  2.9551 1.8570 02/09/09 920710 3.1710 1.1370 03/09/09 921146 5.7567 1.4671 04/06/09 921616 4.7067 1.2883 06/29/09 923146 1.0961 1.4864 08/24/09 924136  SR 89  SR 89  4431 1.0654 05/18/09 923893 1.0466 1.0000 08/10/09 923893 - 8130 .7554 10/19/09 925017  SR 90  SR 90  3.6613 05/18/09 922405 - 7300 6.6347 08/10/09 923893									
TL-208  TL-208  20.3242 39.8397 01/12/09 920241  TL-208  2.9551 1.8570 02/09/09 920710 3.1710 1.1370 03/09/09 921146 5.7567 1.4671 04/06/09 921616 4.7067 1.2883 06/29/09 923146 4.7067 1.2883 06/29/09 923146 1.0961 1.4864 08/24/09 924136  SR 89  3R 89  4.431 1.0654 05/18/09 922405 1.0466 1.0000 08/10/09 9238938130 .7554 10/19/09 925017  SR 90  SR 90  3.6613 05/18/09 922405 .7300 6.6347 08/10/09 923893		•			TH-234				
TL-208  2.9551 1.8570 02/09/09 920710 3.1710 1.1370 03/09/09 921146 5.7567 1.4671 04/06/09 921616 4.7067 1.2883 06/29/09 923146 1.0961 1.4864 08/24/09 924136  SR 89  4.431 1.0654 05/18/09 922405 1.0466 1.0000 08/10/09 9238938130 .7554 10/19/09 925017  SR 90  3.633 .6613 05/18/09 922405 .7300 .6347 08/10/09 923893	12					20.3242	39.8397	01/12/09	920241
3.1710 1.1370 03/09/09 921146 5.7567 1.4671 04/06/09 921616 4.7067 1.2883 06/29/09 923146 1.0961 1.4864 08/24/09 924136  SR 89		•			TL-208				
5.7567 1.4671 04/06/09 921616 4.7067 1.2883 06/29/09 923146 1.0961 1.4864 08/24/09 924136  SR 89						2.9551	1.8570	02/09/09	920710
4.7067 1.2883 06/29/09 923146 1.0961 1.4864 08/24/09 924136  SR 89  - 4431 1.0654 05/18/09 922405 1.0466 1.0000 08/10/09 923893 - 8130 .7554 10/19/09 925017  SR 90  - 3633 .6613 05/18/09 922405 .7300 .6347 08/10/09 923893		·				3.1710	1.1370	03/09/09	921146
SR 89						5.7567	1.4671	04/06/09	921616
SR 89  .4431						4.7067	1.2883	06/29/09	923146
.4431 1.0654 05/18/09 922405 1.0466 1.0000 08/10/09 9238938130 .7554 10/19/09 925017 SR 90  .3633 .6613 05/18/09 922405 .7300 .6347 08/10/09 923893	•					1.0961	1.4864	08/24/09	924136
1.0466 1.0000 08/10/09 9238938130 .7554 10/19/09 925017  SR 90  .3633 .6613 05/18/09 922405 .7300 .6347 08/10/09 923893				SR 89					•
8130 .7554 10/19/09 925017 SR 90 .3633 .6613 05/18/09 922405 .7300 .6347 08/10/09 923893			•			.4431	1.0654	05/18/09	922405
SR 90 .3633 .6613 05/18/09 922405 .7300 .6347 08/10/09 923893		•				1.0466	1.0000	08/10/09	923893
.3633 .6613 05/18/09 922405 .7300 .6347 08/10/09 923893		•				8130	.7554	10/19/09	925017
.7300 .6347 08/10/09 923893				SR 90					
						.3633	.6613	05/18/09	922405
1.1598 4980 10/19/09 925017						.7300	.6347	08/10/09	923893
					•	1.1598	.4980	10/19/09	925017

					- "	•	
Station	Location	Description	Analysis Nuclide	<u>Activity</u>	<u>Error</u>	Date Collected	<u>Lab Number</u>
3115	LAYMAN FARM	1.3 MILES SSW	IODINE-131				
•	•		•			*.	·
	•			.0156	.0582	12/29/08	920077
		•		.0326	.0462	01/12/09	920259
				0107	.0339	01/26/09	920539
	•			.0330	.0551	02/09/09	920728
				.0544	.0567	02/23/09	920980
				0183	.0429	03/09/09	921164
				.0814	.0644	03/23/09	921441
				.0604	.0570	04/06/09	921634
1				.0583	0550	04/20/09	921866
				.0848	.0800	05/04/09	922179
113				.0282	.0935	05/18/09	922423
1 .			•	.0748	.0902	06/01/09	<b>922678</b> ,
			· .	.0855	.0807	06/15/09	922941
				0252	.0756	06/29/09	923171
	•			0208	0488	07/13/09	923408
				.0247	.0819	07/27/09	923679
				.0134	.0502	08/10/09	923911
				0511	.0724	08/24/09	924155
		4		.0113	.0425	09/09/09	924413
				0125	.0395	09/22/09	924621
		•	j	.0461	.0800	10/05/09	924847
				0123	.0390	10/19/09	925036
				.0572	.0992	11/02/09	925350
			* ,	0208	.0623	11/16/09	925559
			•	.0127	.0477	11/30/09	925823
	•			.0108	.0404	12/15/09	926002
		•				. —	

					•			
Station 3115	Location LAYMAN FARM	Description 1.3 MILES SSW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
0.110	La Company (	1.0 WILLO GOVV	GAMMA :	SCAN (GELI)				
				AC-228				•
				•	5.9065	5.4253	02/09/09	920728
					6.6544	3.5102	02/23/09	920980
		•			4.0389	3.9981	03/09/09	921164
	•	•			1.3629	3.2491	05/04/09	922179
	,				5.0634	3.2828	06/15/09	922941
				BI-214	* .			
					23.5105	3.9186	12/29/08	920077
					12.1970	3.3089	01/12/09	920259
				·	47.9895	6.8458	01/26/09	920539
<u>-</u>					34.7839	4.3046	02/09/09	920728
114	-			•	17.5530	3.3515	02/23/09	920980
1					24.0787	10.3490	03/09/09	921164
					27.9246	6.3029	03/23/09	921441
•					12.4711	3.9562	04/06/09	921634
	<u>^</u>				13.4451	3.3761	04/20/09	921866
	•				9.3437	4.1822	05/04/09	922179
					15.1141	4.3669	05/18/09	922423
	•			•	4.4992	2.7788	06/01/09	922678
					6.8371	2.8591	06/15/09	922941
					31.8296	14.6175	06/29/09	923171
					15.1724	3.3715	07/13/09	923408
			•		12.1223	2.8388	07/27/09	923679
					23.8777	4.6973	08/10/09	923911
				ч.	21.6294	3.9369	08/24/09	924155
-					15.5781	3.8692	09/09/09	924413
					14.2501	3.6316	09/22/09	924621

Station	Location	Description	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
3115	LAYMAN FARM	1.3 MILES SSW	0414144	2041/05/18				
			GAMMA	SCAN (GELI) BI-214			•	
				DI-214	14.9597	4.7582	10/05/09	924847
				•	29.9473	6.6166	10/19/09	925036
	•			,	31.5709	5.6854	11/02/09	925350
					18.1884	4.5512	11/16/09	925559
					66.6672	7.6159	11/30/09	925823
					36.3449	4.1388	12/15/09	926002
				K-40	30.3448	4.1300	12/13/09	920002
				11-40	1353.4793	95.4628	12/29/08	920077
					1303.1922	98.6097	01/12/09	920259
, t					1307.6253	127.6011	01/26/09	920539
115					1511.0805	82.9675	02/09/09	920728
ĭ					1365.1908	81.4647	02/23/09	920980
•		•			1393.4817	84.8603	03/09/09	921164
	, •				1328.3313	82.3436	03/23/09	921441
	*				1560.7918	95.6675	04/06/09	921634
					1286.1485	83.5411	04/20/09	921866
					1396.2257	98.8245	05/04/09	922179
		•			1387.5777	101.8290	05/18/09	922423
		•			352.5969	25.9334	06/01/09	922678
					1341.6701	85.4290	06/15/09	922941
					1323.3938	93.5173	06/29/09	923171
					1394.3847	86.0735	07/13/09	923408
					1266.2572	77.8914	07/27/09	923679
				,	1327.0124	98.2596	08/10/09	923911
•		•			1361.5758	87.4690	08/24/09	924155
					1361.7637	93.4362	09/09/09	924413

Station 3115	Location LAYMAN FARM	Description 1.3 MILES SSW	Analysis	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA :	SCAN (GELI)			4	
•				K-40	1335.7860	85.7577	09/22/09	924621
					1364.4242	85.1238	10/05/09	924847
					1424.6968	91.7655	10/19/09	925036
		•			1407.5603	98.5574	11/02/09	925350
					1315.0640	99.8785	11/16/09	925559
					1276.0504	102.7724	11/30/09	925823
					1449.4276	90.1509	12/15/09	926002
		•		PB-212	, , , , , , , , , , , , , , , , , , , ,	33.1333		
					3.2255	2.1100	01/12/09	920259
<u>-</u>					3.7907	2.8614	05/04/09	922179
116					4.4578	2.0713	07/13/09	923408
1			•		3.3531	2.1855	09/22/09	924621
				PB-214				
					15.3569	2.7178	12/29/08	920077
					31.7843	5.6889	01/12/09	920259
					33.7754	4.8655	01/26/09	920539
				•	29.5173	5.1948	02/09/09	920728
				•	17.4925	4.1560	02/23/09	920980
					5.2580	4.5276	03/09/09	921164
					24.9780	3.5144	03/23/09	921441
					10.4772	3.9336	04/06/09	921634
					7.1535	2.7721	04/20/09	921866
					6.5223	3.6808	05/04/09	922179
					9.4637	3.1812	05/18/09	922423
					1.2817	.5344	06/01/09	922678
					4.8358	3.2896	06/15/09	922941

					•			
Station 3115	Location LAYMAN FARM	Description 1.3 MILES SSW	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
3113	LATIVIAN FACIVI	1.5 MILES 55VV	GAMMA	SCAN (GELI)				
	•		OAMINA	PB-214				
				. 5 2	7.4159	2.9591	06/29/09	923171
					4.7780	2.7923	07/13/09	923408
					9.8346	3.4935	07/27/09	923679
		-			27.0501	7.0527	08/10/09	923911
		,			12.8262	4.8551	08/24/09	924155
					17.3376	4.6768	09/09/09	924413
			-		14.4322	2.9881	09/22/09	924621
					4.5756	3.4213	10/05/09	924847
					15.7198	3.6198	10/19/09	925036
<u>-</u>					31.1886	5.4205	11/02/09	925350
117					32.5837	6.1713	11/30/09	925823
1	•				20.0234	3.3243	12/15/09	926002
			•	TL-208	<u>,</u> -			
	•				1.6762	.9672	01/26/09	920539
					.6843	1.3109	05/04/09	922179
		•			2.8435	2.6343	06/29/09	923171
				•	1.3063	1.0601	07/13/09	923408
					.3394	1.5098	08/24/09	924155
	•			-	.1358	1.2306	09/09/09	924413
				•	.4652	1.8319	10/19/09	925036
			SR 89					
	•				3147	1.0872	03/09/09	921164
					2.1523	1.2163	05/18/09	922423
					1.0240	.9233	08/10/09	923911

Station 3115	Location LAYMAN FARM	Description 1.3 MILES SSW	Analysis	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			SR 90					•
					4.4505	7117	02/00/00	021164
					1.1585	.7117	03/09/09	921164
					0917	.7394	05/18/09	922423
2440	NODTON FADA	4.4.1411.50.505			.0678	.5889	08/10/09	923911
3119	NORTON FARM	4.1 MILES ESE	IODINE-1		•			
			IODINE-1	31				
					0186	.0437	12/29/08	920079
					.0335	.0475	01/12/09	920261
					.0001	.0659	01/26/09	920541
T .		•			.0702	.0662	02/09/09	920729
118					.0074	.0473	02/23/09	920982
~					.0651	.0614	03/09/09	921165
:					.0463	.0804	03/23/09	921443
			,		.0368	.0614	04/06/09	921635
					0115	.0364	04/20/09	921868
	·				.0734	.0885	05/04/09	922181
					.0369	.0523	05/18/09	922425
					.0686	.0647	06/01/09	922679
					.0611	.1059	06/15/09	922943
					.0745	.0899	06/29/09	923172
					.0585	.0610	07/13/09	923410
					.0381	.0636	07/27/09	923680
					.0613	.0639	08/10/09	923913
					.0403	.0673	08/24/09	924156
					.0391	.0654	09/07/09	924415
					.0001	.0695	09/21/09	924622

Station 3119	Location NORTON FARM	Description 4.1 MILES ESE	Analysis IODINE-1	Nuclide	<u>Activity</u>	Error	Date Collected	<u>Lab Number</u>
					.0853	.0674	10/05/09	924849
					.0749	.0903	10/19/09	925037
					.0633	.0597	11/02/09	925352
					.0169	.0398	11/16/09	925560
					.0080	.0511	11/30/09	925825
					.0750	.0708	12/14/09	926004
			GAMMA	SCAN (GELI) AC-228				•
				7.100	8.2553	5.7791	02/23/09	920982
1					6.3299	4.8847	06/15/09	922943
119					4.8613	5.2821	09/07/09	924415
ĭ					7.6703	6.2316	11/30/09	925825
					8.4642	3.7722	12/14/09	926004
				BI-214				
					41.9733	5.2653	12/29/08	920079
					62.5712	7.2631	01/12/09	920261
					26.8085	5.4901	01/26/09	920541
					28.5620	5.2405	02/09/09	920729
	•				24.3049	4.4037	02/23/09	920982
					9.3510	3.6314	03/09/09	921165
					33.3806	5.3435	03/23/09	921443
					78.4355	6.9330	04/06/09	921635
					40.7272	5.0608	04/20/09	921868
					12.6228	4.0034	05/04/09	922181
					28.9972	11.9206	05/18/09	922425
			•		5.3414	3.4903	06/01/09	922679

Station 3119	Location NORTON FARM	Description 4.1 MILES ESE	Analysis	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
		•	GAMMA S	SCAN (GELI) BI-214				
•		•			7.9081	3.6379	06/15/09	922943
					9.4407	3.3694	06/29/09	923172
					6.9053	5.2588	07/13/09	923410
					3.5212	4.5328	07/27/09	923680
					20.0389	4.6784	08/10/09	923913
					34.0622	5.4358	08/24/09	924156
	- '				13.5650	4.5947	09/07/09	924415
	•				11.6822	4.0735	09/21/09	924622
					11.6112	4.4872	10/05/09	924849
<u>-</u>					25.2225	4.0578	10/19/09	925037
120				•	7.6358	2.7597	11/02/09	925352
1			`		7.1321	3.5242	11/16/09	925560
					42.2694	4.7681	11/30/09	925825
					12.9885	4.2608	12/14/09	926004
				K-40				•
					1238.9120	96.1087	12/29/08	920079
	•				1230.7341	93.5558	01/12/09	920261
					1159.6110	107.0150	01/26/09	920541
					1267.5072	81.1701	02/09/09	920729
					1220.4447	86.4932	02/23/09	920982
	•	•			1275.8129	93.5925	03/09/09	921165
		,			1278.1293	110.4865	03/23/09	921443
		•			1245.3734	114.7373	04/06/09	921635
					1102.6655	75.4133	04/20/09	921868
			•		1320.7069	88.6634	05/04/09	922181
					1334.0048	90.1344	05/18/09	922425

Station 3119	Location NORTON FARM		Description 4.1 MILES ESE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
		**		GAMMA	SCAN (GELI)				
					K-40	1270.5759	100.6445	06/01/09	922679
*			•		<u>~</u>	1465.6025	97.5336	06/15/09	922943
						1279.7872	84.6836	06/29/09	923172
						1386.5131	111.0025	07/13/09	923410
						892.1582	107.2018	07/27/09	923680
						1357.0759	90.8390	08/10/09	923913
						1280.8957	90.5211	08/24/09	924156
						1413.2393	98.0850	09/07/09	924415
				,		1256.4857	90.0767	09/21/09	924622
1						1431.9009	106.4095	10/05/09	924849
121						1378.5344	84.5840	10/19/09	925037
<del></del>						1428.1714	92.5057	11/16/09	925560
					•				
						1273.5428	507.0167	11/30/09	925825
			•		DD 040	1354.0616	92.5144	12/14/09	926004
					PB-212	.4015	2.3748	01/26/09	920541
			1			.2863	2.0390	02/23/09	920982
						3.2695	4.0824	03/23/09	921443
						3.6843	2.8721	06/01/09	922679
						1.5714	2.3534	06/15/09	922943
						4.0092	2.4157	09/07/09	924415
			*			3.9505	1.9152	10/05/09	924849
						1.0534	3.1861	10/19/09	925037
						.0575	2.4776	11/30/09	925825
	·				PB-214		f		
						41.1018	5.2629	12/29/08	920079

Station 3119	Location NORTON FARM	Description 4.1 MILES ESE	Analysis GAMMA S	Nuclide SCAN (GELI)	<u>Activity</u>	<u>Error</u>	Date Collected	<u>Lab Number</u>
			O2	PB-214				
					38.5620	5.6038	01/12/09	920261
					22.1914	6.6462	01/26/09	920541
					31.0933	6.0653	02/09/09	920729
					16.1376	3.9243	02/23/09	920982
					10.3503	2.8494	03/09/09	921165
					32.2814	7.4209	03/23/09	921443
					46.0374	6.1786	04/06/09	921635
					21.7092	4.6346	04/20/09	921868
ı	·				9.7829	4.0496	05/04/09	922181
		•		•	6.1822	2.6589	05/18/09	922425
122					6.8155	3.2301	06/01/09	922679
1		,			10.8516	3.7419	06/15/09	922943
					11.1188	3.7844	06/29/09	923172
					12.0133	4.2395	07/13/09	923410
					19.0937	7.4050	07/27/09	923680
•					15.8773	6.5267	08/10/09	923913
					28.4298	5.3585	08/24/09	924156
					18.4534	4.7838	09/07/09	924415
	•				12.4127	4.2398	09/21/09	924622
					5.9824	3.1009	10/05/09	924849
					20.5127	2.8225	10/19/09	925037
					15.2165	4.8144	11/02/09	925352
	•				4.2628	3.0184	11/16/09	925560
					31.7679	4.0187	11/30/09	925825
	•				9.7259	2.9015	12/14/09	926004

Station 3119	Location NORTON FARM	Description 4.1 MILES ESE	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) TL-208	•			
				TL-200	1.1427	1.4494	02/23/09	920982
					.0826	1.3977	04/20/09	921868
					.8494	1.6962	05/04/09	922181
					.3917	1.1423	06/01/09	922679
	•		SR 89					
					. 4214	0114	03/00/00	021165
					.4214	.8114	03/09/09	921165
	•				.3045	1.1262	05/18/09	922425
1					7341	.9266	08/10/09	923913
					.6305	1.1414	10/19/09	925037
123 .		•	SR 90					
'					.5230	.5350	03/09/09	921165
					.9876	.7051	05/18/09	922425
					1.3404	.6119	08/10/09	923913
•					.3219	.7158	10/19/09	925037

Station 2116	Location RM-2 DAYTON TN	<u>Description</u> 15.0 MILES SW	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
	·	10.0 11.1223 311	GAMMA	SCAN (GELI) AC-228				
•					.7233	.0572	06/29/09	923192
				BE-7	.4804	.0665	06/29/09	923192
				BI-212	.7347	1178	06/29/09	923192
				BI-214			,	
•				CS-137	.8469	.0547	06/29/09	923192
					.1428	.0137	06/29/09	923192
- 124		:		K-40	4.3024	.3031	06/29/09	923192
1				PB-212	.6871	.0399	06/29/09	923192
•				PB-214	.8220	.0562	06/29/09	923192
				RA-226		•		
				TL-208	.8469	.0547	06/29/09	923192
			00.00	.2 200	.2240	.0163	06/29/09	923192
			SR 89					
			SR 90		8500	.8110	06/29/09	923192
					.0000	.0919	06/29/09	923192
	•				.0000	.0919	00123103	323132

Station 3101	<u>Location</u> LM1	Description 0.5 MILES SSW	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) AC-228				
•				AC-226	1.1532	.0908	06/30/09	923150
	•			BI-212	1.2292	.1497	06/30/09	923150
	,			BI-214				
				CS-137	1.1449	.0624	06/30/09	923150
					.0872	.0138	06/30/09	923150
				K-40	13.7108	.7118 ·	06/30/09	923150
<u>.</u>				PB-212				
125 .	•			PB-214	1.2147	.0842	06/30/09	923150
•					1.2405	.0724	06/30/09	923150
				RA-226	1.1449	.0624	06/30/09	923150
	,			TL-208	.4196	0244	00/20/00	022450
			SR 89		.4190	.0241	06/30/09	923150
	•				.4960	.6930	06/30/09	923150
			SR 90		.4000	.0000	00/00/00	020100
					.0196	.0587	06/30/09	923150
3102	LM2	0.4 MILES NNE						
,			GAMMA S	SCAN (GELI) AC-228				
				· · · · · · · · · · · · · · · · · · ·	1.1127	.0798	06/30/09	923155

							•		
Station 3102	Location LM2	<u>Description</u> 0.4 MILES NNE	<u>Analysis</u>	Nuclide	Activity	<u>Error</u>	Date Collected	<u>Lab Number</u>	
		***************************************	GAMMA S	SCAN (GELI) BE-7					
					.2871	.0481	06/30/09	923155	
				BI-212	1.3124	.0982	06/30/09	923155	
				BI-214	.9304	.0601	06/30/09	923155	
		·		CS-137	.2647	.0222	06/30/09	923155	
			-	K-40		•			
- 12				PA-234M	14.7991	.6247	06/30/09	923155	
126				PB-212	2.8764	.8661	06/30/09	923155	
•	^			PB-214	1.1856	.0599	06/30/09	923155	
					1.0198	.0533	06/30/09	923155	
			•	RA-226	.9304	.0601	06/30/09	923155	
	,			TL-208	.3586	.0216	06/30/09	923155	
*			SR 89						
					.5520	.9150	06/30/09	923155	
			SR 90						
					.0445	.0815	06/30/09	923155	

Station 3106	Location PM2 SPRING CITY	Description 7.0 MILES NW	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				AC-228	1.0541	.0757	06/29/09	923160
				BI-212				
				BI-214	1.2241	.1223	06/29/09	923160
				DI-214	.7607	.0415	06/29/09	923160
				CS-137	1.2295	.0574	06/29/09	923160
			•	K-40	1.2290	.0574	00/29/09	923100
			-	55.040	19.5203	.9905	06/29/09	923160
- 127				PB-212	1.1134	.0496	06/29/09	923160
7 -				PB-214				
				RA-226	.8362	.0421	06/29/09	923160
					.7607	.0415	06/29/09	923160
				TL-208	.3797	.0201	06/29/09	923160
			SR 89	-	.0101	.0201	00/20/00	323100
	• •				2310	.9460	06/29/09	923160
		•	SR 90		2310	.9400	00/25/05	323100
				·	.0871	.0806	06/29/09	923160
3107	PM3	10.4 MILES NNE			.0071	.0800	06/29/09	923100
			GAMMA	SCAN (GELI)	,	•		
				AC-228	.8868	.0632	06/29/09	923163

Station 3107	Location PM3	Description 10.4 MILES NNE	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
3107	FINIS	10.4 WILES WINE	GAMMA S	SCAN (GELI) BE-7				
					,3009	.0454	06/29/09	923163
				BI-212	.7803	.1028	06/29/09	923163
				BI-214	.9492	.0481	06/29/09	022462
				CS-137			00/29/09	923163
				K-40	.1734	.0125	06/29/09	923163
					3.8943	.2554	06/29/09	923163
- 128				PA-234M	2.6159	.7983	06/29/09	923163
∞ 1				PB-212	.8689	.0537	06/29/09	923163
				PB-214	•			
				RA-226	.9661	.0525	06/29/09	923163
				TL-208	.9492	.0481	06/29/09	923163
				TL-200	.2856	.0162	06/29/09	923163
			SR 89					
	•	·	OD 00		.1250	.7000	06/29/09	923163
			SR 90					
					0047	.0571	06/29/09	923163

Station 3108	Location PM4	Description 7.6 MILES NE/ENE	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
		·		AC-228	.9807	.0609	06/29/09	923166
			-	BI-212				•
				BI-214	1.0681	.1091	06/29/09	923166
				DI-2 14	.9340	.0517	06/29/09	923166
				CS-137	0500	0070	00/00/00	000100
				K-40	.0596	.0078	06/29/09	923166
r					8.5847	.4305	06/29/09	923166
<u>.</u>				PB-212	.9934	.0456	06/29/09	923166
129 -				PB-214			00/20/00	020100
				RA-226	.9424	.0467	06/29/09	923166
			•	KA-220	.9340	.0517	06/29/09	923166
		•		TL-208	0.440	22.42	00/00/00	000100
			SR 89		.3418	.0218	06/29/09	923166
			SR 90		- 2790	.8400	06/29/09	923166
			OIX 30	•				
3109	PM5 DECATUR	8.0 MILES S			.0688	.0725	06/29/09	923166
3109	FIND DECATOR	6.0 MILES 5	GAMMA	SCAN (GELI) AC-228				
				, to LLo	1.2985	.0859	06/29/09	923170

Station 3109	Location PM5 DECATUR	<u>Description</u> 8.0 MILES S	Analysis Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA SCAN (GELI) BE-7			•	
				.3802	.0726	06/29/09	923170
		•	BI-212	1.3240	.1056	06/29/09	923170
			BI-214	.8253	.0429	06/29/09	923170
			CS-137				
			K-40	.0383	.0051	06/29/09	923170
1			PB-212	12.1990	.5743	06/29/09	923170
130		·		1.2259	.0867	06/29/09	923170
			PB-214	.8640	.0473	06/29/09	923170
			RA-226	.8253	.0429	06/29/09	923170
			TL-208	.4124	.0211	06/29/09	923170
-			SR 89	.7167	.0211	00/20/00	020170
			·	.8620	.6140	06/29/09	923170
			SR 90				
3203	LM3	1.9 MILES NNE		0255	.0601	06/29/09	923170
3203	LINO	1.0 MILLO MAE	GAMMA SCAN (GELI)		-		•
		•	AC-228	.9054	.0763	06/30/09	923176

Station 3203	<u>Location</u> LM3	Description 1.9 MILES NNE	Analysis	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
	•		GAMMA	SCAN (GELI) BE-7				
			•	BI-212	.1521	.0418	06/30/09	923176
•	,			BI-214	.9687	.1074	06/30/09	923176
				CS-137	1.1143	.0667	06/30/09	923176
					.6196	.0382	06/30/09	923176
•				K-40	4.1885	.2775	06/30/09	923176
- 131		•		PB-212	.9026	.0485	06/30/09	923176
ı				PB-214	1.2030	.0625	06/30/09	923176
				RA-226	1.1143	.0667	06/30/09	923176
-		·	00.00	TL-208	.2870	.0231	06/30/09	923176
			SR 89		5550		06/20/00	000476
			SR 90		.5550	.6010	06/30/09	923176
0004					.0703	.0567	06/30/09	923176
3204	LM-4	0.9 MILES SE	GAMMA	SCAN (GELI) AC-228				-
				AU-220	1.1595	.0826	06/29/09	923181

Station	Location	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	<u>Lab Number</u>
3204	LM-4	0.9 MILES SE	GAMMA	SCAN (GELI)				
				BE-7	.3836	.0892	06/29/09	923181
				BI-212	1.4908	1334	06/29/09	923181
				BI-214	.8320	.0466	06/29/09	923181
				K-40	24.0712	1.1256	06/29/09	923181
				PB-212	1.1393	.0780	06/29/09	923181
- 132	•			PB-214	.8867	.0466	06/29/09	923181
2 -				RA-226	.8320	.0466	06/29/09	923181
				TL-208	.4089	.0258	06/29/09	923181
			SR 89					
			SR 90		.7840	.5460	06/29/09	923181
			011 00		0224	.0559	06/29/09	923181
3205	RM-3 WB	15 MILES NNW	GAMMA	SCAN (GELI)		·		
			<u> </u>	AC-228	.6441	.0387	06/29/09	923185
	•			BE-7	.1513	.0279	06/29/09	923185

Station	<u>Location</u>	Description 15 MILES NNW	<u>Analysis</u>	Nuclide	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
3205	RM-3	19 MILES MINA	GAMMA	SCAN (GELI)				
				BI-212	.5166	.0592	06/29/09	923185
				BI-214		0200		022105
				CS-137	.5492	.0306	06/29/09	923185
				00-107	.3566	.0214	06/29/09	923185
				K-40	4.9114	.2979	06/29/09	923185
- 133				PB-212	.5944	.0341	06/29/09	923185
			•	PB-214	.6255	.0269	06/29/09	923185
ü ı				RA-226	.5492	.0306	06/29/09	923185
•				TL-208	.1838	.0138	06/29/09	923185
			SR 89					
					.4770	.6140	06/29/09	923185
		•	SR 90					
					.0366	.0604	06/29/09	923185

Table 6
RADIOACTIVITY IN APPLES
WATTS BAR NUCLEAR PLANT
PCI/KG - 0.037 BQ/KG (WET WT)
12/28/2008 - 12/25/2009

<u>Station</u>	Location	Description	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
2116	DAYTON TN	15.0 MILES SW					•	
			GAMMA:	SCAN (GELI)				•
				BI-214				
					137.9048	11.7672	09/23/09	922062
				K-40				
					948.2108	106.4685	09/23/09	922062
				PB-214				~
					111.2958	11.2550	09/23/09	922062
				TL-208				
					.4132	4.0436	09/23/09	922062
3204	LM-4	0.9 MILES SE						
			GAMMA :	SCAN (GELI)				
1				BI-214				
134					203.1430	23.2553	09/23/09	922022
4				K-40				
•					811.0550	114.7967	09/23/09	922022
		•		PB-214				
					204.2314	27.7620	09/23/09	922022

Table 7
RADIOACTIVITY IN CABBAGE
WATTS BAR NUCLEAR PLANT
PCI/KG - 0.037 BQ/KG (WET WT)
12/28/2008 - 12/25/2009

Station	Location	Description	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
2116	DAYTON TN	15.0 MILES SW	GAMMA	SCAN (GELI) BI-214				
				DI-Z I T	63.8448	11.5492	07/16/09	922057
				K-40	2120.7435	184.1304	07/16/09	922057
			·	PB-214				
3173	2.5 MILES NE		,		74.0786	12.1687	07/16/09	922057
			GAMMA	SCAN (GELI)				
				AC-228	16.1804	9.6407	07/16/09	922015
<u>.</u>				BI-214	72 6244	0.0633	07/16/00	022015
135				K-40	73.6311	9.9622	07/16/09	922015
•					1843.0069	173.8809	07/16/09	922015
,				PB-212	3.8247	8.6861	07/16/09	.922015
				PB-214	75.0246	10 9120	07/16/09	922015
				TL-208	75.0346	10.8139	07/16/09	922013
					1.3462	3.1712	07/16/09	922015

# Table 8 RADIOACTIVITY IN CORN WATTS BAR NUCLEAR PLANT PCI/KG - 0.037 BQ/KG (WET WT) 12/28/2008 - 12/25/2009

Station	Location	Description	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
2116	DAYTON TN	15.0 MILES SW	GAMMA	SCAN (GELI) BI-214				
					77.1790	13.0058	07/16/09	922058
				K-40			,	
				PB-214	2079.5864	223.6681	07/16/09	922058
				PD-214	86.2200	16.3280	07/16/09	922058
3173	2.5 MILES NE			_				
			GAMMA	SCAN (GELI)				
				BI-214	55.7608	9.8336	07/16/09	922017
1				K-40				
136					2368.5640	165.0742	07/16/09	922017
5 -				PB-212	9.4236	4.1387	07/16/09	922017
				PB-214				
					67.2389	9.2815	07/16/09	922017

Table 9
RADIOACTIVITY IN GREEN BEANS
WATTS BAR NUCLEAR PLANT
PCI/KG - 0.037 BQ/KG (WET WT)
12/28/2008 - 12/25/2009

Station 2116	Location DAYTON TN	Description 15.0 MILES SW	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
2110	BATTON IN	10.0 1411213 344	GAMMA S	SCAN (GELI) BI-214				
·				K-40	65.7897	10.9400	07/16/09	922059
					1577.2507	168.6845	07/16/09	922059
0.170	0.5.444.50.445			PB-214	63.1083	7.6141	07/16/09	922059
3173	2.5 MILES NE		GAMMA S	SCAN (GELI)				
				BI-214	56.6277	10.2100	07/16/09	922018
- 137			•	K-40	2003.6402	185.2092	07/16/09	922018
7 -				PB-214	39.4077	6.9294	07/16/09	922018

Table 10
RADIOACTIVITY IN POTATOES
WATTS BAR NUCLEAR PLANT
PCI/KG - 0.037 BQ/KG (WET WT)
12/28/2008 - 12/25/2009

Station	<u>Location</u>	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	<b>Date Collected</b>	Lab Number
2116	DAYTON TN	15.0 MILES SW						
			GAMMA S	SCAN (GELI)				
				BI-214				
					103.1142	15.1687	09/28/09	922061
				K-40				
,					3597.6343	246.9242	09/28/09	922061
	·			PB-214				
	·		•		93.7465	12.3446	09/28/09	922061

Table 11
RADIOACTIVITY IN TOMATOES
WATTS BAR NUCLEAR PLANT
PCI/KG - 0.037 BQ/KG (WET WT)
12/28/2008 - 12/25/2009

Station	Location	Description	Analysis Nuc	clide Activity	Error	Date Collected	Lab Number
2116	DAYTON TN	15.0 MILES SW	GAMMA SCA	N (GFLI)			
			BI-2	• •			
				63.1978	22.9092	07/16/09	922060
			K-4	10			
				1802.8165	206.7473	07/16/09	922060
			PB-	-214			
				59.6643	11.2163	07/16/09	922060
3173	2.5 MILES NE						
			GAMMA SCAN	•			
			BI-2			27/10/00	000010
				64.2518	9.4536	07/16/09	922019
<u> </u>			K-4		400 4770	07/40/00	000040
39	:			2124.9079	166.4770	07/16/09	922019
ì			PB-	-214	7 700 4	07/40/00	000040
				49.9331	7.7894	07/16/09	922019

Station	Location	<u>Description</u>	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
3133	TRM 529.3		GROSS E	BETA				
					2.8753	.7493	12/30/08	920080
					2.6262	.7434	01/26/09	920542
					1.4621	.6896	02/23/09	920983
					2.2086	.7312	03/23/09	921444
					2.1294	.7380	04/20/09	921869
					2.0663	. 7163	05/18/09	922426
					1.8892	.7047	06/15/09	922944
					1.3841	.7026	07/13/09	923411
ı					3.4190	.7936	08/10/09	923914
					2.9761	.7752	09/08/09	924416
140		•			.2001	.6671	10/06/09	924850
1					1.5029	.6856	11/03/09	925354
					1.6774	.7175	12/01/09	925826
			GAMMA S	SCAN (GELI) AC-228				
					6.5284	3.5159	12/30/08	920080
		·			7.4363	3.7965	02/23/09	920983
					5.4208	4.3749	03/23/09	921444
		•			10.7579	4.7390	04/20/09	921869
					13.3977	5.8010	05/18/09	922426
					3.8645	3.7731	11/03/09	925354
					5.9220	3.8932	12/01/09	925826
•				BI-214				4
					31.9891	4.0171	12/30/08	920080
					12.9323	3.7950	01/26/09	920542
					19.3788	5.5644	02/23/09	920983

BI-214   14.9437   2.7147   03/23/09   921444   94.733   3.6071   04/20/09   921869   92.5.9541   3.7215   05/18/09   922426   11.2836   2.9756   06/15/09   922426   11.2836   2.9756   06/15/09   922426   11.2836   2.9756   06/15/09   922436   11.2836   2.9756   06/15/09   922431   11.2836   3.7801   07/13/09   923414   19.0543   3.7801   07/13/09   923414   18.7536   3.8344   10/06/09   924850   18.7536   3.8344   10/06/09   924850   18.7536   3.8344   10/06/09   924850   18.1558   4.1458   11/03/09   925854   18.1558   4.1458   11/03/09   925854   18.1558   4.1458   11/03/09   925854   18.2450   18.2455   18.3460   01/26/09   92080   16.2165   18.3460   01/26/09   92080   16.2165   18.3460   01/26/09   92080   16.2165   18.3460   01/26/09   92080   18.5050   17.3270   04/20/09   921869   18.5050   17.3270   04/20/09   921869   18.5050   17.3270   04/20/09   921869   18.5050   17.3270   04/20/09   921869   18.5050   17.3270   04/20/09   921869   18.5050   17.3270   04/20/09   923814   18.5050   17.3270   04/20/09   923814   18.5050   17.3270   04/20/09   923814   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   923816   18.5050   17.3270   04/20/09   18.5050   17.3270   04/20/09   18.5050   17.3270   04/20/09   18.5050   17.3270   04/20/09   18.5050   17.3270   04/20/09   18.5050   17.3270   04/20/09   18.5050   17.3270   04/20/09   18.5050   17.3270   04/20/	Station 3133	Location TRM 529.3	Description	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	Lab Number
14,9437   2,7147   03/23/09   921444   9,4733   3,6071   04/20/09   921869   922426   9,4733   3,6071   04/20/09   922426   11,2836   2,9756   06/15/09   922944   19,0543   3,7801   07/13/09   923411   19,0543   3,7801   07/13/09   923411   19,0543   3,7801   07/13/09   923411   18,7536   3,8344   10/06/09   924416   18,7536   3,8344   10/06/09   924450   18,1568   4,1458   11/03/09   925354   10,2009   16,2356   12/01/09   925354   16,2165   18,3460   01/26/09   925354   16,2165   18,3460   01/26/09   920542   16,2165   18,3460   01/26/09   920542   16,2165   18,3460   01/26/09   920542   16,2165   18,3460   01/26/09   920542   16,2165   18,3460   01/26/09   920542   16,2165   17,3270   04/20/09   920983   17,3270   04/20/09   921444   18,5050   17,3270   04/20/09   921444   18,5050   17,3270   04/20/09   921444   18,5050   17,3270   04/20/09   921444   18,5050   17,3270   04/20/09   921444   18,5050   17,3270   04/20/09   921445   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   924416   19,2202   09/08/09   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020   19,22020				GAMMA :	SCAN (GELI)				
1-4   9.4733   3.6071   0.4(20/09   921869   25.9541   3.7215   0.5(18/09   922426   11.2836   2.9756   0.6(15/09   922944   19.0543   3.7801   0.7(13/09   923411   19.0543   3.7801   0.7(13/09   923411   18.7536   3.8344   10/06/09   924456   18.7536   3.8344   1.7(03/09   924550   18.1568   4.1458   11/03/09   925354   18.1568   4.1458   11/03/09   925354   18.1568   4.1458   11/03/09   925354   18.1568   4.1458   11/03/09   925354   16.2165   18.3460   0.1(26/09   920542   16.2165   18.3460   0.1(26/09   920542   16.2165   18.3460   0.1(26/09   920542   16.2165   18.5050   17.3270   0.4(20/09   921869   21.4708   19.8523   0.5(18/09   922426   39.6284   26.8784   0.8(10/09   923414   9.7425   19.2020   0.9(08/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   1.0(6/09   924850   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.5196   3.2594   25.					BI-214	•			•
1.2836   2.9756   05/18/09   922426     11.2836   2.9756   06/15/09   922944     11.2836   2.9756   06/15/09   922941     11.2836   3.7801   07/13/09   923911     11.2836   3.7801   07/13/09   923911     11.2836   3.8362   09/08/09   924416     12.87542   4.8720   09/08/09   924416     12.87542   4.8720   09/08/09   924416     12.87536   3.8344   10/06/09   924850     12.87542   4.8720   09/08/09   924850     12.87542   4.8720   09/08/09   924850     12.87542   4.8720   09/08/09   926826     12.87542   4.8720   09/08/09   925826     12.87542   4.8720   09/08/09   925826     12.87542   2.0.3614   12/30/08   920080     12.87542   2.0.3614   12/30/08   920080     12.87542   2.0.3614   2.0.202   09/08/09   921446     12.87542   2.0.202   09/08/09   924456     12.87542   2.0.202   09/08/09   924456     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   924850     12.87542   2.0.202   09/08/09   09/08/09     12.87542   2.0.202   09/08/09   09/08/09     12.87542   2.0.202   09/08/09   09/08/09     12.87542   2.0.202   09/08/09   09/08/09     12.87542   2.0.202   09/08/09   09/08/09     12.87542   2.0.202   09/08/09     12.87542   2.0.202   09/08/09						14.9437	2.7147	03/23/09	
11.2836   2.9756   06/15/09   922944     19.0543   3.7801   07/13/09   923411     31.1813   5.4035   08/10/09   923416     31.813   5.4035   08/10/09   924416     4.8720   09/08/09   924450     4.8720   09/08/09   924450     4.87536   3.8344   10/06/09   924850     4.87536   3.8344   10/06/09   925354     50.3997   6.2356   12/01/09   925826     50.3997   6.2356   12/01/09   925826     6.2165   18.3460   01/26/09   920542     6.2165   18.3460   01/26/09   920542     6.4.7993   20.2999   02/23/09   920983     20.8538   27.4754   03/23/09   921444     4.8.5050   17.3270   04/20/09   921486     6.2165   18.3460   01/26/09   921486     6.2165   18.3460   01/26/09   921486     6.2165   18.3460   01/26/09   921486     6.2165   18.3460   01/26/09   924850     6.2170   04/20/09   924850     6.2170   04/20/09   924416     6.2185   19.2202   09/08/09   924416     6.2185   19.2202   09/08/09   924416     6.2185   19.2202   09/08/09   924416     6.2185   17.4971   12/01/09   925826     7.2469   17.4971   12/01/09   925826     7.2469   17.4971   12/01/09   925826     7.2469   17.4971   12/01/09   925826     7.2469   17.4971   12/01/09   925826     7.2469   17.4971   12/01/09   925826     7.2469   17.4971   12/01/09   925826     7.2469   17.4971   12/01/09   925826     7.2469   17.4971   12/01/09   925826     7.2469   17.4971   12/01/09   925826     7.2469   17.4971   12/01/09   925826     7.2469   17.4971   12/01/09   925826     7.2469   17.4971   12/01/09   925826     7.2469   17.4971   12/01/09   925826     7.2469   17.4971   12/01/09   92080     7.2469   17.4971   12/01/09   92080     7.2469   17.4971   12/01/09   92080     7.2469   17.4971   12/01/09   92080     7.2469   17.4971   12/01/09   92080     7.2469   17.4971   12/01/09   92080     7.2469   17.4971   12/01/09   92080     7.2469   17.4971   12/01/09   92080						9.4733	3.6071	04/20/09	921869
19.0543   3.7801   07/13/09   923411   31.1813   5.4035   08/10/09   923914   28.7542   4.8720   09/08/09   924416   18.7536   3.8344   10/06/09   924850   18.1568   4.1458   11/03/09   925354   6.2356   12/01/09   925826   12/01/09   925826   12/01/09   925826   12/01/09   925826   12/01/09   925826   12/01/09   920542   18.2456   18.3460   01/26/09   920542   18.2456   18.3460   01/26/09   920542   18.2456   18.3460   01/26/09   920542   18.5050   17.3270   04/20/09   921869   18.5050   17.3270   04/20/09   921869   18.5050   17.3270   04/20/09   921869   19.2426   19.2202   09/08/09   924416   19.7425   19.2202   09/08/09   924416   19.7425   19.2202   09/08/09   924416   19.23190   21.6535   11/03/09   92354   19.23190   21.6535   11/03/09   92354   19.23190   21.6535   11/03/09   92354   19.23190   21.6535   11/03/09   925826   19.23190   17.4971   12/01/09   925826   19.23190   17.4971   12/01/09   925826   19.23190   17.4971   12/01/09   925826   19.23190   17.4971   12/01/09   925826   19.23190   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   920080   17.2304   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08   12/30/08			•		•	25.9541	3.7215	05/18/09	922426
18,7536   18,7536   19,000   923914   28,7542   4,8720   09,08/09   924416   28,7542   4,8720   09,08/09   924416   28,7542   4,8720   09,08/09   924450   28,7542   4,8720   09,08/09   924450   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542   28,7542						11.2836	2.9756	06/15/09	922944
18.7536   3.8344   10/06/09   924416     18.7536   3.8344   10/06/09   924850     18.1568   4.1458   11/03/09   925354     18.1568   4.1458   11/03/09   925354     18.1568   4.1458   11/03/09   925354     18.1568   4.1458   11/03/09   925826     18.1569   71.6922   20.3614   12/30/08   920080     16.2165   18.3460   01/26/09   920542     64.7993   20.2999   02/23/09   920983     20.8538   27.4754   03/23/09   921444     18.5050   17.3270   04/20/09   921869     21.4708   19.8523   05/18/09   922426     21.4708   19.8523   05/18/09   922416     3.96284   26.8784   08/10/09   923914     9.7425   19.2202   09/08/09   924416     3.2594   25.5196   10/06/09   924850     2.3190   21.6535   11/03/09   925354     2.3190   21.6535   11/03/09   925354     2.3190   21.6535   11/03/09   925826     PB-212   PB-212   3.7775   2.1498   12/30/08   920080     2.2304   2.1214   02/23/09   920983						19.0543	3.7801	07/13/09	923411
18.7536   3.8344   10/06/09   924850     18.1568   4.1458   11/03/09   925354     18.1568   4.1458   11/03/09   925354     50.3997   6.2356   12/01/09   925826     17.6922   20.3614   12/30/08   920080     16.2165   18.3460   01/26/09   920542     64.7993   20.2999   02/23/09   92083     64.7993   20.2999   02/23/09   92083     64.7993   20.2999   02/23/09   921869     20.8538   27.4754   03/23/09   921444     18.5050   17.3270   04/20/09   921869     21.4708   19.8523   05/18/09   922426     39.6284   26.8784   08/10/09   923914     97.425   19.2202   09/08/09   924416     97.425   19.2202   09/08/09   924416     93.2594   25.5196   10/06/09   924850     23.3190   21.6535   11/03/09   925354     7.2469   17.4971   12/01/09   925826     PB-212	•					31.1813	5.4035	08/10/09	923914
18.1568						28.7542	4.8720	09/08/09	924416
K-40   K-40   T1.6922   20.3614   12/30/08   920080   16.2165   18.3460   01/26/09   920542   64.7993   20.2999   02/23/09   920983   20.8538   27.4754   03/23/09   921444   18.5050   17.3270   04/20/09   921466   21.4708   19.8523   05/18/09   922426   39.6284   26.8784   08/10/09   923914   97.425   19.2202   09/08/09   924416   3.2594   25.5196   10/06/09   924850   23.3190   21.6535   11/03/09   925354   23.3190   21.6535   11/03/09   925354   25.3190   21.6535   11/03/09   925354   23.3190   21.6535   11/03/09   925354   23.3190   21.6535   11/03/09   925354   23.3190   21.6535   11/03/09   925354   23.3190   21.6535   11/03/09   925354   23.3190   21.6535   11/03/09   925354   23.3190   21.6535   11/03/09   925354   23.3190   21.6535   23.4198   23.3190   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23.4198   23						18.7536	3.8344	10/06/09	924850
K-40   K-40   T1.6922   20.3614   12/30/08   92080						18.1568	4.1458	11/03/09	925354
71.6922 20.3614 12/30/08 920080 16.2165 18.3460 01/26/09 920542 64.7993 20.2999 02/23/09 920983 20.8538 27.4754 03/23/09 921444 18.5050 17.3270 04/20/09 921869 21.4708 19.8523 05/18/09 922426 39.6284 26.8784 08/10/09 923914 9.7425 19.2202 09/08/09 924416 9.7425 19.2202 09/08/09 924416 3.2594 25.5196 10/06/09 924850 2.3190 21.6535 11/03/09 925354 7.2469 17.4971 12/01/09 925826  PB-212  PB-212 3.7775 2.1498 12/30/08 920080 2.2304 2.1214 02/23/09 920983		,				50.3997	6.2356	12/01/09	925826
16.2165 18.3460 01/26/09 920542 64.7993 20.2999 02/23/09 920983 20.8538 27.4754 03/23/09 921444 18.5050 17.3270 04/20/09 921869 21.4708 19.8523 05/18/09 922426 39.6284 26.8784 08/10/09 923914 9.7425 19.2202 09/08/09 924416 3.2594 25.5196 10/06/09 924850 2.3190 21.6535 11/03/09 925354 7.2469 17.4971 12/01/09 925826  PB-212  3.7775 2.1498 12/30/08 920080 2.2304 2.1214 02/23/09 920983	41				K-40				
64.7993 20.2999 02/23/09 920983 20.8538 27.4754 03/23/09 921444 18.5050 17.3270 04/20/09 921869 21.4708 19.8523 05/18/09 922426 39.6284 26.8784 08/10/09 923914 9.7425 19.2202 09/08/09 924416 3.2594 25.5196 10/06/09 924850 2.3190 21.6535 11/03/09 925354 7.2469 17.4971 12/01/09 925826  PB-212  PB-212  3.7775 2.1498 12/30/08 920080 2.2304 2.1214 02/23/09 920983	1					71.6922	20.3614	12/30/08	920080
20.8538 27.4754 03/23/09 921444  18.5050 17.3270 04/20/09 921869  21.4708 19.8523 05/18/09 922426  39.6284 26.8784 08/10/09 923914  9.7425 19.2202 09/08/09 924416  3.2594 25.5196 10/06/09 924850  2.3190 21.6535 11/03/09 925354  7.2469 17.4971 12/01/09 925826  PB-212  9.7775 2.1498 12/30/08 920080  2.2304 2.1214 02/23/09 920983						16.2165	18.3460	01/26/09	920542
18.5050 17.3270 04/20/09 921869 21.4708 19.8523 05/18/09 922426 39.6284 26.8784 08/10/09 923914 9.7425 19.2202 09/08/09 924416 3.2594 25.5196 10/06/09 924850 2.3190 21.6535 11/03/09 925354 7.2469 17.4971 12/01/09 925826  PB-212  9.745 2.1498 12/30/08 920080 2.2304 2.1214 02/23/09 920983						64.7993	20.2999	02/23/09	920983
21.4708 19.8523 05/18/09 922426 39.6284 26.8784 08/10/09 923914 9.7425 19.2202 09/08/09 924416 3.2594 25.5196 10/06/09 924850 2.3190 21.6535 11/03/09 925354 7.2469 17.4971 12/01/09 925826  PB-212  3.7775 2.1498 12/30/08 920080 2.2304 2.1214 02/23/09 920983						20.8538	27.4754	03/23/09	921444
39.6284 26.8784 08/10/09 923914 9.7425 19.2202 09/08/09 924416 3.2594 25.5196 10/06/09 924850 2.3190 21.6535 11/03/09 925354 7.2469 17.4971 12/01/09 925826  PB-212  3.7775 2.1498 12/30/08 920080 2.2304 2.1214 02/23/09 920983						18.5050	17.3270	04/20/09	921869
9.7425 19.2202 09/08/09 924416 3.2594 25.5196 10/06/09 924850 2.3190 21.6535 11/03/09 925354 7.2469 17.4971 12/01/09 925826  PB-212 3.7775 2.1498 12/30/08 920080 2.2304 2.1214 02/23/09 920983						21.4708	19.8523	05/18/09	922426
3.2594 25.5196 10/06/09 924850 2.3190 21.6535 11/03/09 925354 7.2469 17.4971 12/01/09 925826 PB-212 3.7775 2.1498 12/30/08 920080 2.2304 2.1214 02/23/09 920983		•				39.6284	26.8784	08/10/09	923914
2.3190 21.6535 11/03/09 925354 7.2469 17.4971 12/01/09 925826  PB-212 3.7775 2.1498 12/30/08 920080 2.2304 2.1214 02/23/09 920983						9.7425	19,2202	09/08/09	924416
7.2469 17.4971 12/01/09 925826  PB-212  3.7775 2.1498 12/30/08 920080 2.2304 2.1214 02/23/09 920983						3.2594	25.5196	10/06/09	924850
PB-212 3.7775 2.1498 12/30/08 920080 2.2304 2.1214 02/23/09 920983						2.3190	21.6535	11/03/09	925354
PB-212 3.7775 2.1498 12/30/08 920080 2.2304 2.1214 02/23/09 920983					,	7.2469	17.4971	12/01/09	925826
3.7775     2.1498     12/30/08     920080       2.2304     2.1214     02/23/09     920983						· •			
						3.7775	2.1498	12/30/08	920080
1.2714 2.2209 03/23/09 921444						2.2304	2.1214	02/23/09	920983
						1.2714	2.2209	03/23/09	921444

### Environmental Radiological Monitoring and Instrumentation Western Area Radiological Laboratory

### LVA

Station	Location	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
3133	TRM 529.3	·.	GAMMA :	SCAN (GELI)	•			
				PB-212				
				•	4.6093	1.6910	05/18/09	922426
	,				1.8104	1.9801	06/15/09	922944
					.1243	1.9045	07/13/09	923411
					2.4278	1.6619	08/10/09	923914
					2.1535	2.2367	09/08/09	924416
		•		PB-214				
					23.0016	4.0295	12/30/08	920080
					12.9928	2.9619	01/26/09	920542
					16.0976	3.3279	02/23/09	920983
<u>_</u>					11.7230	2.7055	03/23/09	921444
142					4.9625	3.7102	04/20/09	921869
1					14.8978	4.0249	05/18/09	922426
		•			4.7146	2.2745	06/15/09	922944
				•	15.4441	3.8693	07/13/09	923411
					22.7661	4.5314	08/10/09	923914
		•			12.3053	2.8726	09/08/09	924416
					9.7250	2.4525	10/06/09	924850
				•	7.6660	2.3108	11/03/09	925354
•					37.0515	4.5778	12/01/09	925826
				TL-208		,		
					4.2380	1.8620	12/30/08	920080
					1.6688	1.2568	02/23/09	920983
					2.7989	1.1841	05/18/09	922426
					.6816	1.3255	07/13/09	923411
					.6300	1.0721	08/10/09	923914
					.3178	.7683	09/08/09	924416

Station 3133	Location TRM 529.3	Description	Analysis Nuclide	Activity	<u>Error</u>	Date Collected	<u>Lab Number</u>
0100	77 W 020.0		GAMMA SCAN (GELI) TL-208				
		•	TRITIUM	.4345	1.1518	10/06/09	924850
-				47.9531	85.8251	12/30/08	920080
				- 36.3077	83.8523	01/26/09	920542
				- 12.3238	81.6378	02/23/09	920983
•		,		101.2448	84.3941	03/23/09	921444
		•		76.0121	86.7499	04/20/09	921869
				91.1519	85.4308	05/18/09	922426
_				- 69.4585	82.8357	06/15/09	922944
143				94.9937	85.3929	07/13/09	923411
1		•		44.7106	84.7179	08/10/09	923914
				140.1489	83.2257	09/08/09	924416
,				4.5271	80.4908	10/06/09	924850
			•	101.1375	85.1619	11/03/09	925354
				43.3807	82.3389	12/01/09	925826
3134	TRM 517.9		•				
			GROSS BETA				
				3.0312	.7667	12/29/08	920082
				3.4798	.8186	01/26/09	920544
				1.2692	.6681	02/23/09	920985
•				2.6570	.7528	03/23/09	921446
				2.6834	.7730	04/20/09	921871
				.9678	.6699	05/18/09	922428
				1.7312	.7192	06/15/09	922946
				1.5072	.7110	07/13/09	923413

		•				•		
Station	Location	<u>Description</u>	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
3134	TRM 517.9		GROSS E	BETA				
•								
					2.8326	.7622	08/10/09	923916
			÷		2.1063	.7296	09/08/09	924418
					1.9498	.7498	10/05/09	924852
		×			2.6058	.7508	11/02/09	925356
					5.2892	.9175	11/30/09	925828
			GAMMA S	SCAN (GELI)		•		
				AC-228				
					13.2243	7.1622	12/29/08	920082
					2.1978	4.8532	04/20/09	921871
<u>-</u>		·			28.8927	8.4098	05/18/09	922428
144					18.2952	5.4352	06/15/09	922946
1					12.1875	4.4945	08/10/09	923916
					17.8708	5.7104	09/08/09	924418
				BI-214			-	
					55.4332	4.9066	12/29/08	920082
	,	*			41.6328	5.6184	01/26/09	920544
					39.4318	5.1245	02/23/09	920985
			•		17.8862	4.2235	03/23/09	921446
					15.7328	5.1707	04/20/09	921871
•					41.2581	5.2200	05/18/09	922428
	•				29.5000	3.7231	. 06/15/09	922946
					13.0762	3.3736	07/13/09	923413
					48.5732	5.7617	08/10/09	923916
					24.3165	4.6725	09/08/09	924418
					40.7531	7.0222	10/05/09	924852
•					21.5368	3.5554	11/02/09	925356

	•				•				
Station 3134	Location TRM 517.9	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>		Error	Date Collected	Lab Number
3134	TINIO 317.9		GAMMA S	SCAN (GELI)					
			Or available of	BI-214					
					74.2428		8.1496	11/30/09	925828
				Ŕ-40					
					8.9870		22.9000	12/29/08	920082
					26.7591		23.8139	02/23/09	920985
					62.7062		28.3341	03/23/09	921446
					17.4709		17.4253	05/18/09	922428
					53.1195		20.3734	06/15/09	922946
					60.9638		16.8610	07/13/09	923413
					48.5733		19.7452	08/10/09	923916
<u> </u>					69.8313		19.2739	09/08/09	924418
145					46.4983		16.7549	11/02/09	925356
1				PB-212					
					4.6731		2.4877	12/29/08	920082
	•				2.9545		2.4290	02/23/09	920985
	•				6.4746	•	2.3504	03/23/09	921446
					5.5730		2.3263	06/15/09	922946
	•				4.0336		2.5629	07/13/09	923413
					5.2826		2.7136	08/10/09	923916
					5.6009		2.4095	09/08/09	924418
•					3.8162		2.0955	11/02/09	925356
		•			4.1385		2.2912	11/30/09	925828
			•	PB-214					
					39.0212		4.7626	12/29/08	920082
			•		25.9711		5.6590	01/26/09	920544
					30.9927		4.5727	02/23/09	920985
	•				14.3197		3.4980	03/23/09	921446

Station 3134	Location TRM 517.9	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
			GAMMA :	SCAN (GELI)				
				PB-214	8.1008	3.4063	04/20/09	921871
					29.4021	4.6871	05/18/09	922428
					15.9741	3.7419	06/15/09	922946
					14.5315	4.2140	07/13/09	923413
		•					08/10/09	923413
		·			34.5153	5.9907	09/08/09	923910
					16.9767	3.5071		
					27.9953	5.1080	10/05/09	924852
					16.9192	3.9862	11/02/09	925356
					55.4064	7.0676	11/30/09	925828
146		•		TL-208	0.0040	4 4004	00/00/00	000005
6					2.3243	1.1281	02/23/09	920985
•					1.3210	1.0321	03/23/09	921446
					4.1892	1.4292	06/15/09	922946
					2.6876	1.1532	07/13/09	923413
					1.3681	.9436	08/10/09	923916
					3.6991	1.2943	09/08/09	924418
					1.7742	.9276	11/02/09	925356
			TRITIUM					
					55.0353	85.9548	12/29/08	920082
,					14.6771	84.6122	01/26/09	920544
					61.6168	82.8450	02/23/09	920985
					108.2507	84.5212	03/23/09	921446
					- 38.4136	84.8676	04/20/09	921871
					194.7626	87.4173	05/18/09	922428
		•			254.6734	88.5814	06/15/09	922946

Station 3134	<u>Location</u> TRM 517.9	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
3134	11(W 517.5		TRITIUM					
					118.7449	85.8358	07/13/09	923413
					31.3747	84.4938	08/10/09	923916
					185.1106	84.1149	09/08/09	924418
					202.9917	84.1635	10/05/09	924852
					.7781	83.4756	11/02/09	925356
					36.5356	82.2350	11/30/09	925828
3135	TRM 523.1	·						
	•		GROSS B	ETA				
					3.3030	.7771	12/29/08	920083
147					2.0692	.7339	01/26/09	920545
,					2.8445	.7647	02/23/09	920986
					1.8159	.7118	03/24/09	921447
					2.4750	.7550	04/20/09	921872
					1.9257	.7373	05/19/09	922429
					2.3381	.7580	06/16/09	922947
					2.2248	.7533	07/14/09	923414
					2.5852	.7592	08/10/09	923917
				•	4.5706	.8670	09/08/09	924419
•					1.8944	.7699	10/06/09	924853
•					2.9832	.7773	11/03/09	925357
					2.2659	.7676	12/01/09	925829
			GAMMA S	CAN (GELI) AC-228				
				AU-220	5.2836	6.3801	12/29/08	920083
		•			8.8422	4.5034	02/23/09	920986
					26.5971	7.1301	03/24/09	921447
					20.0071	1.1001	00.200	Om 1 1 1 7

Station 3135	Location TRM 523.1	Description	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
0100	11111 020.1	•	GAMMA	SCAN (GELI)				
•				AC-228	•			
					3.5156	3.3088	04/20/09	921872
					2.9821	3.3346	07/14/09	923414
	·	•			5.4502	4.4882	08/10/09	923917
					9.6585	4.6848	09/08/09	924419
				BI-214			,	
					131.1292	10.6582	12/29/08	920083
					28.9455	4.4988	01/26/09	920545
				T.	23.0294	4.1394	02/23/09	920986
					25.8008	3.9770	03/24/09	921447
<u>.</u>					13.6321	3.8197	04/20/09	921872
148					27.9552	6.0877	05/19/09	922429
1					28.4362	13.5499	06/16/09	922947
	,				14.2738	3.9021	07/14/09	923414
					14.0916	3.5143	08/10/09	923917
					64.4279	5.4068	09/08/09	924419
•					33.7922	6.2194	10/06/09	924853
					21.3423	3.8707	11/03/09	925357
					59.4115	5.4564	12/01/09	925829
				K-40			•	
					5.1761	28.9904	12/29/08	920083
					10.5584	13.1326	02/23/09	920986
					1.0143	13.8287	03/24/09	921447
					17.0779	14.0508	04/20/09	921872
					13.7225	17.1211	07/14/09	923414
					2.7939	13.4265	08/10/09	923917
					35.8886	19.8927	09/08/09	924419

•							
Station	<u>Location</u>	<u>Description</u> An	alysis <u>Nuclide</u>	<b>Activity</b>	<u>Error</u>	Date Collected	Lab Number
3135	TRM 523.1						
		GA	AMMA SCAN (GELI)				
			K-40	10.0044	00.0475	40,000,000	00.4050
				16.0841	22.3475	10/06/09	924853
				17.9974	16.0547	11/03/09	925357
				3.6293	13.4171	12/01/09	925829
	•		PB-212			0.4.00.000	
	•			3.1355	2.3299	01/26/09	920545
			PB-214	440.0040	0.0000	40/00/00	000000
			•	118.8648	9.9203	12/29/08	920083
				19.5512	4.8512	01/26/09	920545
1				10.2006	2.3698	02/23/09	920986
				11.1162	4.5995	03/24/09	921447
149				6.6318	2.7328	04/20/09	921872
1	,			20.7398	4.7988	05/19/09	922429
	•			7.5492	3.8594	06/16/09	922947
				18.2851	4.3002	07/14/09	923414
			•	12.9289	4.9345	08/10/09	923917
				47.6093	6.5129	09/08/09	924419
				23.4776	4.6938	10/06/09	924853
				19.0438	4.4301	11/03/09	925357
•				38.4448	4.6990	12/01/09	925829
			TL-208				
				1.2170	1.1609	05/19/09	922429
		TR	ITIUM				
				90.5822	88.1422	12/29/08	920083
				- 40.9425	83.7860	01/26/09	920545
				51.6056	82.6749	02/23/09	920986
		•		88.7702	84.1538	03/24/09	921447

Station 3135	Location TRM 523.1	<u>Description</u>	<u>Analysis</u>	Nuclide	Activity	<u>Error</u> .	Date Collected	Lab Number
			TRITIUM					
					158.5623	88.3135	04/20/09	921872
•					186.9506	87.2484	05/19/09	922429
	•				266.9891	88.8414	06/16/09	922947
		•	*		55.4073	84.6818	07/14/09	923414
					<b>26.6693</b>	84.4193	08/10/09	923917
					122.1612	82.8830	09/08/09	924419
				a a	263.3271	85.4665	10/06/09	924853
		•			98.8028	85.1189	11/03/09	925357
					76.1060	82.9005	12/01/09	925829

Station 2116	Location DAYTON TN	Description TRM 503.8	Analysis	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GROSS	BETA				
					2.9111	.7468	01/12/09	920275
					2.0598	.7133	02/09/09	920743
	•				2.9254	.7615	03/09/09	921179
					1.9268	.7181	04/06/09	921649
					1.4297	.6986	05/04/09	922195
					4.2434	.8278	06/01/09	922693
		•			3.3455	.8094	06/29/09	923190
					3.2756	.7927	07/27/09	923694
_		•			2.4517	.7477	08/24/09	924170
<u>-</u>					2.2534	.7678	09/21/09	924636
51					3.4036	.8005	10/19/09	925051
1					.8204	.6760	11/16/09	925575
					1.6051	.6872	12/14/09	926018
-			GAMMA	SCAN (GELI) AC-228				
				AC-220	3.5538	2.9949	01/12/09	920275
					9.5516	4.0010	04/06/09	921649
					12.4857	3.9749	07/27/09	923694
					9.9226	5.5180	09/21/09	924636
				BI-212	0.0220	0.0100	00/2 //00	02.000
			*	J  212	48.8455	70.4539	01/12/09	920275
	•	•		BI-214				
					10.0758	3.4377	01/12/09	920275
					42.6632	4.8886	02/09/09	920743
					11.3046	4.2225	03/09/09	921179
					16.2902	3.6184	04/06/09	921649

Station	Location	<u>Description</u>	<u>Analysis</u>	Nuclide	<b>Activity</b>	<u>Error</u>	Date Collected	Lab Number
2116	DAYTON TN	TRM 503.8				•		
			GAMMA S	SCAN (GELI)				
	•			BI-214				
				•	35.7025	13.1281	05/04/09	922195
					27.9831	6.2974	06/01/09	922693
					15.6479	5.4206	06/29/09	923190
					20.3221	5.1571	07/27/09	923694
					28.5998	6.0226	08/24/09	924170
					6.8761	3.0187	09/21/09	924636
					32.7221	4.6093	10/19/09	925051
					32.7126	4.3828	11/16/09	925575
					23.9499	4.5105	12/14/09	926018
<u>-</u>		•		K-40				
152					.1581	17.6474	01/12/09	920275
1					16.0833	15.9936	04/06/09	921649
					17.3587	15.3495	05/04/09	922195
		•			39.5707	18.9547	07/27/09	923694
•					6.6057	20.2260	09/21/09	924636
					3.0061	18.6264	11/16/09	925575
				PB-212				
					2.7829	3.2491	03/09/09	921179
					3.4029	2.0986	07/27/09	923694
					1.3929	2.1839	09/21/09	924636
	*			PB-214			· ·	
		·		•	4.7588	3.1869	01/12/09	920275
*	4			*	35.4019	4.8849	02/09/09	920743
					21.4726	3.0532	03/09/09	921179
					13.8219	4.1062	04/06/09	921649
	,				7.7061	3.6554	05/04/09	922195

Station 2116	Location DAYTON TN	<u>Description</u> TRM 503.8	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	Date Collected	<u>Lab Number</u>
2110	DATION IN	1 KW 503.6	CAMMA	SCAN (GELI)				
			OAWWA (	PB-214				
					14.2945	3.5635	06/01/09	922693
					8.5445	2.8385	07/27/09	923694
					29.5129	6.1554	08/24/09	924170
					14.3950	3.8760	09/21/09	924636
					31.5462	5.9114	10/19/09	925051
					13.4296	3.8614	11/16/09	925575
					23.1731	5.7028	12/14/09	926018
				TL-208	•			8
í					1.1731	1.2924	03/09/09	921179
			TRITIUM				•	
153								
. !		•			- 43.3102	83.7554	01/12/09	920275
*					- 10.0207	84.0527	02/09/09	920743
					143.2228	83.7304	03/09/09	921179
					34.0106	84.1964	03/09/09	921184
					65.8273	85.5509	04/06/09	921649
					131.7446	85.6206	05/04/09	922195
					279.8587	89.0679	06/01/09	922693
					161.3636	88.9218	06/01/09	922698
					- 5.4518	83.4839	06/29/09	923190
					76.2492	85.4392	07/27/09	923694
					93.7234	83.4348	08/24/09	924170
•					172.6837	85.3441	08/24/09	924174
					255.2820	86.7148	09/21/09	924636
					172.3262	86.7131	10/19/09	925051
					53.3966	82.6948	11/16/09	925575
					· ·	*		

Station 2116	Location DAYTON TN	Description TRM 503.8	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
2110	DATION IN	11(W 505.0	TRITIUM			•		
					147.0797	87.9982	12/14/09	926018
					156.9872	85.4798	12/14/09	926022
2140	CF INDUSTRIES	TRM 473.0						
			GROSS	BETA				
					2.8256	.7477	01/13/09	920220
-					1.0044	.6609	02/10/09	920688
	•				1.4242	.6965	03/09/09	921125
					2.2936	.7431	04/06/09	921594
<u> </u>					2.3900	.7436	05/04/09	922139
154					2.0771	.7192	06/02/09	922639
T				•	1.2286	.7023	06/29/09	923115
					3.0105	.7724	07/27/09	923639
					2.5310	.7572	08/24/09	924114
					1.6197	.6974	09/22/09	924581
					2.2606	.7029	10/20/09	924995
					1.5046	.6642	11/16/09	925520
				-	1.3015	.6582	12/14/09	925963
			GAMMA	SCAN (GELI) AC-228				,
					8.1626	5.4229	06/02/09	922639
					9.9164	5.8040	08/24/09	924114
					13.2418	4.9460	09/22/09	924581
					5.1127	3.6417	12/14/09	925963
				BI-214				
					28.9799	4.1673	01/13/09	920220
					22.5333	4.2678	02/10/09	920688

Station 2140	Location CF INDUSTRIES	Description TRM 473.0	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
_,,,			GAMMA S	SCAN (GELI)			•	
				BI-214				
	· ·		•		29.6649	6.0406	03/09/09	921125
					47.1683	6.8007	04/06/09	921594
					12.6462	3.4653	05/04/09	922139
					43.7131	6.5072	06/02/09	922639
÷					9.3575	4.3670	06/29/09	923115
					14.6803	4.3303	07/27/09	923639
					22.4228	4.2026	08/24/09	924114
					14.9886	3.8343	09/22/09	924581
					51.5870	5.4271	10/20/09	924995
<u>.</u>					33.8005	6.2242	11/16/09	925520
55					18.8748	2.9277	12/14/09	925963
ı				K-40				
					6.5332	15.5916	06/02/09	922639
					4.2921	16.5991	09/22/09	924581
					25.0004	26.0666	10/20/09	924995
					10.6111	15.0266	11/16/09	925520
					65.2383	25.4655	12/14/09	925963
				PB-212				
					4.6374	2.6892	01/13/09	920220
				•	.2629	2.1287	02/10/09	920688
					1.0710	2.0853	03/09/09	921125
					.9162	2.3858	08/24/09	924114
					2.8522	2.0770	09/22/09	924581
					4.6647	2.1786	12/14/09	925963
				PB-214				•
					24.2098	5.9104	01/13/09	920220

Station	<u>Location</u>	<u>Description</u>	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
2140	CF INDUSTRIES	TRM 473.0						
			GAMMA S	SCAN (GELI)				
				PB-214	45 7040	0.0500	00/40/00	000000
					15.7346	3.6506	02/10/09	920688
					12.7145	3.3386	03/09/09	921125
					49.0935	6.5730	04/06/09	921594
					9.1349	3.5307	05/04/09	922139
	•				22.3349	4.5037	06/02/09	922639
					14.5388	5.6904	06/29/09	923115
					9.6770	3.6731	07/27/09	923639
					12.8012	3.3154	08/24/09	924114
					15.0818	3.2187	09/22/09	924581
<u>-</u>					42.8826	5.0353	10/20/09	924995
156					20.0711	4.1776	11/16/09	925520
1					18.3826	4.1808	12/14/09	925963
	•			TL-208				•
					.4094	1.1114	03/09/09	921125
٠.					2.6702	1.0195	09/22/09	924581
					1.0428	1.2612	10/20/09	924995
					3.4923	1.5312	12/14/09	925963
			TRITIUM					
		•			67.2762	85.4678	01/13/09	920220
					- 38.5363	83.6264	02/10/09	920688
					225.9391	85.4340	03/09/09	921125
		+			151.5019	86.2947	03/09/09	921183
					358.1344	91.6266	04/06/09	921594
					177.9666	86.5181	05/04/09	922139
		·			362.9853	91.0009	06/02/09	922639

Station 2140	Location CF INDUSTRIES	<u>Description</u> TRM 473.0	Analysis Nuclide TRITIUM	<u>Activity</u>	<u>Error</u>	Date Collected	<u>Lab Number</u>
			11010				
				249.5585	90.7187	06/02/09	922697
				189.2548	86.9792	06/29/09	923115
				275.1242	89.4275	07/27/09	923639
				92.9675	83.4212	08/24/09	924114
				98.0300	83.9343	08/24/09	924173
	-			270.2633	87.0343	09/22/09	924581
				192.5735	87.1118	10/20/09	924995
		•		145.6983	84.3783	11/16/09	925520
1		,		134.2219	87.7512	12/14/09	925963
1.5				251.6413	87.4485	12/14/09	926021
57 3133	TRM 529.3		GROSS BETA				
			OROGO BETA				
				2.8753	.7493	12/30/08	920080
				2.6262	.7434	01/26/09	920542
				1.4621	.6896	02/23/09	920983
				2.2086	.7312	03/23/09	921444
				2.1294	.7380	04/20/09	921869
				2.0663	.7163	05/18/09	922426
				1.8892	.7047	06/15/09	922944
				1.3841	.7026	07/13/09	923411
			•	3.4190	.7936	08/10/09	923914
		,		2.9761	.7752	09/08/09	924416
				.2001	.6671	10/06/09	924850
				1.5029	.6856	11/03/09	925354
				1.6774	.7175	12/01/09	925826

Station 3133	Location TRM 529.3	Description	<u>Analysis</u>	Nuclide	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number	
	02010		GAMMA S	SCAN (GELI)				•	
				AC-228					
					6.5284	3.5159	12/30/08	920080	
					7.4363	3.7965	02/23/09	920983	
					5.4208	4.3749	03/23/09	921444	
					10.7579	4.7390	04/20/09	921869	
					13.3977	5.8010	05/18/09	922426	
			•		3.8645	3.7731	11/03/09	925354	
		•			5.9220	3.8932	12/01/09	925826	
				BI-214					
	•				31.9891	4.0171	12/30/08	920080	
<u> </u>					12.9323	3.7950	01/26/09	920542	
58					19.3788	5.5644	02/23/09	920983	
•					14.9437	2.7147	03/23/09	921444	
		•			9.4733	3.6071	04/20/09	921869	
					25.9541	3.7215	05/18/09	922426	
					11.2836	2.9756	06/15/09	922944	
					19.0543	3.7801	07/13/09	923411	
					31.1813	5.4035	08/10/09	923914	
					28.7542	4.8720	09/08/09	924416	
					18.7536	3.8344	10/06/09	924850	
					18.1568	4.1458	11/03/09	925354	
					50.3997	6.2356	12/01/09	925826	
	,			K-40					
					71.6922	20.3614	12/30/08	920080	
					16.2165	18.3460	01/26/09	920542	
		·			64.7993	20.2999	02/23/09	920983	
				•	20.8538	27.4754	03/23/09	921444	

Station 3133	Location TRM 529.3	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	<u>Lab Number</u>
			GAMMA S	SCAN (GELI) K-40				
				11-40	18.5050	17.3270	04/20/09	921869
					21.4708	19.8523	05/18/09	922426
					39.6284	26.8784	08/10/09	923914
					9.7425	19.2202	09/08/09	924416
					3.2594	25.5196	10/06/09	924850
			4		2.3190	21.6535	11/03/09	925354
		•			7.2469	17.4971	12/01/09	925826
•				PB-212			•	
1					3.7775	2.1498	12/30/08	920080
					2.2304	2.1214	02/23/09	920983
159					1.2714	2.2209	03/23/09	921444
1					4.6093	1.6910	05/18/09	922426
	•				1.8104	1.9801	06/15/09	922944
					.1243	1.9045	07/13/09	923411
					2.4278	1.6619	08/10/09	923914
					2.1535	2.2367	09/08/09	924416
				PB-214	•			•
					23.0016	4.0295	12/30/08	920080
					12.9928	2.9619	01/26/09	920542
					16.0976	3.3279	02/23/09	920983
					11.7230	2.7055	03/23/09	921444
					4.9625	3.7102	04/20/09	921869
					14.8978	4.0249	05/18/09	922426
		•			4.7146	2.2745	06/15/09	922944
					15.4441	3.8693	07/13/09	923411
					22.7661	4.5314	08/10/09	923914

ror Date Collected	Lab Number
26 09/08/09	924416
25 10/06/09	924850
08 11/03/09	925354
78 12/01/09	925826
20 12/30/08	920080
68 02/23/09	920983
41 05/18/09	922426
55 07/13/09	923411
21 08/10/09	923914
83 09/08/09	924416
18 10/06/09	924850
51 12/30/08	920080
23 01/26/09	920542
78 02/23/09	920983
41 03/23/09	921444
99 04/20/09	921869
08 05/18/09	922426
57 06/15/09	922944
29 07/13/09	923411
79 08/10/09	923914
57 09/08/09	924416
08 10/06/09	924850
19 11/03/09	925354
84 77 66 57 57 57 57 57 57 57 57 57 57 57 57 57	841 05/18/09 255 07/13/09 721 08/10/09 683 09/08/09 518 10/06/09 251 12/30/08 523 01/26/09 378 02/23/09 941 03/23/09 499 04/20/09 308 05/18/09 357 06/15/09 929 07/13/09 179 08/10/09 257 09/08/09 908 10/06/09

Station 3133	Location TRM 529.3	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
		•	TRITIUM					
					43.3807	82.3389	12/01/09	925826

Station 3121	Location WBN WELL #1	Description 0.6 MILES S	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	<u>Date Collected</u>	<u>Lab Number</u>
			GROSS F	BETA				
					4.0418	.8710	01/20/09	920391
					2.4397	.9331	02/17/09	920833
					2.0170	.9512	03/16/09	921276
					3.3875	1.0533	04/14/09	921743
					4.0785	1.0141	05/11/09	922296
					1.6028	.9144	06/08/09	922794
					2.7603	1.0038	07/07/09	923281
					3.4353	1.0273	08/04/09	923780
					3.9439	1.0437	09/01/09	924265
<u>-</u>					2.0139	.9558	09/29/09	924724
162					2.5780	.9605	10/27/09	925218
1					1.7935	.9430	11/24/09	925693
					2.8937	.9579	12/21/09	926155
			GAMMA	SCAN (GELI)				
				AC-228				
			•		16.6622	4.3081	01/20/09	920391
					9.8102	3.9986	06/08/09	922794
	,				1.1352	3.1867	07/07/09	923281
					5.1005	4.5339	08/04/09	923780
				·	7.7622	4.2155	09/01/09	924265
				BI-214				
					67.9681	7.0258	01/20/09	920391
					10.7188	3.4218	02/17/09	920833
					30.3729	4.4129	03/16/09	921276
					27.7480	4.4399	04/14/09	921743
		•			7.7370	4.1000	05/11/09	922296

Station 3121	Location WBN WELL #1	Description 0.6 MILES S	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI) BI-214				
	·				4.4966	3.0733	06/08/09	922794
					8.4872	3.2047	07/07/09	923281
					19.5244	4.4887	08/04/09	923780
					28.0414	3.9429	09/01/09	924265
					27.2428	3.8768	09/29/09	924724
		•			16.8755	4.5735	10/27/09	925218
					21.9754	4.8805	11/24/09	925693
	•				23.9796	5.2471	12/21/09	926155
				K-40				
<u>_</u>					83.1078	27.6382	01/20/09	920391
163					14.2067	12.4440	02/17/09	920833
i					27.1178	20.7299	03/16/09	921276
					18.9588	22.1822	04/14/09	921743
					39.0985	22.3730	06/08/09	922794
					10.2683	16.4775	07/07/09	923281
					15.3710	11.9172	09/01/09	924265
					13.1658	15.3039	09/29/09	924724
				PB-212				
					5.2314	2.4911	01/20/09	920391
					4.8330	2.0692	03/16/09	921276
	•				5.8274	2.6932	04/14/09	921743
					1.6340	2.4636	05/11/09	922296
		•			6.8756	2.3658	06/08/09	922794
					3.9463	2.6261	08/04/09	923780
			•		.2715	2.2037	10/27/09	925218
					.9617	2.1549	11/24/09	925693

Station	<u>Location</u>	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	<u>Lab Number</u>
3121	WBN WELL #1	0.6 MILES S						
			GAMMA S	CAN (GELI)				
				PB-212				
					1.6831	2.2560	12/21/09	926155
	•			PB-214				
					36.8891	4.4478	01/20/09	920391
					8.1500	2.4652	02/17/09	920833
	•				20.8774	3.5225	03/16/09	921276
	•	•			14.9392	3.3748	04/14/09	921743
	•				11.6213	3.6406	05/11/09	922296
					2.3006	2.9465	06/08/09	922794
					7.3386	4.5590	07/07/09	923281
<u>.</u>					12.4248	2.8688	08/04/09	923780
164					23.9442	3.7337	09/01/09	924265
1	•				25.9125	4.8015	09/29/09	924724
					13.9411	6.3301	10/27/09	925218
			•		22.4306	5.2681	11/24/09	925693
					22.5253	4.9248	12/21/09	926155
		•		TL-208				
					5.0305	1.1307	01/20/09	920391
					3.6855	1.1879	03/16/09	921276
					.8703	1.1978	04/14/09	921743
					1.1130	1.2280	05/11/09	922296
					3.4859	1.7270	06/08/09	922794
		·			1.6326	1.8097	08/04/09	923780
					3.3398	1.7187	12/21/09	926155
			TRITIUM					
				ŀ	74.4415	83.0835	01/20/09	920391

Station 3121	Location WBN WELL #1	Description 0.6 MILES S	Analysis	Nuclide	·	Activity	<u>Error</u>	Date Collected	Lab Number
	•		TRITIUM						
						413.7586	91.0143	02/17/09	920833
*						347.3548	88.7619	03/16/09	921276
						392.1407	92.3590	04/14/09	921743
						187.7880	86.6305	05/11/09	922296
						244.9127	88.4623	06/08/09	922794
						230.2544	87.7364	07/07/09	923281
						243.3888	88.6274	08/04/09	923780
						199.2992	85.3736	09/01/09	924265
		•				216.0260	84.5159	09/29/09	924724
						140.9661	85.9976	10/27/09	925218
165						208.7571	85.5539	11/24/09	925693
1						181.4461	88.5902	12/21/09	926155
3125	WBN WELL #5	0.5 miles N							
			GROSS I	BETA				•	
						4.9569	1.1212	01/20/09	920392
						1.6313	.6789	02/17/09	920834
	·					7.0633	.9573	03/16/09	921277
						1.7454	.7252	04/13/09	921744
						2.2818	.7397	05/11/09	922297
						1.9141	.7322	06/08/09	922795
	·					.5958	.6171	07/07/09	923282
						1.8658	.7137	08/04/09	923781
						2.6826	.7593	09/01/09	924266
						3.0202	.7907	09/29/09	924725
						1.9955	.7248	10/27/09	925219

Station 3125	Location WBN WELL #5	Description 0.5 miles N	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	Date Collected	<u>Lab Number</u>
3123	VVDIV VVLLE#0	o.o mileo N	GROSS I	BETA				
,	,				.8287	.6833	11/24/09	925694
					1.1331	.6750	12/21/09	926156
			GAMMA	SCAN (GELI) AC-228				
				,	17.4601	7.7151	01/20/09	920392
					7.7101	4.1211	05/11/09	922297
					11.0005	4.5040	08/04/09	923781
					7.4188	4.1141	09/01/09	924266
					7.6543	4.1445	12/21/09	926156
				BI-212				
166					27.8296	11.2494	10/27/09	925219
1				BI-214				
					66.7745	6.9256	01/20/09	920392
					29.2632	4.3962	02/17/09	920834
				•	18.7623	4.6015	03/16/09	921277
					26.4308	4.5436	04/13/09	921744
	•				9.9874	3.8997	05/11/09	922297
•					7.6436	3.2650	06/08/09	922795
					12.6493	4.8071	07/07/09	923282
					11.8857	2.8255	08/04/09	923781
					19.8482	3.8580	09/01/09	924266
					17.3841	3.7655	09/29/09	924725
					14.5938	5.2838	10/27/09	925219
					91.3629	6.5033	11/24/09	925694
					8.9312	3.2968	12/21/09	926156
				K-40				-
					6.1512	17.1797	01/20/09	920392

					•			
<u>Station</u>	<u>Location</u>	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
3125	WBN WELL#5	0.5 miles N						
			GAMMA S	SCAN (GELI)				
		•	•	K-40				
		•			26.6204	18.7073	04/13/09	921744
					21.5815	15.1657	07/07/09	923282
		•			28.2394	18.2079	08/04/09	923781
					40.9330	24.3781	09/01/09	924266
	•				55.8468	18.2763	10/27/09	925219
					6.6520	14.0886	12/21/09	926156
				PB-212				
					4.4270	1.3780	04/13/09	921744
					3.9931	2.2062	08/04/09	923781
<u> </u>					4.5296	1.5194	09/01/09	924266
167	. •				1.3725	2.4551	09/29/09	924725
1					2.5194	1.6081	10/27/09	925219
				PB-214				
					35.7770	4.4619	01/20/09	920392
					28.4909	5.4380	02/17/09	920834
					19.0113	3.6115	03/16/09	921277
					14.8834	3.5118	04/13/09	921744
					5.3067	3.5188	05/11/09	922297
					8.7687	2.6680	07/07/09	923282
					14.3757	4.1160	08/04/09	923781
			·	•	15.9150	3.8072	09/01/09	924266
		•		•	18.7633	3.4170	09/29/09	924725
					10.9203	3.1087	10/27/09	925219
					50.1132	5.2194	11/24/09	925694
				•		3.4373	12/21/09	926156
					4.5556	3.43/3	12/21/08	320130

Station 3125	Location WBN WELL #5	<u>Description</u> 0.5 miles N	Analysis Nuc	ilide Activity	Error	Date Collected	Lab Number
3125	VVDIV VVLLE#3	0.5 Times IV	GAMMA SCAN			· .	
				3.9605	1.5016	02/17/09	920834
				2.4589	1.2697	04/13/09	9217 <del>44</del>
		·		3.8763	1.4510	08/04/09	923781
				3.8803	1.3176	09/01/09	924266
			,	2.1333	1.2551	10/27/09	925219
				1.9472	1.9111	11/24/09	925694
			TRITIUM				
				287.0236	87.4108	01/20/09	920392
1				2.2944	82.4787	02/17/09	920834
168			•	20.5671	82.1313	03/16/09	921277
ĭ				- 25.8336	83.9964	04/13/09	921744
		·		- 16.9315	83.0134	05/11/09	922297
				90.3931	85.4212	06/08/09	922795
				4.6673	83.5394	07/07/09	923282
				49.4627	84.8756	08/04/09	923781
				- 7.5491	81.6572	09/01/09	924266
				19.6386	80.8180	09/29/09	924725
				65.4202	84.6167	10/27/09	925219
				35.8084	82.3003	11/24/09	925694
	•			64.2291	86.3821	12/21/09	926156
3263	WBN MW-A	0.6 MILES SSE					
			GROSS BETA				
				2.3707	.7231	01/20/09	920399
				.6444	.7265	02/17/09	920841
		·		.0294	.7248	03/16/09	921284

Station 3263	Location WBN MW-A	Description 0.6 MILES SSE	Analysis GROSS I	Nuclide BETA	<u>Activity</u>	Error	Date Collected	<u>Lab Number</u>
			0110001	JE IA				
					1.4178	.8462	04/14/09	921751
					1.6307	.7963	05/11/09	922304
				,	.8260	.7849	06/08/09	922802
					.6113	.6891	07/07/09	923289
					1.2072	.7952	08/04/09	923788
		•			1.7467	.8242	09/01/09	924273
					.3236	.8426	09/29/09	924732
					1.1571	.7993	10/27/09	925232
					.8680	.8261	11/24/09	925701
<u>.</u>					1.0224	.7920	12/21/09	926163
169 -			GAMMA	SCAN (GELI) AC-228				
				•	15.3699	5.4703	07/07/09	923289
					7.1125	5.0395	09/01/09	924273
					11.2008	3.9283	09/29/09	924732
	•				3.6707	4.3375	11/24/09	925701
				BI-214				
					97.4482	9.2735	01/20/09	920399
					14.8449	2.8737	02/17/09	920841
					52.3580	6.4019	03/16/09	921284
		. *			36.9233	6.7104	04/14/09	921751
					12.2198	3.9631	05/11/09	922304
					5.0622	3.1812	06/08/09	922802
	÷				15.0747	3.8873	07/07/09	923289
					19.4986	3.9173	08/04/09	923788
					20.8138	4.4846	09/01/09	924273

Station 3263	<u>Location</u> WBN MW-A	Description 0.6 MILES SSE	<u>Analysis</u>	Nuclide	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
, 0200	VVDIA IMAA-7	0.0 MILLO COL	GAMMA S	SCAN (GELI)	<i>,</i> ;			
				BI-214	0.4.5000	4.40.00	00/00/00	
					24.5203	4.1853	09/29/09	924732
					21.4709	4.5709	10/27/09	925232
					67.6180	7.2242	11/24/09	925701
					25.0466	4.9233	12/21/09	926163
				K-40				
					20.8230	19.0470	03/16/09	921284
			•		15.7626	16.5806	04/14/09	921751
					23.5767	17.8431	09/01/09	924273
	•				37.1706	19.2149	09/29/09	924732
<u> </u>					53.2239	24.5028	11/24/09	925701
170					107.7079	33.2093	12/21/09	926163
1				PB-212				
					1.4244	2.4894	02/17/09	920841
					3.2333	1.8221	03/16/09	921284
					2.0378	2.1338	05/11/09	922304
					6.0669	2.1691	06/08/09	922802
					7.4611	3.7203	09/29/09	924732
					4.1537	2.0523	11/24/09	925701
					3.4612	3.2837	12/21/09	926163
				PB-214				
					88.9349	7.4845	01/20/09	920399
					14.5313	4.6382	02/17/09	920841
					39.8844	5.8368	03/16/09	921284
					29.2167	4.7055	04/14/09	921751
					9.3252	3.6103	05/11/09	922304
					6.1719	2.7446	06/08/09	922802
					0.11.10	2	00.00.00	

Station 3263	Location WBN MW-A	Description 0.6 MILES SSE	Analysis	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI) PB-214				
				1 0-214	8.9227	4.1065	07/07/09	923289
					22.4554	6.1760	08/04/09	923788
	·				13.8605	4.3998	09/01/09	924273
				•	21.4970	3.4591	09/29/09	924732
					10.5713	3.4022	10/27/09	925232
					46.0530	5.1059	11/24/09	925701
		•			22.5838	4.8984	12/21/09	926163
,				TL-208		4.0004	12.2.1700	020100
				12 200	1.8918	1.6486	02/17/09	920841
1					2.0973	.9953	11/24/09	925701
71			TRITIUM					
1								
					43.7444	82.5550	01/20/09	920399
					76.4812	83.7061	02/17/09	920841
				•	51.0366	82.6339	03/16/09	921284
					5.4790	84.4591	04/14/09	921751
		•			33.8635	83.8087	05/11/09	922304
					- 46.3558	83.2439	06/08/09	922802
					147,7991	86.0537	07/07/09	923289
					38.4713	84.6922	08/04/09	923788
•					- 23.4027	81.4214	09/01/09	924273
					- 30.9688	80.0357	09/29/09	924732
					15.5764	83.7888	10/27/09	925232
					6.0951	81.8224	11/24/09	925701
					15.2543	85.5624	12/21/09	926163

Station 3264	Location WBN MW-B	Description 0.5 MILES SSE	Analysis	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GROSS E	BETA		·		
					3.5677	.9447	01/20/09	920400
					2.4609	.8522	02/17/09	920842
		•			3.3494	.9008	03/16/09	921285
					2.1899	.9380	04/14/09	921752
	*				1.9682	.8435	05/11/09	922305
					2.3359	.9185	06/08/09	922803
				•	2.6633	.9241	07/07/09	923290
					3.7764	1.0004	08/04/09	923789
_					2.1187	.8801	09/01/09	924274
<u></u>					2.4523	.9966	09/29/09	924733
172 -					2.6558	.8990	10/27/09	925233
i					2.2403	9886	11/24/09	925702
•					1.8427	.8678	12/21/09	926164
			GAMMA	SCAN (GELI) AC-228				
					12.9906	5.9489	03/16/09	921285
				•	12.5190	4.2680	06/08/09	922803
					5.4930	6.5124	09/01/09	924274
				BI-214				
÷					60.9288	6.2400	01/20/09	920400
					13.8578	3.9048	02/17/09	920842
					28.2879	4.2732	03/16/09	921285
				•	69.2152	7.9487	04/14/09	921752
					15.4263	3.7603	05/11/09	922305
	•				16.9542	3.6970	06/08/09	922803
•					. 16.2663	4.3470	07/07/09	923290

								•	
<u>Station</u>	<u>Location</u>	Description	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number	
3264	WBN MW-B	0.5 MILES SSE							ł
			GAMMA	SCAN (GELI)	)				
				BI-214					
,					18.5319	4.3559	08/04/09	923789	
	•				24.2996	5.0304	09/01/09	924274	
					62.7690	5.8180	09/29/09	924733	
	•	-			17.0750	4.4743	10/27/09	925233	
					80.6073	8.4304	11/24/09	925702	
					34.8023	5.7479	12/21/09	926164	
				K-40			•	•	
					15.9143	19.1497	01/20/09	920400	
					50.9616	21.2026	03/16/09	921285	
<u> </u>		. •			8.4303	18.6426	05/11/09	922305	
173					11.3244	18.6430	09/01/09	924274	
1					12.9472	17.8866	11/24/09	925702	
					15.5639	15.1247	12/21/09	926164	
				PB-212		,			
					7.1851	2.3616	03/16/09	921285	
					.3106	2.2389	05/11/09	922305	
•					.6013	2.1305	06/08/09	922803	
					1.3493	1.7881	09/01/09	924274	
				PB-214			•		
,					35.0762	4.1898	01/20/09	920400	
					19.7121	4.3366	02/17/09	920842	
					24.0144	3.8990	03/16/09	921285	
					50.4090	7.2415	04/14/09	921752	
					16.1176	3.6289	05/11/09	922305	
					11.7642	3.3850	06/08/09	922803	
	•				14.7087	3.1617	07/07/09	923290	
					· ·				

Station 3264	Location WBN MW-B	Description 0.5 MILES SSE	Analysis	Nuclide SCAN (GELI)	<u>Activity</u>	Error	Date Collected	Lab Number
			GAMMA	PB-214				
				10-214	15.6315	3.0673	08/04/09	923789
					19.5264	4.1214	09/01/09	924274
					41.3274	4.2761	09/29/09	924733
					17.6256	4.6551	10/27/09	925233
					65.0423	8.0637	11/24/09	925702
					32.3311	4.9134	12/21/09	926164
		•		TL-208				
					3.6581	1.5219	03/16/09	921285
				•	.2534	1.3378	06/08/09	922803
<u> </u>					1.4670	1.6678	09/01/09	924274
174					1.9743	1.2858	09/29/09	924733
1					1.0250	1.4817	10/27/09	925233
			TRITIUM				• -	
*					3277.7564	205.4085	01/20/09	920400
		•			3349.8695	208.9316	02/17/09	920842
•		*.			3417.1643	211.7387	03/16/09	921285
					3353.1613	210.3504	04/14/09	921752
					3414.8255	212.4244	05/11/09	922305
				•	3146.7848	200.3505	06/08/09	922803
•	· ·				2901.5258	189.0540	07/07/09	923290
					2763.6463	183.2565	08/04/09	923789
					3112.5461	197.4054	09/01/09	924274
					2602.8902	173.5905	09/29/09	924733
	-			•	2573.2242	174.2897	10/27/09	925233
	•				2770.9871	181.9302	11/24/09	925702

Station 3264	Location WBN MW-B	<u>Description</u> 0.5 MILES SSE	<u>Analysis</u> <u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			TRITIUM	*			
3265	WBN MW-C	0.3 MILES ESE		3400.9125	213.5262	12/21/09	926164
3203	AADIA MAAA-C	0.3 MILES ESE	GROSS BETA				
		•		1.2939	.7082	02/17/09	920843
				1.0784	.7082	03/17/09	921286
		•		.7169	.7388	04/14/09	921753
				2.2119	.7657	05/11/09	922306
				3.0968	.8471	06/08/09	922804
<u> </u>		•		2.7140	.8124	07/07/09	923291
175				1.7456	.7267	08/04/09	923790
ĭ	·			2.9192	.7991	09/01/09	924275
	•			3.2385	.8350	09/29/09	924734
				4.2768	.8799	10/27/09	925234
				3.0620	.8371	11/24/09	925703
				1.7516	.7275	12/22/09	926165
			GAMMA SCAN (GELI)	•			
			AC-228				
				4.9205	3.3775	03/17/09	921286
		•	•	9.9423	4.3896	05/11/09	922306
				7.1183	4.3090	07/07/09	923291
		`		11.1214	4.2539	08/04/09	923790
				10.6045	5.4556	09/29/09	924734
			•	15.4854	4.8403	12/22/09	926165
			BI-214				
				15.8833	4.1889	02/17/09	920843
				29.9767	4.6671	03/17/09	921286
							· · · · · · · · · · · · · · · · · · ·

### Table 14 RADIOACTIVITY IN CONTIN. WELL WATER(Total) WATTS BAR NUCLEAR PLANT PCI/L - 0.037 BQ/L

12/28/2008 - 12/25/2009

	Station 3265	Location WBN MW-C	Description 0.3 MILES ESE	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
1		•		GAMMA :					
10.7275						23.8280	3.8587	04/14/09	921753
11.6623						18.2996	4.3069	05/11/09	922306
12.2032						10.7275	2.6266	06/08/09	922804
17.1652   6.0674   09/01/09   924275     24.2643   3.7489   09/29/09   924734     24.2620   4.2592   10/27/09   925234     21.2620   3.2592   10/27/09   925234     31.506   5.3804   11/24/09   926165     3.840   12/22/09   926165     5.7462   15.7848   03/17/09   92186     30.2009   14.8652   04/14/09   921753     55.6998   23.3594   05/11/09   922306     55.6998   23.3594   05/11/09   922306     67.5112   23.3570   07/07/09   923291     67.5112   23.3570   07/07/09   923291     67.5112   23.3570   07/07/09   923291     67.5112   23.3570   07/07/09   923291     67.5112   23.3570   07/07/09   923291     67.5112   23.3570   07/07/09   923291     67.5112   23.3570   07/07/09   923291     67.5112   23.3570   07/07/09   923291     67.5112   23.3570   07/07/09   923291     67.5112   23.3570   07/07/09   923291     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.5112   23.3570   07/07/09   925234     67.511						11.6623	2.8058	07/07/09	923291
PB-212   PB-212   PA-2643   3.7489   09/29/09   924734   24.2643   3.7489   09/29/09   924734   21.2620   4.2592   10/27/09   925234   43.1506   5.3804   11/24/09   925703   61.62257   3.3840   12/22/09   926165   7.1462   15.7848   03/17/09   921286   30.2009   14.8652   04/14/09   921753   92.306   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.804   92.80						12.2032	4.2919	08/04/09	923790
21.2620 4.2592 10/27/09 925234 43.1506 5.3804 11/24/09 925703 16.2257 3.3840 12/22/09 926165  K-40  K-40  7.1462 15.7848 03/17/09 921286 30.2009 14.8652 04/14/09 921753 55.6998 23.3594 05/11/09 922306 55.6998 23.3594 05/11/09 922306 67.5112 23.3570 07/07/09 923291 67.5112 23.3570 07/07/09 923291 67.5112 23.3570 07/07/09 923291 67.5112 23.3570 07/07/09 923291 67.5112 23.3570 07/07/09 923291 67.5051 20.7421 09/29/09 924734 9.9674 14.8006 10/27/09 925234 20.6841 15.7992 11/24/09 925703 3.9902 13.0991 12/22/09 925703 3.9902 13.0991 12/22/09 925703 4.4316 1.7389 06/08/09 922804 4.4316 1.7389 06/08/09 922804						27.1652	6.0674	09/01/09	924275
143.1506		•				24.2643	3.7489	09/29/09	924734
16.2257   3.3840   12/22/09   926165     K-40						21.2620	4.2592	10/27/09	925234
K-40  K-40    16.2257   3.3840   12/22/09   926165     15.7848   03/17/09   921286     30.2009   14.8652   04/14/09   921753     55.6998   23.3594   05/11/09   922306     78.2020   21.6039   06/08/09   922804     67.5112   23.3570   07/07/09   923291     36.9217   19.1250   08/04/09   923790     57.3051   20.7421   09/29/09   924734     9674   14.8006   10/27/09   925234     20.6841   15.7992   11/24/09   925703     3.9902   13.0991   12/22/09   926165     PB-212    PB-212    FB-212   5.4783   1.6683   05/11/09   922306     4.4316   1.7389   06/08/09   922804     4.4316   1.7389   06/08/09   922804     2.8421   1.1422   07/07/09   923291				•		43.1506	5.3804	11/24/09	925703
7.1462 15.7848 03/17/09 921286 30.2009 14.8652 04/14/09 921753 55.6998 23.3594 05/11/09 922306 78.2020 21.6039 06/08/09 922804 67.5112 23.3570 07/07/09 923291 36.9217 19.1250 08/04/09 923790 57.3051 20.7421 09/29/09 924734 9.9674 14.8006 10/27/09 925234 20.6841 15.7992 11/24/09 925703 3.9902 13.0991 12/22/09 926165  PB-212  PB-212  PB-212  5.4783 1.6683 05/11/09 922306 4.4316 1.7389 06/08/09 922804 2.8421 1.1422 07/07/09 923291						16.2257	3.3840	12/22/09	926165
30.2009 14.8652 04/14/09 921753 55.6998 23.3594 05/11/09 922306 78.2020 21.6039 06/08/09 922804 67.5112 23.3570 07/07/09 923291 36.9217 19.1250 08/04/09 923790 57.3051 20.7421 09/29/09 924734 .9674 14.8006 10/27/09 925234 20.6841 15.7992 11/24/09 925703 3.9902 13.0991 12/22/09 926165 PB-212  PB-212  5.4783 1.6683 05/11/09 922306 4.4316 1.7389 06/08/09 922804 2.8421 1.1422 07/07/09 923291	76				K-40				
55.6998 23.3594 05/11/09 922306 78.2020 21.6039 06/08/09 922804 67.5112 23.3570 07/07/09 923291 36.9217 19.1250 08/04/09 923790 57.3051 20.7421 09/29/09 924734 9674 14.8006 10/27/09 925234 20.6841 15.7992 11/24/09 925703 3.9902 13.0991 12/22/09 926165  PB-212  5.4783 1.6683 05/11/09 922306 4.4316 1.7389 06/08/09 922804 2.8421 1.1422 07/07/09 923291	ı								
78.2020 21.6039 06/08/09 922804 67.5112 23.3570 07/07/09 923291 36.9217 19.1250 08/04/09 923790 57.3051 20.7421 09/29/09 924734 9674 14.8006 10/27/09 925234 20.6841 15.7992 11/24/09 925703 3.9902 13.0991 12/22/09 926165  PB-212  5.4783 1.6683 05/11/09 922306 4.4316 1.7389 06/08/09 922804 2.8421 1.1422 07/07/09 923291									
PB-212  67.5112 23.3570 07/07/09 923291 36.9217 19.1250 08/04/09 923790 57.3051 20.7421 09/29/09 924734 .9674 14.8006 10/27/09 925234 20.6841 15.7992 11/24/09 925703 3.9902 13.0991 12/22/09 926165 PB-212  5.4783 1.6683 05/11/09 922306 4.4316 1.7389 06/08/09 922804 2.8421 1.1422 07/07/09 923291						· ·			
936.9217 19.1250 08/04/09 923790 57.3051 20.7421 09/29/09 924734 9674 14.8006 10/27/09 925234 20.6841 15.7992 11/24/09 925703 3.9902 13.0991 12/22/09 926165  PB-212  5.4783 1.6683 05/11/09 922306 4.4316 1.7389 06/08/09 922804 2.8421 1.1422 07/07/09 923291						78.2020	21.6039	06/08/09	
57.3051 20.7421 09/29/09 924734 9674 14.8006 10/27/09 925234 20.6841 15.7992 11/24/09 925703 3.9902 13.0991 12/22/09 926165  PB-212  5.4783 1.6683 05/11/09 922306 4.4316 1.7389 06/08/09 922804 2.8421 1.1422 07/07/09 923291						67.5112	23.3570	07/07/09	923291
PB-212  1.4.8006 10/27/09 925234 20.6841 15.7992 11/24/09 925703 3.9902 13.0991 12/22/09 926165  PB-212  5.4783 1.6683 05/11/09 922306 4.4316 1.7389 06/08/09 922804 2.8421 1.1422 07/07/09 923291						36.9217	19.1250	08/04/09	923790
20.6841 15.7992 11/24/09 925703 3.9902 13.0991 12/22/09 926165 PB-212 5.4783 1.6683 05/11/09 922306 4.4316 1.7389 06/08/09 922804 2.8421 1.1422 07/07/09 923291						57.3051	20.7421	09/29/09	924734
PB-212  5.4783 1.6683 05/11/09 922306 4.4316 1.7389 06/08/09 922804 2.8421 1.1422 07/07/09 923291						.9674	14.8006	10/27/09	925234
PB-212 5.4783 1.6683 05/11/09 922306 4.4316 1.7389 06/08/09 922804 2.8421 1.1422 07/07/09 923291			•			20.6841	15.7992	11/24/09	925703
5.4783       1.6683       05/11/09       922306         4.4316       1.7389       06/08/09       922804         2.8421       1.1422       07/07/09       923291						3.9902	13.0991	12/22/09	926165
4.4316       1.7389       06/08/09       922804         2.8421       1.1422       07/07/09       923291					PB-212				
2.8421 1.1422 07/07/09 923291		•				5.4783	1.6683	05/11/09	
						4.4316	1.7389	06/08/09	
5.0749 1.9377 08/04/09 923790						2.8421	1.1422	07/07/09	923291
						5.0749	1.9377	08/04/09	923790

Station	Location	<u>Description</u>	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
3265	WBN MW-C	0.3 MILES ESE	GAMMA	SCAN (GELI)				
			OAWWA	PB-212				
				1 5 2 12	5.5787	2.3192	09/29/09	924734
				PB-214				
					12.3977	4.0859	02/17/09	920843
					31.9297	5.7136	03/17/09	921286
					22.6216	3.1840	04/14/09	921753
					17.0110	4.1471	05/11/09	922306
					5.3420	2.7020	06/08/09	922804
					7.6474	3.5196	07/07/09	923291
			•		11.9546	3.2387	08/04/09	923790
				•	25.1662	3.8557	09/01/09	924275
177					19.4428	3.7697	09/29/09	924734
ı e					13.6353	3.0915	10/27/09	925234
					24.0233	3.5864	11/24/09	925703
					15.4790	3.6315	12/22/09	926165
				TL-208				
					2.7179	1.4431	05/11/09	922306
					3.6098	1.3511	06/08/09	922804
					3.3524	1.2113	07/07/09	923291
					2.7493	1.2559	08/04/09	923790
					2.1405	.7823	09/29/09	924734
					.0892	1.2638	11/24/09	925703
			TRITIUM					
					744.9196	100.4793	02/17/09	920843
					779.9164	101.0211	03/17/09	921286
		4			250.4686	89.0546	04/14/09	921753

					•			
Station	Location		<u>Description</u>	Analysis Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
3265	WBN MW-C	0.3 MILES ES)		TRITIUM				
					365.5681	90.6040	05/11/09	922306
			• •		136.7489	86.2715	06/08/09	922804
					189.0257	86.8739	07/07/09	923291
					405.1215	92.4271	08/04/09	923790
			•		674.1419	97.6227	09/01/09	924275
					80.0653	81.8472	09/29/09	924734
•			•		171.3395	86.5930	10/27/09	925234
					416.7500	90.4213	11/24/09	925703
					362.8494	92.6350	12/22/09	926165
3266	WBN MW-D		0.4 MILES SSE			i		
•			,	GROSS BETA			* *.	
				· · · · · · · · · · · · · · · · · · ·	2.4291	.9547	05/11/09	922307
		-		GAMMA SCAN (GELI) AC-228			:	•
			•	AU-220	19.3119	6.7325	05/11/09	922307
			*	BI-214	•	, ,		
				•.	14.4094	9.3873	05/11/09	922307
				K-40				
				•	2.1395	13.1135	05/11/09	922307
				PB-214	1.8156	3.4241	05/11/09	922307
				TRITIUM	0.010.1	3.4241	บอก เกษสุ	922307
	•			INTION		,		
·	•		٠.	•	2412.0025	166.7467	05/11/09	922307
	•			•		•		

Station 3267	Location WBN MW-F	Description O.3 MILES SE	Analysis	Nuclide	Activity	Error	<u>Date Collected</u>	Lab Number
3201	AADIA IAIAA-L	O.S MILLS SE	GROSS E	BETA				
					3.2333	.8562	06/08/09	922805
					3.9184	1.0219	07/07/09	923292
					3.5535	.9553	08/04/09	923791
					3.9201	.9627	09/01/09	924276
	-				3.3435	1.0446	09/29/09	924735
					4.9156	1.0339	10/27/09	925235
					1.5896	.9465	11/24/09	925704
					2.4300	.9050	12/22/09	926166
			GAMMA	SCAN (GELI)			,	
<u> </u>	•	•		AC-228		,		
179					9.1963	3.7606	06/08/09	922805
i s					2.4276	3.9995	09/29/09	924735
				BI-214				000005
					6.2697	2.7066	06/08/09	922805
					10.8789	2.9631	07/07/09	923292
					11.3392	4.5049	08/04/09	923791
					16.0041	3.9758	09/01/09	924276
					43.4460	5.8418	09/29/09	924735
					23.0151	4.4470	10/27/09	925235
					46.6592	6.5665	11/24/09	925704
					26.1468	6.8453	12/22/09	926166
			•	K-40				
					9.0449	16.2584	06/08/09	922805
					.5945	15.7209	08/04/09	923791
				,	15.6566	12.6034	09/01/09	924276
					28.2210	16.5965	09/29/09	924735

Station 3267	Location WBN MW-F	Description O.3 MILES SE	<u>Analysis</u>	<u>Nuclide</u>	Activity	<u>Error</u>	<u>Date Collected</u>	Lab Number
3207	AADIA MAA-I	. O.S WILLO GE	GAMMA S	SCAN (GELI)				
	•			PB-212				
					1.1995	2.1752	10/27/09	925235
				PB-214				
					1.9582	3.3995	06/08/09	922805
					3.2342	.7775	07/07/09	923292
					7.5161	2.6481	08/04/09	923791
					15.3734	3.7940	09/01/09	924276
					20.5163	3.3735	09/29/09	924735
					10.8726	2.6029	10/27/09	925235
•					31.1256	5.2363	11/24/09	925704
1					22.7593	4.7680	12/22/09	926166
180				TL-208	•			
0 -					.5695	1.3656	09/29/09	924735
			TRITIUM					
		•			1941.5279	146.8251	06/08/09	922805
					2213.8540	158.3626	07/07/09	923292
					2454.2794	169.4043	08/04/09	923791
					2592.3855	173.6973	09/01/09	924276
					2398.9370	164.4549	09/29/09	924735
					2905.7634	189.3145	10/27/09	925235
					2537.8301	171.4114	11/24/09	925704
					2299.9180	163.6823	12/22/09	926166

Station 3115	Location LAYMAN FARM	Description 1.3 MILES SSW	Analysis	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
			GROSS I	BETA			•	
					1.7513	.7735	01/20/09	920390
					.1855	.6222	02/16/09	920831
					1970	.6092	03/16/09	921275
					3064	.6074	04/13/09	921741
					.5675	.6401	05/11/09	922295
					.0775	.6248	06/08/09	922793
					.8262	.6830	07/06/09	923280
					1.1046	.6614	08/03/09	923779
•					1.0993	.6570	09/01/09	924264
					.4638	.6474	09/28/09	924723
181					2.3963	.7308	10/26/09	925217
1					.7956	.6562	11/23/09	925692
					.1889	.6267	12/21/09	926154
			GAMMA	SCAN (GELI) AC-228				
					7.3347	4.9153	02/16/09	920831
	•				8.3926	6.2829	03/16/09	921275
					3.9243	3.6167	07/06/09	923280
					8.1920	4.8583	10/26/09	925217
				BI-214				
				•	145.5849	12.3549	01/20/09	920390
					285.7775	15.0543	02/16/09	920831
					173.0291	11.2823	03/16/09	921275
					202.8694	14.7686	04/13/09	. 921741
					227.3759	12.6084	05/11/09	922295
					102.0291	8.9696	06/08/09	922793

								•
Station 3115	Location LAYMAN FARM	Description 1.3 MILES SSW	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
3113	LATIVIANT ARRIV	1.5 WILLS 33VV	GAMMA S	SCAN (GELI)				
•			O2	BI-214				
					124.9331	8.1745	07/06/09	923280
					19.6770	3.6014	08/03/09	923779
					157.8304	12.9286	09/01/09	924264
		•			191.0588	15.0287	09/28/09	924723
					196.7750	11.9300	10/26/09	925217
					106.0439	13.9103	11/23/09	925692
					261.1110	14.8430	12/21/09	926154
				K-40				
					36.8648	21.8482	02/16/09	920831
<u>-</u>					22.2863	27.7227	03/16/09	921275
182					17.0784	17.3758	05/11/09	922295
ı					65.3147	23.0414	07/06/09	923280
	·			•	11.7083	20.3411	08/03/09	923779
					10.1964	17.7114	12/21/09	926154
				PB-212		,		
					5.6234	3.4157	01/20/09	920390
					2.6669	2.9313	02/16/09	920831
					.3863	2.1223	03/16/09	921275
					1.5981	1.7556	06/08/09	922793
	•				6.0960	2.2424	07/06/09	923280
				PB-214				
		*			112.2463	10.7351	01/20/09	920390
					281.7607	17.3381	02/16/09	920831
					177.1896	10.8877	03/16/09	921275
					188.4656	14.5949	04/13/09	921741
					221.0221	19.1578	05/11/09	922295

Station 3115	Location LAYMAN FARM	Description 1.3 MILES SSW	<u>Analysis</u>	Nuclide	Activity	<u>Error</u>	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				PB-214				
					98.2282		06/08/09	922793
			*		126.3219		07/06/09	923280
					9.5459	2.4333	08/03/09	923779
					73.4223	11.0967	09/01/09	924264
					185.0370	13.4148	09/28/09	924723
					191.2793	12.4561	10/26/09	925217
		•			90.6314	9.6897	11/23/09	925692
					230.7892	13.1677	12/21/09	926154
				TC-99M				
<u>i</u>		•			11.5188	5.1299	01/20/09	920390
183				TL-208		~		
1					3.9919	1.5815	01/20/09	920390
					2.0696	1.6811	05/11/09	922295
					.9814	1.3114	06/08/09	922793
					2.0162	1.3535	08/03/09	923779
			TRITIUM					
					115.8794	83.8351	01/20/09	920390
					35.9504	83.0272	02/16/09	920831
					- 17.5202	81.5391	03/16/09	921275
					- 69.6703	83.3734	04/13/09	921741
			•		3.0784	83.3163	05/11/09	922295
	•				- 43.2636	83.2839	06/08/09	922793
		,			41.2334		07/06/09	923280
					28.2381	89.3853	08/03/09	923779
					- 45.2934		09/01/09	924264
							<del>-</del>	

<u>Station</u>	<u>Location</u>	Description	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	<b>Date Collected</b>	Lab Number
3115	LAYMAN FARM	1.3 MILES SSW						
			TRITIUM				•	
					52.8799	81.3819	09/28/09	924723
			•		26.4830	83.9743	10/26/09	925217
					94.4854	83.3272	11/23/09	925692
					106.7817	87.1450	12/21/09	926154

### Table 16 RADIOACTIVITY IN COMMERCIAL FISH WATTS BAR NUCLEAR PLANT PCI/GM - 0.037 BQ/G (DRY WEIGHT) 12/28/2008 - 12/25/2009

					•			
Station 2160	Location CHICKAMAUGA RES	Description TRM 471-530	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	Date Collected	<u>Lab Number</u>
	313.3 13.37.17.23	11111 17 1 000	GAMMA	SCAN (GELI)				
			<i>Or</i>	AC-228				
					.1279	.0395	10/22/09	925181
	·		•	BI-214		•		
					.1039	.0111	05/11/09	922035
				,	.2619	.0367	10/22/09	925181
				CS-137				
					.0249	.0049	05/11/09	922035
				K-40				
					13.6738	.6327	05/11/09	922035
					13.2122	.6914	10/22/09	925181
				PB-212				
185					.0910	.0186	10/22/09	925181
i				PB-214				
					.0861	.0121	05/11/09	922035
			,		.2628	.0422	10/22/09	925181
				TL-208				•
					.0470	.0115	10/22/09	925181
2161	WATTS BAR RES	TRM 530-602					-	
			GAMMA	SCAN (GELI)				
				BI-214	2004	0444	0.40.400	000000
					.0691	.0141	04/24/09	922038
					.1631	.0202	10/22/09	925184
				CS-137	0704	2007	0.4/0.4/0.0	
					.0731	.0067	04/24/09	922038
					.0429	.0072	10/22/09	925184
				K-40	40 4007	7000	0.4/0.4/00	00000
					13.1627	.7023	04/24/09	922038
					12.3888	.6916	10/22/09	925184

Table 16
RADIOACTIVITY IN COMMERCIAL FISH
WATTS BAR NUCLEAR PLANT
PCI/GM - 0.037 BQ/G (DRY WEIGHT)
12/28/2008 - 12/25/2009

Station 2161	Location	Description TRM 530-602	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	Lab Number
2101	WATTS BAR RES	1 KW 330-002	GAMMA	SCAN (GELI)				
			OAMMA	PB-212				
					.0012	.0054	04/24/09	922038
					.0099	.0065	10/22/09	925184
				PB-214	•			
					.0676	.0111	04/24/09	922038
					.1674	.0216	10/22/09	925184
				TL-208				
					.0010	.0042	04/24/09	922038
3261	DOWNSTREAM STATION 1	DOWNSTREAM						•
			GAMMA :	SCAN (GELI)				
<u> </u>	•		•	BI-214				
186					.1316	.0195	04/25/09	922090
ī					.1800	.0219	10/20/09	925230
				CS-137	0.400	2055		000000
					.0420	.0055	04/25/09	922090
					.0450	.0092	10/20/09	925230
				K-40	40.0005	0070	0.4105.100	
					12.9925	.6370	04/25/09	922090
					11.7209	.6875	10/20/09	925230
				PB-214	1006	0120	04/05/00	022000
					.1096	.0139	04/25/09	922090
			•		.1731	.0223	10/20/09	925230

01-4:	Lautian	Danadation	Analysis Nuclide	<u>Activity</u>	F	Data Oallantaid	t ala ktomala on
Station 2160	Location	<u>Description</u> TRM 471-530	Allalysis Indelide	ACTIVITY	Error	Date Collected	Lab Number
2,00	CHICKAMAUGA RES	1 KW 47 1-330	GAMMA SCAN (GEI				
	•		BI-214				
			•	.3052	.0234	05/11/09	922034
				.3330	,0323	10/22/09	925180
•		•	CS-137				
			·	.0374	.0082	05/11/09	922034
	•	÷		.0294	.0082	10/22/09	925180
			K-40				
				14.6554	.7287	05/11/09	922034
		:	:	15.8474	1.0305	10/22/09	925180
			PB-214	.2993	.0226	05/11/09	922034
1 87		* .		.3311	.0226	10/22/09	925180
	WATTO DAD DEC	TDM 520,602		.3311	.0307	10/22/09	925160
2161	WATTS BAR RES	TRM 530-602	GAMMA SCAN (GEI	LD			
		•	BI-214	L.1)			•
				.1450	.0129	04/24/09	922037
		•		.2630	.0279	10/22/09	925183
			CS-137				5.
				.0832	.0099	04/24/09	922037
:	,	•		.0358	.0064	10/22/09	925183
			K-40				
		•		14,6877	.7556	04/24/09	922037
**		* * * * * * * * * * * * * * * * * * *		17.9024	.8792	10/22/09	925183
•		•	PB-212	0.400	2274	0.110.1100	.000007
: .	· · · · · · · · · · · · · · · · · · ·			.0139	.0074	04/24/09	922037
•			٠	.0162	.0111	10/22/09	925183
			PB-214	4000	0404	0.410.4100	
				.1032	.0121	04/24/09	922037

Station	<u>Location</u>	Description	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
2161	WATTS BAR RES	TRM 530-602	GAMMA S	SCAN (GELI)				
				PB-214	2002	04.40	40/22/00	005400
2264	DOMAISTDE AM STATION 4	DOWNSTREAM			.2063	.0149	10/22/09	925183
3261	DOWNSTREAM STATION 1	DOWINGTREAM	GAMMA S	SCAN (GELI)				
			O/	AC-228				
		•			.0245	.0118	04/24/09	922089
				BI-214				•
		•			.1101	.0130	04/24/09	922089
					.1709	.0187	10/20/09	925229
				CS-137			*	
•					.0458	.0059	04/24/09	922089
188					.0494	.0071	10/20/09	925229
∞ '				K-40				
				•	12.5283	.6023	04/24/09	922089
					14.3368	.7278	10/20/09	925229
				PB-212		•		
					.0100	.0049	04/24/09	922089
				•	.0250	.0070	10/20/09	925229
				PB-214				
					.0931	.0114	04/24/09	922089
					.1333	.0149	10/20/09	925229
			•	TL-208				
					.0079	.0029	04/24/09	922089
					.0174	.0067	10/20/09	925229

Station 3191	Location WATTS BAR RESORT	Description TRM 530	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA S	SCAN (GELI)				
				AC-228			•	
		•			.3222	.0260	04/28/09	922080
					.0482	.0097	10/26/09	925220
				BE-7				
					.2483	.0301	04/28/09	922080
		•			.1370	.0176	10/26/09	925220
				BI-212				
					.3207	.0517	04/28/09	922080
	<del></del>			BI-214				
					.2466	.0186	04/28/09	922080
1					.0770	.0102	10/26/09	925220
189		•		K-40	•			
9 -					.8300	.0845	04/28/09	922080
					.3542	.0507	10/26/09	925220
		·		PB-212				
					.3269	.0238	04/28/09	922080
					.0643	.0058	10/26/09	925220
				PB-214				
					.2464	.0160	04/28/09	922080
					.0926	.0069	10/26/09	925220
		•		RA-226	.0020			
				101-220	.2466	.0186	04/28/09	922080
		•			.0770	.0102	10/26/09	925220
				TL-208	.0110	.0102		020220
				1 L-200	.1054	.0083	04/28/09	922080
			-		.0209	.0031	10/26/09	925220
					.0203	.0001	10/20/00	· OZOZZO

Station 3193	Location COTTON PORT MARINA	Description TRM 513	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	Error	Date Collected	Lab Number
	•		GAMMA S	SCAN (GELI)				
				AC-228				
		•			1.6517	.1140	04/28/09	922081
					1.3609	.0925	10/26/09	925221
				BE-7				
					.4279	.0911	04/28/09	922081
					.2040	.0533	10/26/09	925221
				BI-212				
			•		2.0161	.2274	04/28/09	922081
					1.5339	.1513	10/26/09	925221
				BI-214				
l pand					.8309	.0589	04/28/09	922081
190					.5783	.0378	10/26/09	925221
ī				CS-137				
				•	.0292	.0086	04/28/09	922081
					.0632	.0081	10/26/09	925221
				K-40				
					33.6312	1.4079	04/28/09	922081
					30.4987	1.3026	10/26/09	925221
				PB-212				
					1.6103	.1134	04/28/09	922081
					1.2849	.0715	10/26/09	925221
				PB-214				
					.8880	.0699	04/28/09	922081
					.5919	.0340	10/26/09	925221
				RA-226				
					.8309	.0589	04/28/09	922081
					.5783	.0378	10/26/09	925221

<u>Station</u>	<u>Location</u>	Description	<u>Analysis</u>	<u>Nuclide</u>	<u>Activity</u>	<u>Error</u>	Date Collected	Lab Number
3193	COTTON PORT MARINA	TRM 513						
	·		GAMMA :	SCAN (GELI)				
				TL-208				
					.6353	.0397	04/28/09	922081
					.4478	.0239	10/26/09	925221

Station 3303	Location LV-3	Description LOW VOL WASTE	<u>Analysis</u>	<u>Nuclide</u>	Activity	Error	Date Collected	<u>Lab Number</u>
		POND	GAMMA	SCAN (GELI)				
				AC-228	.6594	.0708	12/09/09	924280
				BI-212	.0004	.0700	12/00/00	02 1200
					.9329	.1299	12/09/09	924280
				BI-214	.6780	.0496	12/09/09	924280
				CO-58	.0010.	.0430	12/03/03	024200
					.0900	.0142	12/09/09	924280
				CS-134	.0726	.0088	12/09/09	924280
ı				CS-137	.0726	.0000	12/09/09	924200
192					.1460	.0169	12/09/09	924280
2 -				K-40	8.0884	.5155	12/09/09	924280
	•			PB-212	0.0004	.5155	12/09/09	324200
					.6237	.0593	12/09/09	924280
		•		PB-214	.6258	.0473	12/09/09	924280
				TL-208	.0236	.0473	12/09/09	924200
					.2351	.0203	12/09/09	924280
3305	YP-5	YARD POND	CANANAA	COAN (CELI)				
	•		GAMMA	SCAN (GELI) AC-228				
					.9987	.0601	12/09/09	924281
				BE-7	.3645	.0542	12/09/09	924281
				BI-212	.3040	.0342	12/03/09	324201
					1.0017	.0974	12/09/09	924281

Station 3305	Location YP-5	Description YARD POND	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
3303	TP-0	TARD POND	GAMMA	SCAN (GELI)	•			
				BI-214				
	•				.7624	.0423	12/09/09	924281
				CO-58	0205	0004	. 40/00/00	004004
		•		CO-60	.0385	.0064	12/09/09	924281
				00-00	.0716	.0093	12/09/09	924281
				CS-134				
		•			.0231	.0038	12/09/09	924281
				CS-137	1.100	0444	40,00,00	004004
				K-40	.1406	.0111	12/09/09	924281
. 193				N-40	11.7715	.5381	12/09/09	924281
သ -			÷	PB-212				
•					8667	.0604	12/09/09	924281
				PB-214	7044	0070	40/00/00	004004
				TL-208	.7911	.0379	12/09/09	924281
				1L-200	.2980	.0187	12/09/09	924281
3313	YP-13	YARD POND		•			00.00	02.20.
	•		GAMMA	SCAN (GELI)				
				AC-228	4.4000	4000	40/00/00	00.4000
	•			BE-7	1.1002	.1009	12/09/09	924282
				· ·	.4088	.0861	12/09/09	924282
*				BI-212				
					1.0795	.1397	12/09/09	924282
				BI-214	0440	0545	10/00/05	00.4000
					.9412	.0517	12/09/09	924282

Station 3313	Location YP-13	Description YARD POND	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	Lab Number
3313	11-10	TANDIOND	GAMMA	SCAN (GELI) CO-60				
				CS-137	.0458	.0100	12/09/09	924282
					.1931	.0156	12/09/09	924282
				K-40	16.8888	.8650	12/09/09	924282
				MN-54	.0183	.0055	12/09/09	924282
				PB-212	1.2053	.0569	12/09/09	924282
- 194				PB-214	.9778	.0477	12/09/09	924282
T				RA-224	1.0604	.1960	12/09/09	924282
				TL-208	.4143	.0223	12/09/09	924282
3316	YP-16	YARD POND	GAMMA	SCAN (GELI)		-		
				AC-228	.7435	.0593	12/09/09	924283
				BE-7	.3512	.0654	12/09/09	924283
				BI-212	.8187	.1107	12/09/09	924283
				BI-214	.7232	.0466	12/09/09	924283
	· •	•		CO-58	.0439	.0070	12/09/09	924283
							•	

Station 3316	Location YP-16	<u>Description</u> YARD POND	<u>Analysis</u>	Nuclide	<u>Activity</u>	Error	Date Collected	<u>Lab Number</u>
3310	77-10	TAND FOND	GAMMA	SCAN (GELI)				
				CO-60	4000	0400	40/00/00	00.4000
				CS-137	.1020	.0130	12/09/09	924283
				00 101	.0442	.0071	12/09/09	924283
			•	K-40	0.4500	. 4044	12/00/00	024202
				PB-212	9.4580	.4944	12/09/09	924283
					.7820	.0482	12/09/09	924283
				PB-214	.7394	.0510	12/09/09	924283
1				SB-125	.7554	.0310	12/03/03	324203
195					.1553	.0258	12/09/09	924283
ī				TL-208	.2620	.0157	12/09/09	924283
3317	YP-17	YARD POND				.0.0.	72.00.00	02 1200
			GAMMA	SCAN (GELI) AC-228				
				AU-220	.7760	.0447	12/09/09	924284
				BE-7				
				BI-212	.3775	.0573	12/09/09	924284
				DI-212	.8011	.0856	12/09/09	924284
				BI-214	CEDE	0.407	40/00/00	004004
				CO-58	.6535	.0407	12/09/09	924284
					.0560	.0068	12/09/09	924284
				CO-60	.1610	.0141	12/09/09	924284
	·				. 1010	.0141	12/09/09	32420 <del>4</del>

Station 3317	<u>Location</u> YP-17	Description YARD POND	<u>Analysis</u>	Nuclide	Activity	Error	Date Collected	Lab Number
			GAMMA	SCAN (GELI)				
				CS-137	.0372	.0061	12/09/09	924284
				K-40				
				PB-212	8.7226	.4387	12/09/09	924284
					.8414	.0426	12/09/09	924284
				PB-214	.7289	.0359	12/09/09	924284
				RA-224				
				SB-125	.6868	.0960	12/09/09	924284
196					.2728	.0238	12/09/09	924284
1	,			TL-208	.2413	.0138	12/09/09	924284