

Annual Radiological Environmental Operating Report

Watts Bar
Nuclear Plant
1995



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ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT
WATTS BAR NUCLEAR PLANT
1995

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION

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EXECUTIVE SUMMARY

This report describes the preoperational radiological environmental monitoring program conducted by TVA in the vicinity of the Watts Bar Nuclear Plant (WBN) in 1995. 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 will not be influenced by plant operations. Station locations are selected after careful consideration of the weather patterns and projected radiation doses to the various areas around the plant. Material sampled includes air, water, milk, foods, vegetation, soil, fish, sediment, and direct radiation levels. During plant operations, results from stations near the plant will be compared with concentrations from control stations and with preoperational measurements to determine potential impacts to the public.

Exposures calculated from environmental samples were contributed by naturally occurring radioactive materials, from materials commonly found in the environment as a result of atmospheric fallout, or from the operation of other nuclear facilities in the area. Since WBN has not operated before or during this reporting period, there has been no contribution of radioactivity from the plant to the environment.

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 determine the existing background radioactivity levels in the area of WBN and to comply with the requirements of 10 CFR 50, Appendix A, Criterion 64 and 10 CFR 50, Appendix I, Section IV.B. This report satisfies the annual reporting requirements of WBN Technical Specification 5.9.2 and Offsite Dose Calculation Manual (ODCM) Control 5.1. The requirements for the Radiological Environmental Monitoring Program (REMP) are outlined in Control 1.3.1 of the ODCM and the program is described in Section 9 of the ODCM. Some of the data presented are prescribed by specific requirements, while other data are included which may be useful or interesting to individuals who do not work with this material routinely.

Naturally Occurring and Background Radioactivity

Most materials in our world today contain trace amounts of naturally occurring radioactivity. Approximately 0.01 percent of all potassium is radioactive potassium-40. 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. An individual weighing 150 pounds contains about 140 grams of potassium (Reference 1). This is equivalent to approximately 100,000 pCi of K-40 which delivers a dose of 15 to 20 mrem per year to the bone and soft tissue of the body.

Naturally occurring radioactive materials have always been in the environment. 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, uranium-235, thorium (Th)-234, radium (Ra)-226, radon (Rn)-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 comes from outer space. We are all exposed to this natural radiation 24 hours per day.

The average dose equivalent at sea level resulting from radiation from outer space (part of natural background radiation) is about 27 mrem/year. This essentially doubles with each 6600-foot increase in altitude in the lower atmosphere. Another part of natural background radiation comes from naturally occurring radioactive materials in the soil and rocks. Because the quantity of naturally occurring radioactive material varies according to geographical location, the part of the natural background radiation coming from this radioactive material also depends upon the geographical location. Most of the remainder of the natural background radiation comes from the radioactive materials within each individual's body. We absorb these materials from the food we eat which contains naturally occurring radioactive materials from the soil. An example of this is K-40 as described above. Even building materials affect the natural background radiation levels in the environment. Living or working in a building which is largely made of earthen material, such as concrete or brick, will generally result in a higher natural background radiation level than would exist if the same structure were made of wood. This is due to the naturally occurring radioisotopes in the concrete or brick, such as trace amounts of uranium, radium, thorium, etc.

Because the city of Denver, Colorado, is over 5000 feet in altitude and the soil and rocks there contain more radioactive material than the U.S. average, the people of Denver receive around 350 mrem/year total natural background radiation dose equivalent compared to about 295 mrem/year for the national average. People in some locations of the world receive over 1000 mrem/year natural background radiation dose equivalent, primarily because of the greater quantity of radioactive materials in the soil and rocks in those locations. Scientists have never been able to show that these levels of radiation have caused harmful effects to anyone.

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 table, 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.

Significant discussion recently has centered around exposures from radon. Radon is an inert gas given off as a result of the decay of naturally occurring Ra-226 in soil. When dispersed in

the atmosphere, radon concentrations are relatively low. However, when the gas is trapped in closed spaces, it can build up until concentrations become significant. The National Council of Radiation Protection and Measurements (Reference 2) has estimated that the average annual effective dose equivalent from radon in the United States is approximately 200 mrem/year. This estimated dose is approximately twice the average dose equivalent from all other natural background sources.

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. However, nuclear plants include many complex systems to control the nuclear fission process and to safeguard against the possibility of reactor malfunction, which could lead to the release of radioactive materials. 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.

At WBN releases will be monitored at the onsite points of release and through the radiological environmental monitoring program which will measure the environmental radiation in outlying areas around the plant. In this way, not only will the release of radioactive materials from the plant be tightly controlled, but measurements will be made in surrounding areas to verify that the population will not be exposed to significant levels of radiation or radioactive materials.

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 radionuclides. 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 about 1.25 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, 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.

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 160,000, 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 165,000 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, on which WBN is located, 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, commercial fishing, and recreation. Public access areas, boat docks, and residential subdivisions have been developed along the reservoir shoreline in scattered locations.

WBN consists of two pressurized water reactors: each unit is rated at 1160 megawatts (electrical). WBN unit 1 received a low power operating license (NPF-20) on November 9, 1995.

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

Most of the radiation and radioactivity generated in a nuclear power reactor is contained within the reactor itself or one of the other plant systems. Plant effluent monitors are designed to detect the small amounts released to the environment. Environmental monitoring is a final verification that the systems are performing as planned. The monitoring program is designed to most efficiently 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 identification 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 to the program in 1995 are described in Appendix B and exceptions to the sampling and analysis schedule are presented 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 expected from an operating plant are assessed during the preoperational phase to establish normal background levels for various radionuclides in the environment.

The preoperational monitoring program is a very important part of the overall program. During the 1950s, 60s, and 70s, atmospheric nuclear weapons testing released radioactive material to the environment causing fluctuations in background radiation levels. This radioactive material is the same type as that which will be produced by the operation of the WBN reactors.

Preoperational knowledge of preexisting radionuclide patterns in the environment will permit a determination, through comparison and trending analyses, of whether the operation of WBN is impacting the environment and thus the surrounding population. The determination of 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) will be compared with those from indicator stations (near the plant) to aid in the determination of the impacts from WBN after the plant becomes operational.

All samples are analyzed by the radioanalytical laboratory of TVA's Environmental Radiological Monitoring and Instrumentation group located at the Western Area Radiological Laboratory (WARL) in Muscle Shoals, Alabama. 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. A listing of the results of the analyses of all radiological environmental samples and of all environmental radiation measurements taken during 1995 are presented in the Data Supplement to this report.

The radiation detection devices used to determine the radionuclide content of samples collected in the environment are generally quite 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 Radioanalytical Laboratory is presented in Appendix E.

The Radioanalytical Laboratory employs 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 special samples which are included alongside routine environmental samples. The laboratory participates in the Environmental Protection Agency (EPA) Interlaboratory Comparison Program. In addition, samples split with the EPA National Air and Radiation Environmental Laboratory and with the State of Tennessee provide an independent verification of the overall performance of the laboratory. A complete description of the program is presented in Appendix F.

DIRECT RADIATION MONITORING

Direct radiation levels are measured at a number of stations 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.

Radiation levels measured in the area around the WBN site in 1995 were consistent with levels from previous years and with levels measured at other locations in the region.

Measurement Techniques

Direct radiation measurements are made with thermoluminescent dosimeters (TLDs). When certain materials are exposed to ionizing radiation, many of the electrons which become displaced are trapped in the crystalline structure of the material. They remain trapped for long periods of time as long as the material is not heated. When heated (thermo-), the electrons are released, producing a pulse of light (-luminescence). The intensity of the light pulse is proportional to the amount of radiation to which the material was exposed. Materials which display these characteristics are used in the manufacture of TLDs.

From 1977 through 1989, TVA used a Victoreen dosimeter consisting of a manganese activated calcium fluoride ($\text{Ca}_2\text{F:Mn}$) TLD material encased in a glass bulb. In 1989, TVA began the process of changing from the Victoreen dosimeter to the Panasonic Model UD-814 dosimeter, and completely changed to the Panasonic dosimeter in 1990. This dosimeter contains four elements consisting of one lithium borate and three calcium sulfate phosphors. The calcium sulfate phosphors are shielded by approximately 1000 mg/cm² plastic and lead to compensate for the over-response of the detector to low energy radiation.

The TLDs are placed approximately one meter above the ground, with three TLDs at each

station. Sixteen stations are located around the plant near the site boundary, one station in each of the 16 compass sectors. An additional 16 stations are located approximately 5 miles from the plant in each of the 16 sectors. Dosimeters are also placed at the perimeter and remote air monitoring sites and at six additional stations out to approximately 32 miles from the site. The TLDs are exchanged every 3 months and the accumulated exposure on the detectors is read with a Panasonic Model UD-710A automatic reader interfaced with a Hewlett Packard Model 9000 computer system. Eight of the locations also have TLD devices which are processed by the NRC. The results from the NRC measurements are reported in NUREG 0837.

Since the calcium sulfate phosphor is much more sensitive than the lithium borate, the measured exposure is taken as the median of the results obtained from the nine calcium sulfate phosphors in three detectors. The values are corrected for gamma response, system variations, and transit exposure, with individual gamma response calibrations for each element. The system meets or exceeds the performance specifications outlined in Regulatory Guide 4.13 for environmental applications of TLDs.

Since 1974, TVA has participated in eight of the ten intercomparisons of environmental dosimeters conducted by the U.S. Department of Energy and other interested parties. The results, shown in Table 2 and Figure 3, demonstrate that direct radiation levels determined by TVA are generally within ten percent of the calculated or known values.

Results

Results are normalized to a standard quarter (91.25 days or 2190 hours). The stations are grouped according to the distance from the plant. The first group consists of stations within 1 mile of the plant. The second group lies between 1 and 2 miles, the third group between 2 and 4 miles, the fourth between 4 and 6 miles, and the fifth group is made up of stations more than 6 miles from the plant. Past data have shown that the average results from groups greater than 2 miles from the plant are essentially the same. Therefore, for purposes of this report, stations 2 miles or less from the plant are identified as "onsite" and all others are considered "offsite."

The quarterly gamma radiation levels determined from the TLDs deployed around WBN in 1995 are summarized in Table H-1. The results from all measurements at individual stations are presented in Table H-2. The exposures are measured in milliroentgens and reported in millirem per standard quarter. For purposes of this report, one milliroentgen and one millirem (mrem) are assumed to be equivalent. The rounded average annual exposures are shown below. For comparison purposes, the average direct radiation measurements made in the preoperational monitoring program are also shown.

| | Annual Average Direct Radiation Levels WBN <u>mrem/year</u> | |
|------------------|----------------------------------------------------------------------|-----------------------------------|
| | <u>1995</u> | <u>Preoperational Average</u> |
| Onsite Stations | 64 | 75 |
| Offsite Stations | 58 | 65 |

The data in Table H-1 indicate that the average quarterly radiation levels at the WBN onsite stations are approximately 2 mrem/quarter higher than levels at the offsite stations. This difference has also been noted in the preoperational monitoring at the Browns Ferry and Sequoyah Nuclear Plants and at other nonoperating TVA nuclear power plant construction sites where the average levels onsite are generally 2-6 mrem/quarter higher than levels offsite. The causes of these differences have not been isolated; however, it is postulated that the differences are probably attributable to combinations of influences such as natural variations in environmental radiation levels, earth-moving activities onsite, and the mass of concrete employed in the construction of the plant. Other undetermined influences may also play a part.

Figure H-1 compares plots of the data from the onsite or site boundary stations with those from the offsite stations over the period from 1977 through 1995. To reduce the seasonal variations present in the data sets, a 4-quarter moving average was constructed for each data set. Figure H-2 presents a trend plot of the direct radiation levels as defined by the moving averages. The data follow the same general trend as the raw data, but the curves are much smoother.

The results reported in 1995 are consistent with direct radiation levels reported in previous years.

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 in communities out to about 12 miles from the plant, and two remote air monitors are located out to 20 miles. The monitoring program and the locations of monitoring stations are identified in the tables and figures of Appendix A. The remote stations are used as control or baseline stations.

As a result of delays in the scheduled fuel load date for WBN, the atmospheric monitoring program was discontinued for calendar year 1989. The full program was restarted in January 1990. The results from the program conducted in 1995 are included in this report.

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 Hollingsworth and Vose LB5211 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. This allows an accurate determination of the volume of air passing through the filter. 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 every 7 days. 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 for gamma-emitting radionuclides (gamma spectroscopy).

Gaseous radioiodine is collected 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 iodine (I)-131 by a complete gamma spectroscopy analysis.

Rainwater is collected by use of a collection tray attached to the monitor building. The collection tray is protected from debris by a screen cover. As water drains from the tray, it is collected in one of two 5-gallon containers inside the monitor building. A 1-gallon sample is removed from the container every 4 weeks. Any excess water is discarded. Rainwater samples are held to be analyzed only if air particulate samples indicate the presence of elevated levels or if fallout is expected. For example, rainwater samples were analyzed during the period of fallout following the accident at Chernobyl in 1986. Since no plant-related air activity was detected in 1995, no rainwater samples from WBN were analyzed in this reporting period.

Results

The results from the analysis of air particulate samples are summarized in Table H-3. Gross beta activity in 1995 was consistent with levels reported in previous years. The average level at indicator stations was 0.021 pCi/m^3 and the average at control stations was 0.021 pCi/m^3 . The annual averages of the gross beta activity in air particulate filters at these stations for the years 1971-1995 are presented in Figure H-3. Increased levels due to fallout from atmospheric nuclear weapons testing are evident, especially in 1971, 1977, 1978, and 1981. Evidence of a small increase resulting from the Chernobyl accident can also be seen in 1986. These patterns are consistent with data from monitoring programs conducted by TVA at nonoperating nuclear power plant construction sites.

Only natural radioactive materials were identified by the monthly gamma spectral analysis of the air particulate samples. No fission or activation products were found at levels greater than the LLDs. As shown in Table H-4, I-131 was not detected in any charcoal canister samples collected in 1995.

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, vegetation, 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-5 through H-13.

A land use survey is conducted periodically 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. From these data, radiation doses are projected for individuals living near the plant. Doses from air submersion are calculated for the nearest resident 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. The doses projected as a result of the 1995 land use survey are presented in Appendix G.

Sample Collection and Analysis

Milk samples are purchased every 2 weeks from three indicator dairies and from at least one of three control dairies. In addition, samples were collected from a farm producing milk for private consumption as they were available. For this sample period, thirteen samples were collected from this farm. 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 quarterly samples are analyzed for Sr-89 and Sr-90.

Samples of vegetation are collected every 4 weeks from one farm that had milk producing animals in the past. In addition, samples are also collected every 4 weeks from one dairy farm

and from one control station. The samples are collected by cutting or breaking enough vegetation to provide between 100 and 200 grams of sample. Care is taken not to include any soil with the vegetation. The sample is placed in a container with 1650 ml of 0.5N NaOH for transport back to the Radioanalytical Laboratory for I-131 analysis. A second sample of between 750 and 1000 grams is also collected from each location. After drying and grinding, these samples are analyzed by gamma spectroscopy. Once each quarter, the sample is ashed after the gamma analysis is completed and analyzed for Sr-89,90.

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 ashed and analyzed for Sr-89,90.

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 1995 samples of cabbage, corn, green beans, potatoes, and tomatoes were collected from local vegetable gardens. In addition, samples of apples were also obtained from the area. 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-5. All I-131 values were below the established nominal LLD of 0.4 pCi/liter. Sr-90 was found in less than one-fourth of the samples. These levels are consistent with concentrations measured in samples collected in TVA's preoperational radiological environmental monitoring programs and with concentrations reported in milk as a result of fallout from atmospheric nuclear weapons tests (Reference 1). Figure H-4 displays the average Sr-90 concentrations measured in milk since 1976. The concentrations have steadily decreased as a result of the 28-year half-life of Sr-90 and the washout and transport of the element through the soil over the period. The average Sr-90 concentration reported from indicator stations in 1995 was 2.9 pCi/liter.

An average of 2.1 pCi/liter was identified in samples from control stations. By far the predominant isotope reported in milk samples was the naturally occurring K-40. An average of approximately 1300 pCi/liter of K-40 was identified in all milk samples.

The levels of Sr-90 in milk samples from farms producing milk for private consumption only are up to six times the levels found in milk from commercial dairy farms. Samples of feed and water supplied to the animals were analyzed in 1979 in an effort to determine the source of the strontium. Analysis of dried hay samples indicated levels of Sr-90 slightly higher than those encountered in routine vegetation samples. Analysis of pond water indicated no significant strontium activity.

This phenomenon was observed during the preoperational radiological monitoring near SQN and near the Bellefonte Nuclear Plant construction site at farms where only one or two cows were being milked for private consumption of the milk. It is postulated that the feeding practices of these small farms differ from those of the larger dairy farmers to the extent that fallout from atmospheric nuclear weapons testing may be more concentrated in these instances. Similarly, Hansen, et al. (Reference 4), reported an inverse relationship between the levels of Sr-90 in milk and the quality of fertilization and land management. From 1982 through 1991 milk was sampled from two smaller dairy farms in the vicinity of WBN that exhibited Sr-90 levels similar to those found at small farms milking for private use only.

Results from the analysis of vegetation samples are presented in Table H-6. All Cs-137 values were less than the nominal LLD. Sr-90 was identified in one indicator sample at a concentration of 30.0 pCi/kg and averaged 22.5 pCi/Kg in two control samples. Again, the highest concentrations identified were for the naturally occurring isotopes K-40 and Be-7.

The only fission product identified in soil samples was Cs-137. The maximum concentration of Cs-137 was 1.2 pCi/g. This value is consistent with levels previously reported from fallout. All other radionuclides reported were naturally occurring isotopes (Table H-7).

A plot of the annual average Cs-137 concentrations in soil is presented in Figure H-5. Like the levels of Sr-90 in milk, 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.

All radionuclides reported in food samples were naturally occurring. The maximum K-40 value was 3820 pCi/kg in potatoes. The results are reported in Tables H-8 through H-13.

AQUATIC MONITORING

Potential exposures from the liquid pathway can occur from drinking water, ingestion of edible fish and clams, or from direct radiation exposure from radioactive materials deposited in the river sediment. The aquatic monitoring program includes the collection of samples of river (reservoir) water, groundwater, drinking water supplies, fish, Asiatic clams, plankton and bottom and shoreline sediment. Samples from the reservoir are collected both upstream and downstream from the plant.

Results from the analysis of aquatic samples are presented in Tables H-14 through H-24. Radioactivity levels in water, fish, sediment, and clams were consistent with background and/or fallout levels previously reported. The presence of Cs-137 was identified in some samples. Since WBN has not operated prior to the end of this reporting period, these activity levels are from some other sources, such as fallout or other operations in the area.

Sample Collection and Analysis

Samples of surface water are collected from the Tennessee River using automatic sampling pumps from two downstream stations and one upstream station. A timer turns on the pump at least once every 2 hours. The line is flushed and a sample collected into a composite container. A 1-gallon sample is removed from the container at 4-week intervals and the remaining water is discarded. Each sample is analyzed for gamma-emitting radionuclides and for gross beta activity. The samples are composited quarterly and analyzed for Sr-89,90 and for tritium.

Samples are also collected by an automatic sampling pump 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 and for gross beta activity. Quarterly composites are analyzed for Sr-89, Sr-90, and tritium. The samples collected by the automatic pumping device are taken directly from the river at the intake structure. Since the sample at this point is raw water, not water processed through the water treatment plant, the control sample should also be unprocessed water.

Therefore, the upstream surface water sample is also considered as a control sample for drinking water.

Groundwater is sampled from an onsite well and from a private well in an area unaffected by WBN. The samples are composited by location quarterly and analyzed for gross beta activity, for gamma-emitting radionuclides and for Sr-89,90 and tritium content.

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. Most of the fish are filleted, but one group is processed whole for analysis. After drying and grinding, the samples are analyzed by gamma spectroscopy.

Bottom sediment is collected semiannually from selected Tennessee River Mile (TRM) locations using a dredging apparatus or divers. Samples of shoreline sediment are also taken 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 two onsite ponds; the Low Volume Waste Treatment Pond and the Yard Pond. Four samples were collected from the Low Volume Waste Treatment Pond and fourteen from the Yard Pond. Each sample was dried, ground and analyzed by gamma spectroscopy.

Efforts are made to sample Asiatic clams semiannually from one location downstream from the plant and one location upstream. The clams are usually collected in the same process with the sediment. However, the clams are becoming more and more difficult to find. Enough clams are collected to produce approximately 50 grams of wet flesh. The flesh is separated from the shells and the dried flesh samples are analyzed by gamma spectroscopy.

Results

Gross beta activity was present in most of the surface water samples. Concentrations averaged 3.0 pCi/liter in downstream samples and 2.6 pCi/liter in upstream samples. All other activity was consistent with previously reported levels from fallout or naturally occurring isotopes. A trend plot of the gross beta activity in surface water samples from 1977 through 1995 is presented in Figure H-6. A summary table of the results is shown in Table H-14.

No fission or activation products were identified in drinking water samples. Average gross beta activity was 2.9 pCi/liter at downstream stations and 2.6 pCi/liter at upstream stations. The results are shown in Table H-15 and a trend plot of the gross beta activity in drinking water from 1977 through 1995 is presented in Figure H-7.

Concentrations of all fission and activation products in ground water were all below the LLDs. Only naturally occurring radionuclides were identified in these samples. Gross beta concentrations in samples from the onsite well averaged 7.7 pCi/liter, while concentrations from the offsite well were all below the lower limit of detection. The results are presented in Table H-16.

Cs-137 was identified in four fish samples. The downstream samples contained a maximum of 0.07 pCi/g, while the upstream samples had a maximum of 0.07 pCi/g. Other radioisotopes found in fish were naturally occurring, with the most notable being K-40. The concentrations of K-40 ranged from 5.5 pCi/g to 15.6 pCi/g. The results are summarized in Tables H-17, H-18, H-19, and H-20. Plots of the annual average Cs-137 concentrations are presented in Figures H-8, H-9, H-10, and H-11. The Cs-137 activities are a result of fallout or effluents from other facilities.

Radionuclides of the types produced by nuclear power plant operations were identified in sediment samples. The materials identified were Cs-137 and Co-60. In bottom sediment samples the average levels of Cs-137 were 0.33 pCi/g in downstream samples and 0.16 pCi/g upstream. These levels are consistent with previously identified fallout levels.

Co-60 was not identified in downstream samples but was identified in one upstream sample at a concentration of 0.03 pCi/g. In shoreline sediment, Cs-137 levels averaged 0.11 pCi/g in downstream samples and 0.04 pCi/g upstream. Results from the analysis of bottom sediment and shoreline sediment samples are shown in Tables H-21 and H-22, respectively. Trend plots of the average Cs-137 and Co-60 concentrations in bottom sediment samples are presented in Figures H-12 and H-13, respectively. A plot of the Cs-137 concentrations in shoreline sediment is presented in Figure H-14.

Cs-137 was identified in sixteen of the eighteen pond sediment samples. Concentrations ranged from 0.04 pCi/g to 0.38 pCi/g, with an average of 0.14 pCi/g. These levels are in general lower than concentrations reported in the stream sediment samples. Concentrations in this range would produce no measurable increase in the dose to personnel living or working in the area. A summary of the results from the analysis of the pond sediment samples is presented in Table H-23.

Only naturally occurring radioisotopes were identified in clam flesh samples. The results from the analysis of clam samples are shown in Table H-24.

ASSESSMENT AND EVALUATION

For operating nuclear power plants, 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 area around the plant is analyzed to determine the pathways through which the public may receive an exposure. As indicated in Figure 2, the two major ways by which radioactivity is introduced into the environment are through liquid and gaseous effluents.

For liquid effluents, the public can be exposed to radiation from three sources: drinking water from the Tennessee River, eating fish caught in the Tennessee River, and direct exposure to radioactive material due to activities on the banks of the river (recreational activities). For gaseous effluents, the public can be exposed to radiation from several sources: direct radiation from the radioactivity in the air, direct radiation from radioactivity deposited on the ground, inhalation of radioactivity in the air, ingestion of vegetation which contains radioactivity deposited from the atmosphere, and ingestion of milk or meat from animals which consumed vegetation containing deposited radioactivity.

The results from each sample are compared with the concentrations from the corresponding control stations to establish the relationship between these stations during the preoperational phase of the monitoring program. During this report period, Sr-90 was found in milk samples from both indicator and control stations. Cs-137 was identified in most soil samples and in aquatic media. Cs-137 in fish and sediment is consistent with fallout levels identified in samples both upstream and downstream from the plant. No increases of radioactivity have been seen in water samples.

Dose estimates were made from concentrations of radioactivity found in samples of environmental media. Media evaluated include, but are not limited to, air, milk, food products,

drinking water, and fish. Inhalation and ingestion doses estimated for persons at the indicator locations were essentially identical to those determined for persons at control stations.

Concentrations of Sr-90 and Cs-137 are consistent with levels measured in TVA's preoperational radiological environmental monitoring programs. Figures H-4 and H-5 and Figures H-9 through H-12 indicate that concentrations of Sr-90 and Cs-137 in the environment have decreased since the cessation of atmospheric weapons testing in 1981. This decrease is the result of the decay of the two isotopes and the redistribution of the materials in the environment.

Conclusions

Since WBN had not achieved criticality prior to the end of 1995, there has been no contribution of radioactivity from the plant to the environment. The levels of radioactivity reported in this document are due to natural background radiation, fallout from nuclear weapons testing, fallout from the Chernobyl nuclear power station accident, or other nuclear operations in the area.

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.
4. Hansen, W. G., Campbell, J. E., Fooks, J. H., Mitchell, H. C., and Eller, C. H., Farming Practices and Concentrations of Emission Products in Milk, U.S. Department of Health, Education, and Welfare; Public Health Service Publication No. 999-R-6, May 1964.

Table 1

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

| <u>Concentrations in Water, pCi/Liter</u> | | | | <u>Concentrations in Air, pCi/Cubic Meter</u> | | | |
|-------------------------------------------|--------------------------|---------------------------------|-----|-----------------------------------------------|--------------------------|---------------------------------|--------|
| <u>Effluent</u> | <u>Reporting</u> | <u>Lower Limit</u> | | <u>Effluent</u> | <u>Reporting</u> | <u>Lower Limit</u> | |
| <u>Concentration¹</u> | <u>Level²</u> | <u>of Detection³</u> | | <u>Concentration¹</u> | <u>Level²</u> | <u>of Detection³</u> | |
| H-3 | 1,000,000 | 20,000 | 250 | 100,000 | | | |
| 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 | 30,000 | 300 | 5 | 50 | | | 0.005 |
| Zn-65 | 5,000 | 300 | 10 | 400 | | | 0.005 |
| Sr-89 | 8,000 | | 3 | 1,000 | | | 0.0006 |
| Sr-90 | 500 | | 1.4 | 6 | | | 0.0003 |
| 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 | 1 | 200 | 0.9 | | 0.02 |
| Cs-134 | 900 | 30 | 5 | 200 | 10 | | 0.005 |
| Cs-137 | 1,000 | 50 | 5 | 200 | 20 | | 0.005 |
| Ce-144 | 3,000 | | 33 | 40 | | | 0.01 |
| Ba-140 | 8,000 | 200 | 25 | 2,000 | | | 0.01 |
| La-140 | 9,000 | 200 | 8 | 2,000 | | | 0.005 |

Note: 1 pCi = 3.7×10^{-2} 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 2.3-3

3 Source: Table E-1 of this report

Table 2
Results from the
Intercomparison of Environmental Dosimeters

| <u>Year</u> | <u>TVA Results mrem</u> | <u>Average, All Respondents mrem</u> | <u>Calculated Exposure (See Note 1) mrem</u> | <u>% Difference TVA: Calculated</u> | <u>% Difference Respondents: Calculated</u> |
|----------------------------|-----------------------------|----------------------------------------------|----------------------------------------------------------|---------------------------------------------|-----------------------------------------------------|
| Field Dosimeters | | | | | |
| 74 | 15.0 | 16.3 | 16.3 | -8.0 | 0.0 |
| 77 | 30.4 | 31.5 | 34.9 | -12.9 | -9.7 |
| 79 | 13.8 | 16.0 | 14.1 | -2.1 | 13.5 |
| 81 | 31.8 | 30.2 | 30.0 | 6.0 | 0.7 |
| 82 | 43.2 | 45.0 | 43.5 | -0.7 | 3.4 |
| 84 | 73.0 | 75.1 | 75.8 | -3.7 | -0.9 |
| 86a | 33.2 | 28.9 | 29.7 | 11.8 | -2.7 |
| 86b | 9.4 | 10.1 | 10.4 | -9.6 | -2.9 |
| 93a | 24.4 | 26.4 | 27.0 | -9.6 | -2.2 |
| 93b | 27.6 | 26.4 | 27.0 | 2.2 | -2.2 |
| Low Irradiated Dosimeters | | | | | |
| 74 | 27.9 | 28.5 | 30.0 | -7.0 | -5.0 |
| 79 | 12.1 | 12.1 | 12.2 | -0.8 | -0.8 |
| 86 | 18.2 | 16.2 | 17.2 | 5.8 | -5.8 |
| 93a | 24.9 | 25.0 | 25.9 | -3.9 | -3.5 |
| 93b | 27.8 | 25.0 | 25.9 | 7.3 | -3.5 |
| High Irradiated Dosimeters | | | | | |
| 77 | 99.4 | 86.2 | 91.7 | 8.4 | -6.0 |
| 79 | 46.1 | 43.9 | 45.8 | 0.7 | -4.1 |
| 81a | 84.1 | 75.8 | 75.2 | 11.8 | 0.8 |
| 81b | 102.0 | 90.7 | 88.4 | 15.4 | 2.6 |
| 82a | 179.0 | 191.0 | 202.0 | -11.4 | -5.4 |
| 82b | 136.0 | 149.0 | 158.0 | -13.9 | -5.7 |
| 84a | 85.6 | 77.9 | 79.9 | 7.1 | -2.5 |
| 84b | 76.8 | 73.0 | 75.0 | 2.4 | -2.7 |
| 93a | 67.8 | 69.8 | 72.7 | -6.7 | -4.0 |
| 93b | 80.2 | 69.8 | 72.7 | 10.3 | -4.0 |

- Notes:
1. The calculated exposure is the "known" exposure determined the testing agency.
 2. See Figure 3.

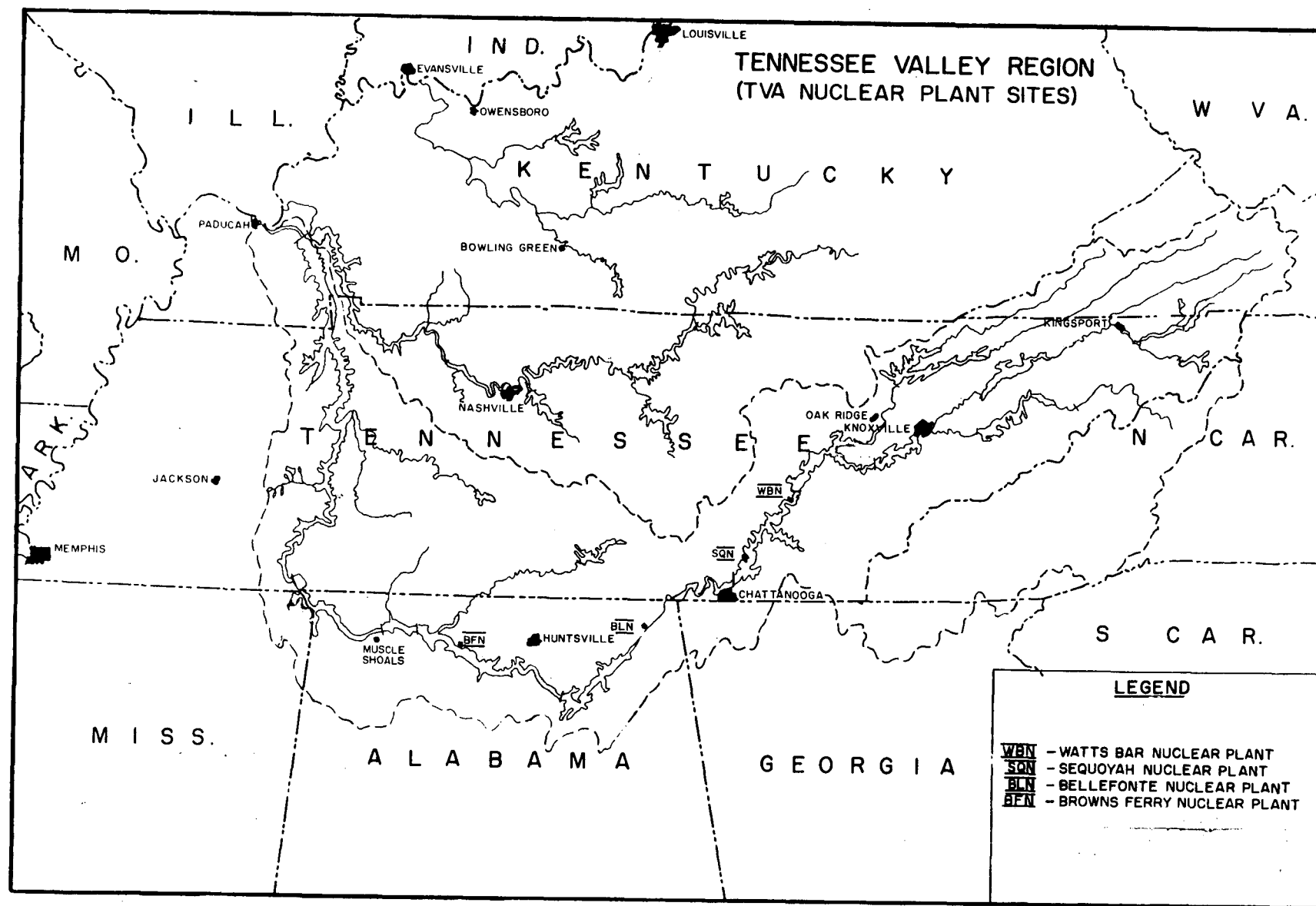
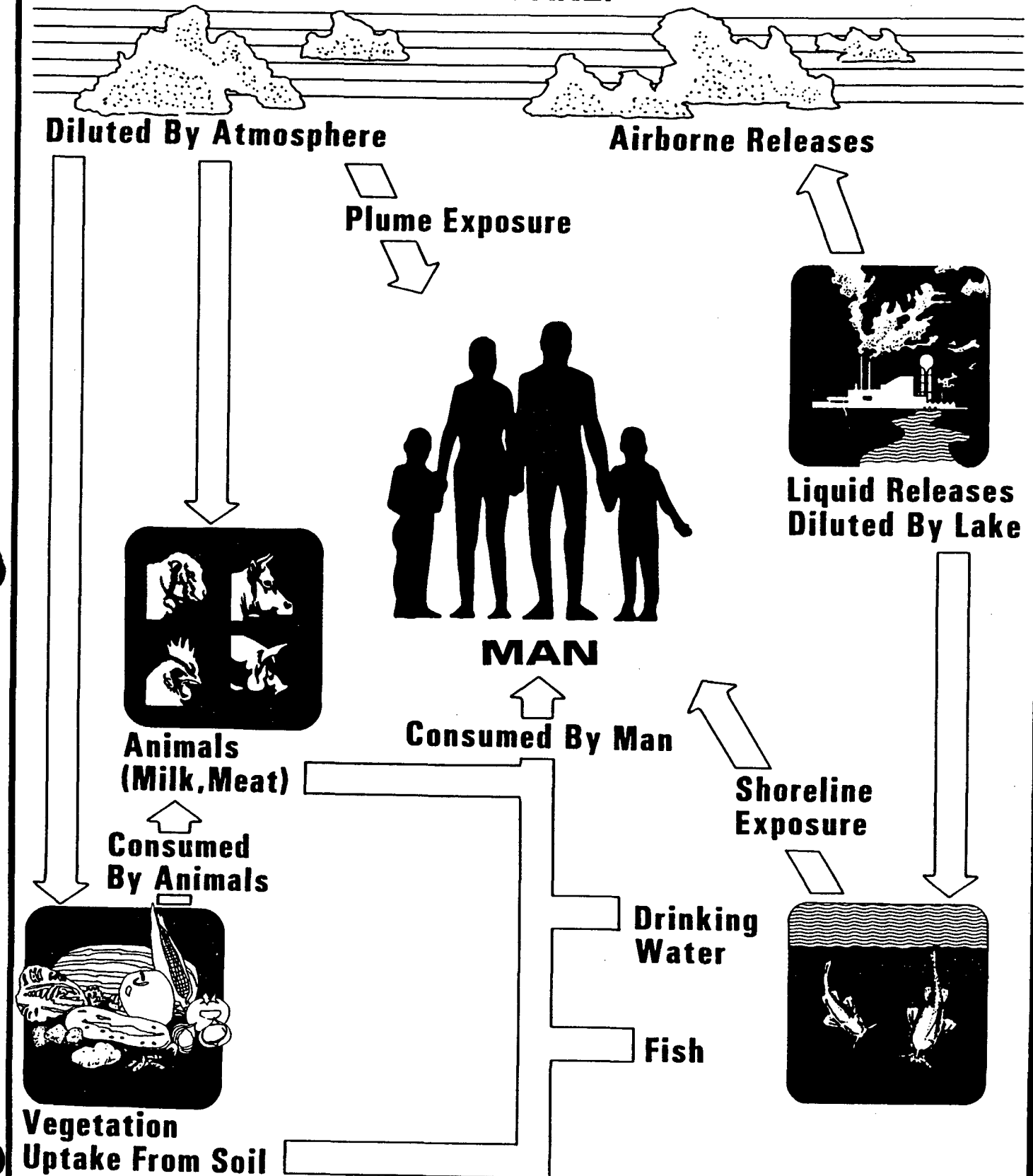


Figure 1

FIGURE 2

**ENVIRONMENTAL EXPOSURE PATHWAYS OF MAN
DUE TO RELEASES OF RADIOACTIVE MATERIAL
TO THE ATMOSPHERE AND LAKE.**



Intercomparison of Environmental Dosimeters

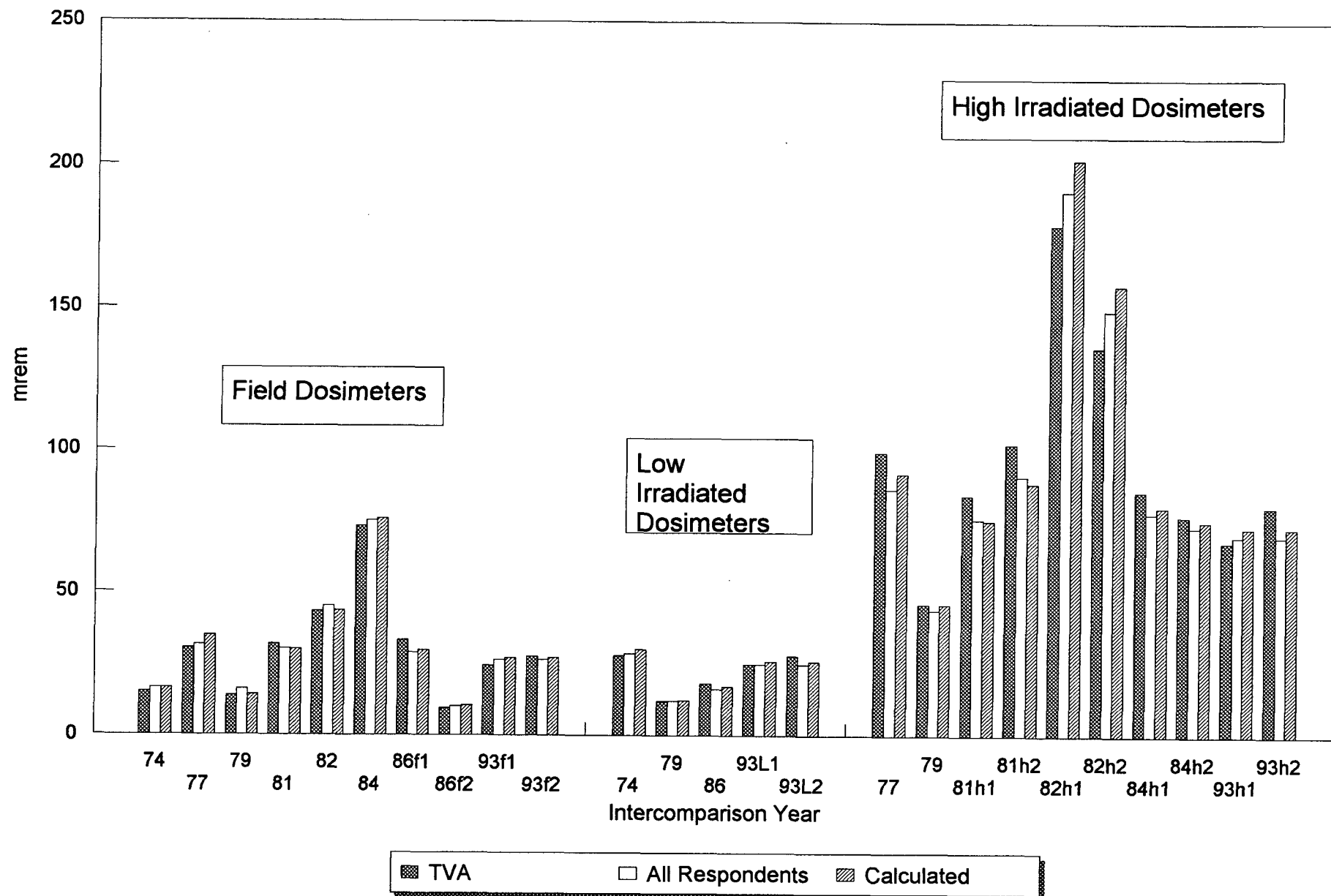


FIGURE 3

APPENDIX A

ENVIRONMENTAL RADIOLOGICAL MONITORING PROGRAM AND
SAMPLING LOCATIONS

Table A-1

WATTS BAR NUCLEAR PLANT
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM^a

| <u>Exposure Pathway and/or Sample</u> | <u>Number of Samples and Locations^b</u> | <u>Sampling and Collection Frequency</u> | <u>Type and Frequency of Analysis</u> |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. AIRBORNE | | | |
| a. Particulates | <p>4 samples from locations (in different sectors) at or near the site boundary (LM-1, 2, 3, and 4)</p> <p>4 samples from communities approximately 6-10 miles from the plant (PM-2, 3, 4, and 5)</p> <p>2 samples from control locations greater than 10 miles from the plant (RM-1 and 3)</p> | Continuous sampler operation with sample collection once per 7 days (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. |
| b. Radioiodine | Samples from same locations as air particulates | Continuous sampler operation with filter collection once per 7 days | I-131 at least once per 7 days |
| d. Rainwater | Samples from same locations as air particulates | Rainwater collected continuously with composite sample taken monthly | Analyzed for gamma activity only if radioactivity in other media indicates the presence of increased levels of fallout. |
| e. Soil | Samples from same locations as air particulates | Once per year | Gamma scan, Sr-89, Sr-90 once per year |

Table A-1

WATTS BAR NUCLEAR PLANT
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM^a

| <u>Exposure Pathway and/or Sample</u> | <u>Number of Samples and Locations^b</u> | <u>Sampling and Collection Frequency</u> | <u>Type and Frequency of Analysis</u> |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 2. DIRECT | <p>2 or more dosimeters (TLDs) placed (in different sectors) at or near the site boundary in each of the 16 sectors</p> <p>2 or more dosimeters placed at stations located approximately 5 miles from the plant in each of the 16 sectors</p> <p>2 or more dosimeters in approximately 16 additional locations of special interest.</p> | At least once per 92 days | Gamma dose at least once per 92 days |
| 3. WATERBORNE | | | |
| a. Surface | <p>2 samples downstream from plant discharge (TRM 517.9 and TRM 523.1)</p> <p>1 sample at a control location upstream from plant discharge (TRM 529.3)</p> | Collected by automatic sequential-type sampler ^c with composite samples collected over a period of approximately 31 days | Gross beta and gamma scan of each composite sample. Composite for Sr-89, Sr-90, and tritium analysis at least once per 92 days |
| b. Ground | One sample adjacent to plant (well No. 1) | Collected by automatic sequential-type sampler ^c with composite samples collected over a period of approximately 31 days | Composited for gross beta, gamma scan, Sr-89, Sr-90 and tritium at least once per 92 days |

Table A-1

WATTS BAR NUCLEAR PLANT
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM^a

| <u>Exposure Pathway and/or Sample</u> | <u>Number of Samples and Locations^b</u> | <u>Sampling and Collection Frequency</u> | <u>Type and Frequency of Analysis</u> |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| b. Ground (Continued) | 1 sample from ground water source upgradient (Farm L) | Grab sample at least once per 92 days | Gross beta, gamma scan, Sr-89, Sr-90 and tritium at least once per 92 days |
| 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 ^c with composite sample analyzed monthly ^e | Gross beta and gamma scan on each composite. Quarterly composite also analyzed for tritium, Sr-89, and Sr-90 |
| | 1 sample at a control location (TRM 529.3 ^d) | | |
| d. Sediment | 1 sample in the area immediately downstream of plant discharge (TRM 527.4) | At least once per 184 days | Gamma scan of each sample |
| | 2 additional samples downstream of plant discharge (TRM 518.0 and 496.5) | | |
| | 1 sample at a control location upstream from plant discharge (TRM 532.1) | | |
| e. 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) | | |

Table A-1

WATTS BAR NUCLEAR PLANT
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM^a

| <u>Exposure Pathway and/or Sample</u> | <u>Number of Samples and Locations^b</u> | <u>Sampling and Collection Frequency</u> | <u>Type and Frequency of Analysis</u> |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| f. Pond Sediment | 4 samples from the Low Volume Waste Treatment Pond 14 samples from the Yard Pond | At least once per year | Gamma scan of each sample |
| 5. INGESTION | | | |
| a. Milk | 3 samples from farms and/or dairies in the immediate vicinity of the plant (Farms L, Mu and N) 1 or more samples from control locations (Farms B, C, and/or S) (Also used at SQN) | Every 2 weeks | I-131 and gamma analysis on each sample. Sr-89 and Sr-90 once per quarter |
| b. Fish | 1 sample each of a commer- cially and a recreationally important species from Chickamauga and Watts Bar Reservoirs | At least once per 184 days. At least two of the follow- ing species shall be sampled: Channel Catfish, Crappie Smallmouth Buffalo | Gamma scan on edible portions. |
| c. Clams | 1 sample downstream of plant discharge 1 sample at a control location upstream from plant discharge | At least once per 184 days | Gamma scan on flesh only |

Table A-1

WATTS BAR NUCLEAR PLANT
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM^a

| <u>Exposure Pathway and/or Sample</u> | <u>Number of Samples and Locations^b</u> | <u>Sampling and Collection Frequency</u> | <u>Type and Frequency of Analysis</u> |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| e. Vegetation (Pasturage and grass) | 2 samples from farms from which milk is or has been obtained. (Farms L and OH) | Monthly | I-131 analysis and gamma scan of each sample. Sr-89 and Sr-90 analysis at least once per 92 days |
| | 1 sample from a control location (Farm S; also used for SQN) | Monthly | |
| e. Food Products | 1 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 |
| | 1 sample of each of the same foods grown at distances of greater than 10 miles from the plant | Cabbage and/or Lettuce Corn Green Beans Potatoes Tomatoes | |

- a. The sampling program outlined in this table is that which was in effect at the end of 1995.
b. Sample locations are shown on Figures A-1, A-2, and 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. The two downstream sampling stations are also part of the Sequoyah Nuclear Plant (SQN) monitoring program.

Table A-2

WATTS BAR NUCLEAR PLANT
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM
SAMPLING LOCATIONS

| Map Location Number ^a | Station | Sector | Approximate Distance (Miles) | Indicator (I) or Control (C) | Samples Collected ^b |
|----------------------------------------|-------------------------------------|---------------------|------------------------------------|------------------------------------|-----------------------------------|
| 2 | PM-2 | NW | 7.0 | I | AP,CF,R,S |
| 3 | PM-3 | NNE | 10.4 | I | AP,CF,R,S |
| 4 | PM-4 | NE/ENE ^c | 7.6 | I | AP,CF,R,S |
| 5 | PM-5 | S | 6.2 | I | AP,CF,R,S |
| 6 | RM-2 | SW | 15.0 | C | AP,CF,R,S |
| 7 | RM-3 | NNW | 15.0 | C | AP,CF,R,S |
| 8 | LM-1 | SSW | 0.5 | I | AP,CF,R,S |
| 9 | LM-2 | N | 0.5 | I | AP,CF,R,S |
| 10 | LM-3 | NNE | 1.9 | I | AP,CF,R,S |
| 11 | LM-4 | SE | 0.9 | I | AP,CF,R,S |
| 12 | Farm L | SSW | 1.3 | I ^d | M,V,W |
| 15 | Farm B | E | 15.0 | C | M |
| 16 | Farm C | SSW | 16.0 | C | M |
| 17 | Farm S | SW | 19.5 | C | M,V |
| 18 | Well #1 | S | 0.6 | I | W |
| 19 | Farm Mu | ESE | 3.7 | I | M |
| 20 | Farm N | ESE | 4.1 | I | M |
| 21 | Farm OH | WSW | 4.8 | I | V |
| 25 | TRM 517.9 | -- | 9.9 ^e | I | SW |
| 25a | TRM 518.0 | -- | 9.8 ^e | I | SD |
| 26 | TRM 523.1 | -- | 4.7 ^e | I | SW |
| 27 | TRM 529.3 | -- | 1.5 ^e | C | SW ^f |
| 28 | TRM 532.1 | -- | 4.3 ^e | C | SD |
| 29 | TRM 527.4 | -- | 0.4 ^e | I | SD |
| 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 | C | SS |
| 35 | TRM 503.8 | -- | 24.0 ^e | I | PW |
| | (Dayton) | | | | |
| 36 | TRM 496.5 | -- | 31.3 ^e | I | SD |
| 38 | Chickamauga Reservoir (TRM 471-530) | | | I | F |
| 39 | Watts Bar Reservoir (TRM 530-602) | | | C | F |
| 80 | Low Volume Waste | | | | |
| | Treatment Pond | SW | Onsite | I | PS |
| 81 | Yard Pond | SSE/S/SSW | Onsite | I | PS |

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

b. Sample codes:

AP = Air particulate filter
CF = Charcoal filter
CL = Clams
F = Fish
M = Milk

PW = Public water
PS = Pond Sediment
R = Rainwater
S = Soil

SD = Sediment
SS = Shoreline sediment
SW = Surface water
V = Vegetation
W = Well water

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
THERMOLUMINESCENT DOSIMETER (TLD) LOCATIONS

| Map ^a Location Number | Station | Sector | Approximate Distance (miles) | Onsite (On) ^b or Offsite (Off) |
|----------------------------------------|---------|--------|------------------------------------|-------------------------------------------------|
| 2 | NW-3 | NW | 7.0 | Off |
| 3 | NNE-3 | NNE | 10.4 | Off |
| 4 | ENE-3 | ENE | 7.6 | Off |
| 5 | S-3 | S | 6.2 | 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 |
| 15 | E-3 | E | 15.0 | 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 | E | 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-1 | 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 | SW | 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 |

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

b. TLDs designated 'onsite' are located 2 miles or less from the plant; 'offsite' are located more than 2 miles from the plant.

Figure A-1

Environmental Radiological Sampling Locations

Within 1 Mile of the Plant

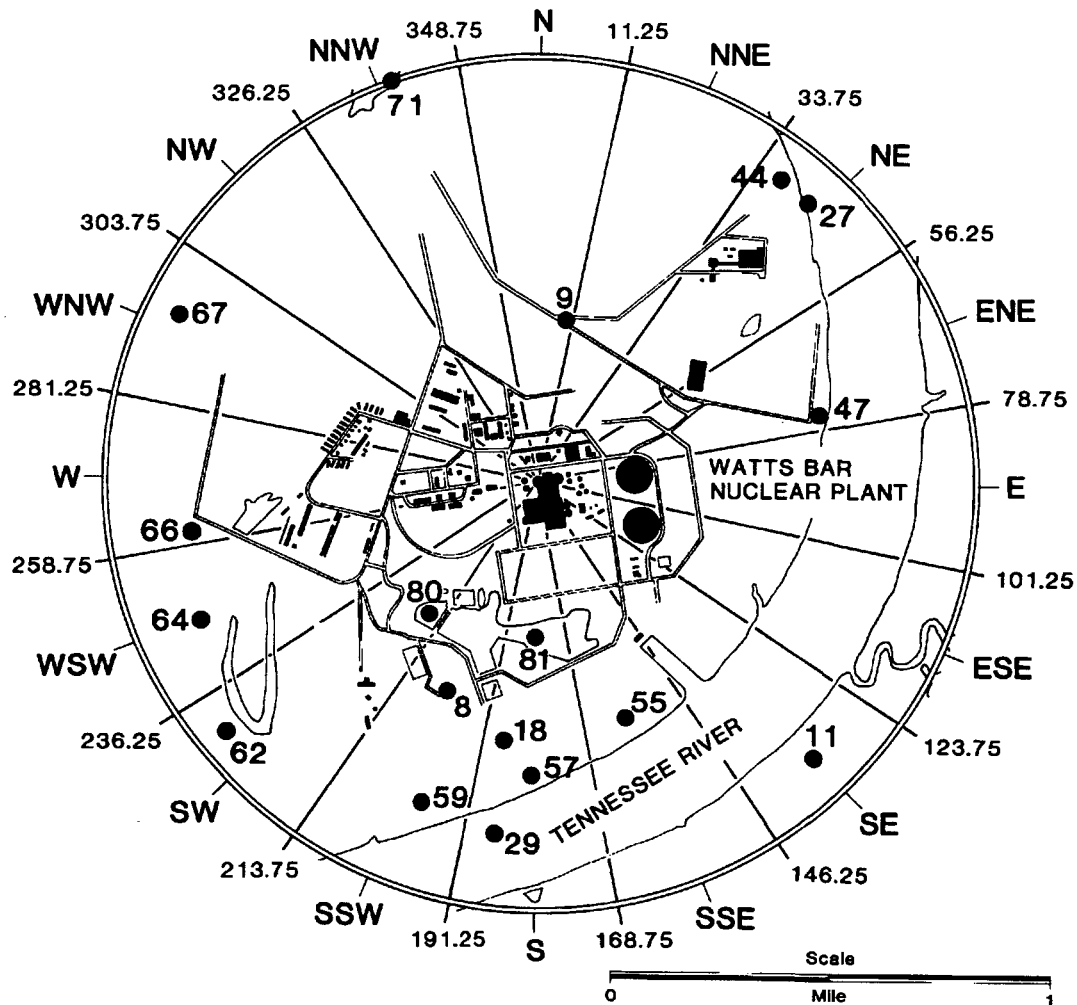


Figure A-2

Environmental Radiological Sampling Locations

From 1 to 5 Miles From The Plant

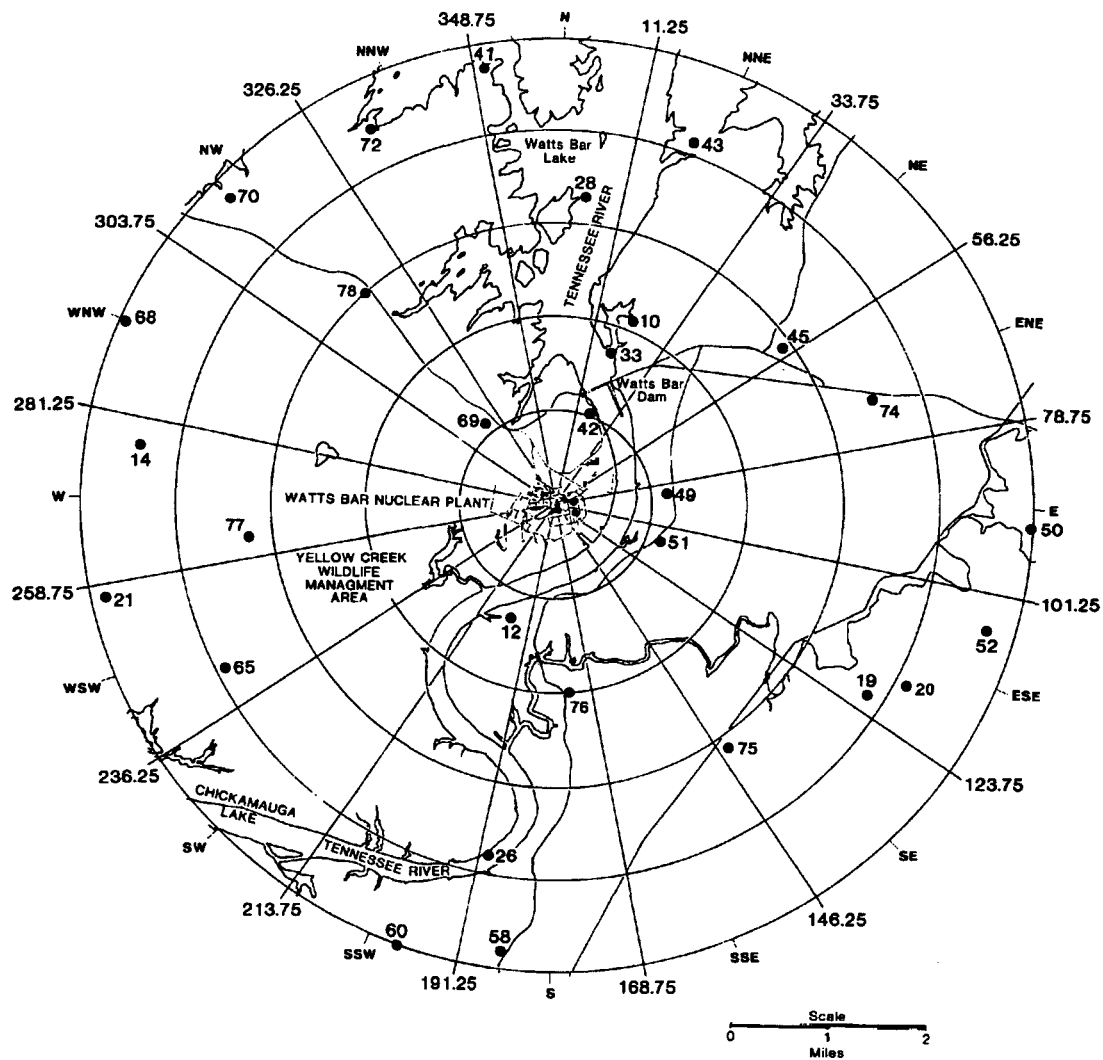
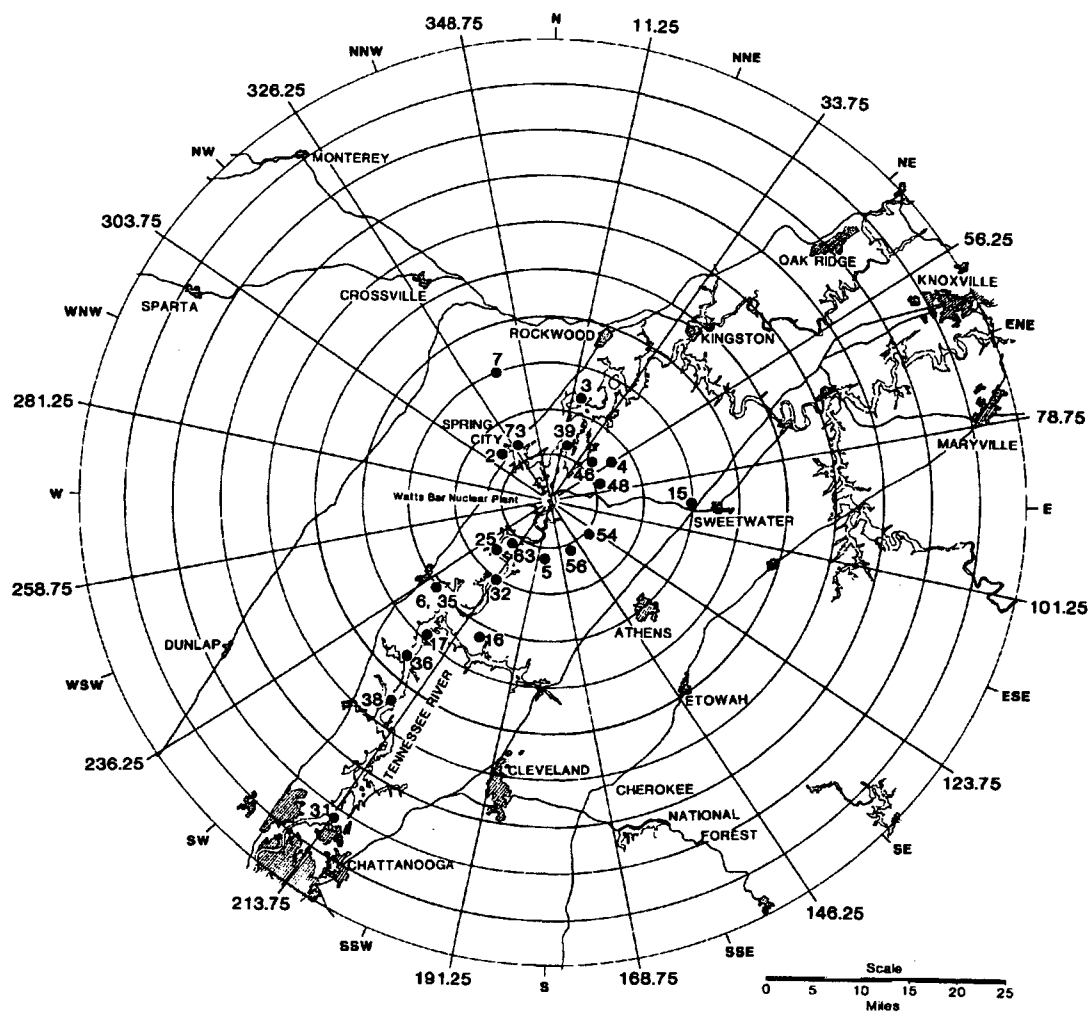


Figure A-3

Environmental Radiological Sampling Locations

Greater Than 5 Miles From the Plant



APPENDIX B

1995 PROGRAM MODIFICATIONS

Appendix B
1995 Program Modifications

Effective January 1, 1995, the WBN Radiological Environmental Monitoring Program (REMP) was modified to make it consistent with the program outlined in the WBN ODCM. Prior to that date the program included a number of activities designed to establish a broad base for background radioactivity levels in the vicinity of the plant. The program conducted prior to January 1995, contained many activities not included in the operational program described in the ODCM. Consequently, the modifications made in 1995 include the deletion of a number of these activities.

The following table lists the changes made in the REMF in 1995.

Table B-1

WATTS BAR NUCLEAR PLANT

Radiological Environmental Monitoring Program Modifications
1995

| <u>Date</u> | <u>Station</u> | <u>Location</u> | <u>Remarks</u> |
|-------------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1/1/95 | Air monitoring stations Sediment sampling stations Shoreline sediment sampling stations Fish sampling stations | | Discontinued the strontium analyses for these media. |
| 1/1/95 | All air monitoring stations | | 1. Discontinued the collection of gummed acetate (fallout) samples. 2. Discontinued the analysis of rainwater samples except when the need indicated by activity in other media. |
| 1/1/95 | Surface water sampling stations Public water sampling stations | | Discontinued the specific analysis for I-131 activity in these samples. Analysis for I-131 by gamma spectroscopy continued. |
| 1/1/95 | Well # 1 Farm L | 0.6 miles S 1.3 miles SSW | Changed well water sample analyses from monthly to quarterly. |
| 1/1/95 | Watts Bar Reservoir Piney River Mile 5.7 | | Discontinued the collection of public water samples from stations not obtaining water from the Tennessee River. |
| 1/1/95 | TRM 532.1 TRM 527.4 TRM 518.0 TRM 496.5 | 4.3 miles upstream 0.4 miles downstream 9.8 miles downstream 31.3 miles downstream | 1. Discontinued collection of clam samples from specific Tennessee River Mile locations. Clam samples are collected from one upstream and one downstream location in areas where clams can be found. 2. Discontinued the collection of plankton samples. |
| 1/1/95 | All milk sampling stations | | Changed the analysis of milk samples for Sr-89,90 content from monthly to quarterly. |
| 1/1/95 | Nickajack Reservoir | 57 miles downstream | Discontinued the collection of fish from this reservoir. |
| 1/1/95 | Farm Mu Farm N | 3.7 miles ESE 4.1 miles ESE | Discontinued the collection of vegetation samples from these two farms. Vegetation sampling at Farm L, Farm S and Farm OH continued. |
| 1/1/95 | All food product locations | | Discontinued the collection of beef and poultry samples. |
| 1/1/95 | Low Volume Waste Treatment Pond Yard Pond | Onsite Onsite | Initiated the annual collection of sediment samples from these two ponds. |

APPENDIX C

PROGRAM DEVIATIONS

Appendix C
Program Deviations

During the 1995 sampling period, a small number of samples were not collected and one analysis was not completed as scheduled. These occurrences resulted in deviations from the scheduled program but not from the minimum program required by the ODCM.

The missed samples and analyses were the result of equipment malfunction, sample unavailability and impurities in a sample. A list of missed samples, analyses, causes, and remedies to prevent recurrence, where applicable, are found in Table C-1.

Table C-1

Missed Samples and Analyses

| <u>Date</u> | <u>Station</u> | <u>Location</u> | <u>Remarks</u> |
|-----------------------|----------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6/27/95 & 10/17/95 | TRM 523.1 | 4.7 miles downstream | Two surface water samples were not collected as a result of damage to the sampling equipment. The equipment was repaired as soon as possible after the damage was discovered. |
| 6/14/95 | Farm B | 15 miles E | Milk had already been picked up by the processor, therefore no sample was available. This is one of three control stations. |
| 7/18/95 | PM-2 | 7.0 miles NW | The air particulate and charcoal samples were not collected because of a broken belt on the sampling pump. The belt was replaced and subsequent samples collected. |
| 8/30/94 | Farm L | 1.3 miles SSW | The analysis for Sr-89,90 could not be performed because the milk sample contained excessive solids. All other scheduled analyses were completed. |
| 11/14/95 | TRM 517.9 | 9.9 miles downstream | One surface water sample was not collected because of a blown fuse in the electrical control box. The fuse was replaced and subsequent samples were collected. |
| 8/8/95 - 11/7/95 | LM-2 | 0.5 miles N | Fourteen air particulate and charcoal filter samples were not collected as a result of the loss of power to the station during construction activities near the site. Power was restored in early November and subsequent samples collected. |

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. All 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. For solid samples, a specified amount of the sample is packed into a deep stainless steel planchet. Air particulate filters are counted directly in a shallow planchet.

The specific analysis of I-131 in milk, water, or vegetation samples 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 100 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, 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 computer based multichannel analyzer system. Spectral data reduction is performed by the computer program HYPERMET.

The charcoal cartridges used to sample gaseous radioiodine were analyzed by gamma spectroscopy using a germanium detector system.

All of 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

Sensitive radiation detection devices can produce a signal or reading even when no radioactivity is present in a sample being analyzed. This signal may come from trace amounts of radioactivity in the components of the device, from cosmic rays, from naturally occurring radon gas, or from electronic noise. The signal registered when no activity is present in the sample is called the background.

The point at which the signal is determined to represent radioactivity in the sample is called the critical level. This point is based on statistical analysis of the background readings from any particular device. However, any sample measured over and over in the same device will give different readings, some higher than others. The sample should have a well-defined average reading, but any individual reading will vary from that average. In order to determine the activity present in a sample that will produce a reading above the critical level, additional statistical analysis of the background readings is required. The hypothetical activity calculated from this analysis is called the lower limit of detection (LLD). A listing of typical LLD values that a laboratory publishes is a guide to the sensitivity of the analytical measurements performed by the laboratory.

Every time an activity is calculated for a sample, the background must be subtracted from the sample signal. For the very low levels encountered in environmental monitoring, the sample signals are often very close to the background. The measuring equipment is being used at the limit of its capability. For a sample with no measurable activity, which often happens, about half the time its signal should fall below the average machine background and half the time it should be above the background. If a signal above the background is present, the calculated activity is compared to the calculated LLD to determine if there is really activity present or if the number is an artifact of the way radioactivity is measured.

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 likely values for these factors have been evaluated for the various analyses performed in the environmental monitoring program. The nominal LLDs calculated from these values are presented in Table E-1. The maximum values for the lower limits of detection specified in NRC NUREG 0473 are shown in Table E-2.

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

Table E-1

Nominal LLD Values
A. Radiochemical Procedures

| | Air Filters (<u>pCi/m³</u>) | Water (<u>pCi/L</u>) | Milk (<u>pCi/L</u>) | Fish (<u>pCi/g dry</u>) | Wet Vegetation (<u>pCi/Kg wet</u>) | Sediment and Soil (<u>pCi/g dry</u>) |
|--------------|---------------------------------------------|---------------------------|--------------------------|------------------------------|-----------------------------------------|----------------------------------------------|
| Gross Beta | 0.002 | 1.9 | | | | |
| Tritium | | 300 | | | | |
| Iodine-131 | | 0.4 | 0.4 | | 6.0 | |
| Strontium-89 | 0.0011 | 5.0 | 2.0 | 0.09 | 31.0 | 1.6 |
| Strontium-90 | 0.0004 | 2.0 | 2.0 | 0.03 | 12.0 | 0.4 |

Table E-1
Nominal LLD Values
B. Gamma Analyses (GeLi)

| | Air Particulates <u>pCi/m³</u> | Charcoal Filters <u>pCi/m³</u> | Water and Milk <u>pCi/L</u> | Soil and Vegetation <u>pCi/kg, wet</u> | Vegetation Sediment <u>pCi/g, dry</u> | Fish and Grain <u>pCi/g, dry</u> | Tomatoes Clam Flesh <u>pCi/g, dry</u> | Foods: Meat and Potatoes, etc. <u>pCi/kg, wet</u> | Poultry <u>pCi/kg, wet</u> |
|---------|-------------------------------------------------|-------------------------------------------------|-----------------------------------|----------------------------------------------|---------------------------------------------|----------------------------------------|---------------------------------------------|------------------------------------------------------------|-------------------------------|
| Ac-228 | .01 | .07 | 20 | 70 | .25 | .10 | .75 | 50 | 30 |
| Ba-140 | .015 | .07 | 25 | 130 | .30 | .30 | 2.40 | 50 | 50 |
| Be-7 | .02 | .15 | 45 | 200 | .25 | .25 | 1.90 | 90 | 70 |
| Bi-212 | .02 | .20 | 50 | 250 | .45 | .25 | 2.00 | 130 | 90 |
| Bi-214 | .005 | .05 | 20 | 55 | .15 | .10 | .50 | 40 | 25 |
| Ce-141 | .005 | .02 | 10 | 35 | .10 | .07 | .35 | 20 | 15 |
| Ce-144 | .01 | .07 | 30 | 115 | .20 | .15 | .85 | 60 | 50 |
| Co-58 | .005 | .02 | 5 | 20 | .03 | .03 | .25 | 10 | 10 |
| Co-60 | .005 | .02 | 5 | 20 | .03 | .03 | .20 | 10 | 10 |
| Cr-51 | .02 | .15 | 45 | 200 | .35 | .30 | 2.40 | 95 | 75 |
| Cs-134 | .005 | .02 | 5 | 30 | .03 | .03 | .14 | 10 | 10 |
| Cs-137 | .005 | .02 | 5 | 25 | .03 | .03 | .15 | 10 | 10 |
| Fe-59 | .005 | .04 | 10 | 40 | .05 | .08 | .45 | 25 | 20 |
| I-131 | .005 | .03 | 10 | 60 | .25 | .20 | 1.70 | 20 | 25 |
| K-40 | .04 | .30 | 100 | 400 | .75 | .40 | 3.50 | 250 | 200 |
| La-140 | .01 | .04 | 10 | 50 | .20 | .20 | 1.40 | 25 | 30 |
| Mn-54 | .005 | .02 | 5 | 20 | .03 | .03 | .20 | 10 | 10 |
| Pa-234m | .50 | 3.20 | 800 | 4000 | 4.00 | 4.00 | 35.00 | 2500 | 2000 |
| Nb-95 | .005 | .02 | 5 | 30 | .04 | .25 | .25 | 10 | 10 |
| Pb-212 | .005 | .03 | 15 | 40 | .10 | .04 | .30 | 40 | 20 |
| Pb-214 | .005 | .07 | 20 | 80 | .15 | .50 | .10 | 80 | 40 |
| Ra-224 | | | | .75 | | 3.00 | | | |
| Ra-226 | | | | .15 | | .50 | | | |
| Ru-103 | .005 | .02 | 5 | 25 | .03 | .03 | .25 | 25 | 15 |
| Ru-106 | .02 | .12 | 40 | 190 | .20 | .15 | 1.25 | 190 | 60 |
| Tl-208 | .002 | .02 | 10 | 30 | .06 | .03 | .25 | 30 | 30 |
| Zn-65 | .005 | .03 | 10 | 45 | .05 | .05 | .40 | 45 | 20 |
| Zr-95 | .005 | .03 | 10 | 45 | .05 | .05 | .45 | 45 | 20 |

Table E-2

Maximum Values for the Lower Limits of Detection (LLD)
Specified by the WBN Offsite Dose Calculation Manual

| <u>Analysis</u> | <u>Water pCi/L</u> | <u>Airborne Particulate or Gases pCi/m³</u> | <u>Fish pCi/Kg.wet</u> | <u>Milk pCi/L</u> | <u>Food Products pCi/kg.wet</u> | <u>Sediment pCi/Kg.dry</u> |
|-----------------|------------------------|--------------------------------------------------------------------|----------------------------|-----------------------|-----------------------------------------|--------------------------------|
| gross beta | 4 | 1×10^{-2} | N.A. | N.A. | N.A. | N.A. |
| H-3 | 2000 ^a | 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 | 7×10^{-2} | N.A. | 1 | 60 | N.A. |
| Cs-134 | 15 | 5×10^{-2} | 130 | 15 | 60 | 150 |
| Cs-137 | 18 | 6×10^{-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/L may be used.

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

APPENDIX F

QUALITY ASSURANCE/QUALITY CONTROL PROGRAM

Appendix F

Quality Assurance/Quality Control Program

A thorough 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; a nonconformance and corrective action tracking system; systematic internal audits; a complete training and retraining system; 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 special samples along with routine samples.

Radiation detection devices can be tested in a number of ways. There are two primary tests which are performed on all devices. In the first type, the device is operated without a sample on the detector to determine the background count rate. The background counts are usually low values and are due to machine noise, cosmic rays, or trace amounts of radioactivity in the materials used to construct the detector. Charts of background counts are kept and monitored to ensure that no unusually high or low values are encountered.

In the second test, the device is operated with a known amount of radioactivity present. The number of counts registered from such a radioactive standard should be very reproducible. These reproducibility checks are also monitored to ensure that they are neither higher nor lower than expected. When counts from either test fall outside the expected range, the device is inspected for malfunction or contamination. It is not placed into service until it is operating properly.

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 may be 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 same 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 the 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 analyst can split it into two portions. Such a sample can provide 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 by the quality control staff or by the analysts themselves. The analysts are told 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, the analysts have immediate knowledge of the quality of the measurement process. A portion of these samples are also blanks.

Blind spikes are samples containing radioactivity which are introduced into the analysis process disguised as ordinary environmental samples. The analyst does not know they contain 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 they 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 they 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 determine whether or not the laboratory can find any unusual radioactivity whatsoever.

At present, 5 percent of the laboratory workload is in the category of internal cross-checks. These samples have a known amount of radioactivity added and are presented to the analysts labeled as cross-check samples. This means that the quality control staff knows the radioactive content or "right answer" but the analysts do not. They are aware they are being tested. Such samples test the best performance of the laboratory by determining if the analysts 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. Internal cross-checks can also tell if there is a difference in performance between two analysts. Like blind spikes or analytical knowns, these samples can also be spiked with low levels of activity to test detection limits.

Control 1.3.3 of the ODCM requires that the laboratory participate in an approved Interlaboratory Comparison Program. A series of cross-checks is produced by the EPA in Las Vegas. These interlaboratory comparison samples or "EPA cross-checks" are considered to be the primary indicator of laboratory performance. They provide an independent check of the entire measurement process that cannot be easily provided by the laboratory itself. That is, unlike internally produced cross-checks, EPA cross-checks test the calibration of the laboratory detection devices since different radioactive standards produced by individuals outside TVA are used in the cross-checks. The results of the analysis of these samples are reported back to EPA which then issues a report of all the

results of all participants. These reports are examined very closely by laboratory supervisory and quality control personnel. They indicate how well the laboratory is doing compared to others across the nation. Like internal cross-checks, the EPA cross-checks provide information to the laboratory about the precision and accuracy of the radioanalytical work it does.

The results of TVA's participation in the EPA Interlaboratory Comparison Program are presented in Table F-1 and Figure F-1. For 1995, all EPA cross-check sample concentrations measured by TVA's laboratory were within ± 3 -sigma of the EPA reported values.

TVA splits certain environmental samples with laboratories operated by the States of Alabama and Tennessee and the EPA National Air and Radiation Environmental Laboratory in Montgomery, Alabama. When radioactivity has been present in the environment in measurable quantities, such as following atmospheric nuclear weapons testing, following the Chernobyl incident, or as naturally occurring radionuclides, the split samples have provided TVA with yet another level of information about laboratory performance. These samples demonstrate performance on actual environmental sample matrices rather than on the constructed matrices used in cross-check programs.

All 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 help or improvement. The end result is a measurement process that provides accurate 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 OBTAINED IN INTERLABORATORY COMPARISON PROGRAM

A. Air Filter (pCi/Filter)

| <u>Date</u> | <u>Gross Alpha</u> | | <u>Gross Beta</u> | | <u>Strontium-90</u> | | <u>Cesium-137</u> | |
|-------------|--------------------|------|-------------------|------|---------------------|------|-------------------|------|
| | EPA Value | TVA | EPA Value | TVA | EPA Value | TVA | EPA Value | TVA |
| | (± 3 sigma) | Avg. | (± 3 sigma) | Avg. | (± 3 sigma) | Avg. | (± 3 sigma) | Avg. |
| 8/95 | 25 \pm 11 | 29 | 87 \pm 17 | 90 | 30 \pm 9 | 29 | 25 \pm 9 | 23 |

B. Radiochemical Analysis of Water (pCi/L)

| <u>Date</u> | <u>Gross Beta</u> | | <u>Strontium-89</u> | | <u>Strontium-90</u> | | <u>Tritium</u> | | <u>Iodine-131</u> | | <u>Plutonium-239</u> | |
|--------------------|-------------------|------|---------------------|------|---------------------|------|------------------|------|-------------------|------|----------------------|------|
| | EPA Value | TVA | EPA Value | TVA | EPA Value | TVA | EPA Value | TVA | EPA Value | TVA | EPA Value | TVA |
| | (± 3 sigma) | Avg. | (± 3 sigma) | Avg. | (± 3 sigma) | Avg. | (± 3 sigma) | Avg. | (± 3 sigma) | Avg. | (± 3 sigma) | Avg. |
| 1/95 | 5 \pm 9 | 7 | 20 \pm 9 | 21 | 15 \pm 9 | 15 | | | | | | |
| 2/95 | | | | | | | | | 100 \pm 17 | 93 | | |
| 3/95 | | | | | | | 7435 \pm 1289 | 7172 | | | 11 \pm 2 | 10 |
| 4/95 ^a | | | 20 \pm 9 | 20 | 15 \pm 9 | 15 | | | | | | |
| 7/95 | 19 \pm 9 | 22 | 20 \pm 9 | 21 | 8 \pm 9 | 9 | | | | | | |
| 8/95 | | | | | | | 4872 \pm 844 | 4747 | | | | |
| 10/95 | 25 \pm 9 | 28 | | | | | | | 148 \pm 26 | 148 | | |
| 10/95 ^a | | | 20 \pm 9 | 22 | 10 \pm 9 | 8 | | | | | | |

Table F-1

RESULTS OBTAINED IN INTERLABORATORY COMPARISON PROGRAM (Continued)

C. Gamma-Spectral Analysis of Water (pCi/L)

| <u>Date</u> | <u>Barium-133</u> | | <u>Cobalt-60</u> | | <u>Zinc-65</u> | | <u>Cesium-134</u> | | <u>Cesium-137</u> | |
|--------------------|-------------------------------------------------------|---------------------------|-------------------------------------------------------|---------------------------|-------------------------------------------------------|---------------------------|-------------------------------------------------------|---------------------------|-------------------------------------------------------|---------------------------|
| | <u>EPA Value</u> <u>(± 3 sigma)</u> | <u>TVA</u> <u>Avg.</u> | <u>EPA Value</u> <u>(± 3 sigma)</u> | <u>TVA</u> <u>Avg.</u> | <u>EPA Value</u> <u>(± 3 sigma)</u> | <u>TVA</u> <u>Avg.</u> | <u>EPA Value</u> <u>(± 3 sigma)</u> | <u>TVA</u> <u>Avg.</u> | <u>EPA Value</u> <u>(± 3 sigma)</u> | <u>TVA</u> <u>Avg.</u> |
| 4/95 ^a | | | 29 \pm 9 | 29 | | | 20 \pm 9 | 19 | 11 \pm 9 | 12 |
| 6/95 | 79 \pm 14 | 76 | 40 \pm 9 | 40 | 76 \pm 14 | 71 | 50 \pm 9 | 44 | 35 \pm 9 | 34 |
| 10/95 ^a | | | 49 \pm 9 | 50 | | | 40 \pm 9 | 38 | 30 \pm 9 | 30 |
| 11/95 | 99 \pm 17 | 100 | 60 \pm 9 | 60 | 125 \pm 23 | 129 | 40 \pm 9 | 37 | 49 \pm 9 | 50 |

D. Milk (pCi/L)

| <u>Date</u> | <u>Strontium-89</u> | | <u>Strontium-90</u> | | <u>Iodine-131</u> | | <u>Cesium-137</u> | | <u>Potassium-40^b</u> | |
|-------------|-------------------------------------------------------|---------------------------|-------------------------------------------------------|---------------------------|-------------------------------------------------------|---------------------------|-------------------------------------------------------|---------------------------|-------------------------------------------------------|---------------------------|
| | <u>EPA Value</u> <u>(± 3 sigma)</u> | <u>TVA</u> <u>Avg.</u> | <u>EPA Value</u> <u>(± 3 sigma)</u> | <u>TVA</u> <u>Avg.</u> | <u>EPA Value</u> <u>(± 3 sigma)</u> | <u>TVA</u> <u>Avg.</u> | <u>EPA Value</u> <u>(± 3 sigma)</u> | <u>TVA</u> <u>Avg.</u> | <u>EPA Value</u> <u>(± 3 sigma)</u> | <u>TVA</u> <u>Avg.</u> |
| 9/95 | 20 \pm 9 | 19 | 15 \pm 9 | 16 | 99 \pm 17 | 100 | 50 \pm 9 | 50 | 1654 \pm 144 | 1675 |

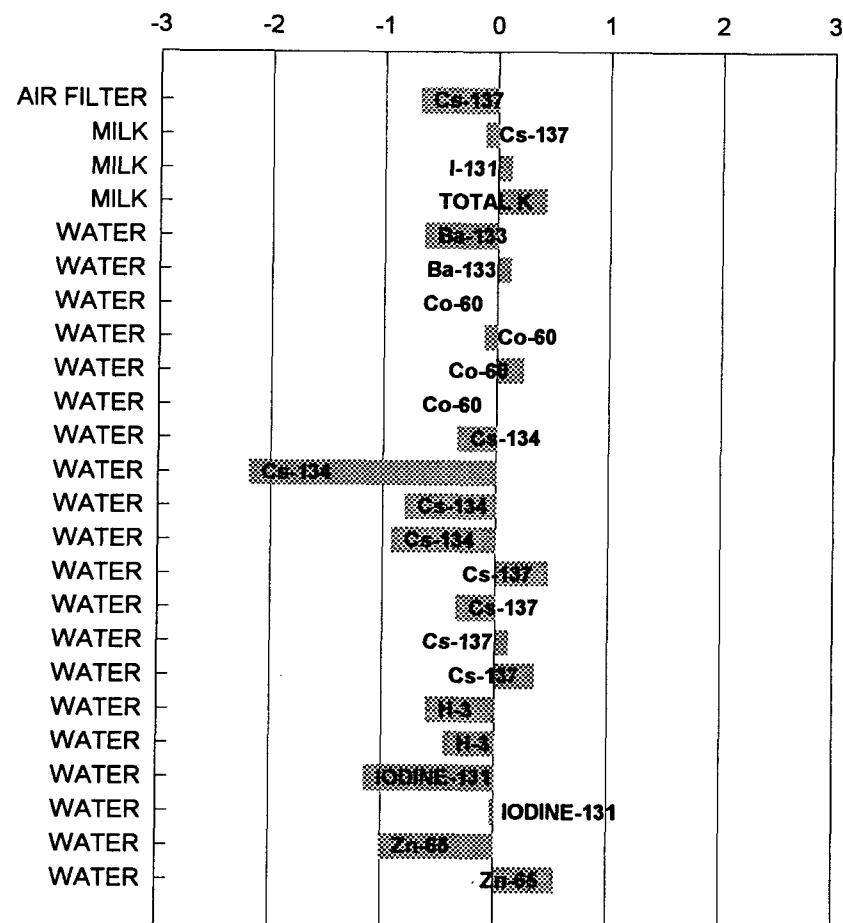
a. Performance Evaluation Intercomparison Study.

b. Units are milligrams of total potassium per liter rather than picocuries of K-40 per liter.

(found - given) / EPA sigma



(found - known) / EPA sigma



Laboratory objective: $\text{abs}[(\text{found} - \text{given})/\text{EPA sigma}] < 3$

APPENDIX G

LAND USE SURVEY

APPENDIX G

Land Use Survey

A land use survey is conducted periodically 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 is usually 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.

From the data of the surveys, 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 design basis source terms and historical meteorological data. They also assume that the plant is operating and that 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 1994 and 1995, three changes were made in the codes used to calculate potential doses offsite. These changes include: (1) The last five years of meteorological data were added to the meteorological data file; (2) factors ranging from 1 to 3 were added to account for the impact of the terrain on the estimated doses; and (3) the source terms were changed several times. The most recent source terms from the latest version of the Final Safety Analysis Report (FSAR) were used in the calculation of the doses included in this report.

As a result of the changes noted above in the calculational codes, relative doses calculated for 1995 for air submersion were lower than those projected for 1994 while doses

calculated in 1995 from ingestion of home-grown foods were higher than those calculated in 1994. The doses projected from the consumption of milk were also significantly lower in 1995 than in 1994, but were similar to those calculated in 1993. Except for the farm where the owner does not want to participate in the program (Farm Ho), milk samples are being collected from the three farms where the calculated doses are highest. One of the farms providing a milk sample is between Farm Ho and the plant.

Tables G-1, G-2, and G-3 show the comparative calculated doses for 1994 and 1995.

Table G-1

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

mrem/year

| <u>Sector</u> | <u>1994 Survey</u> | | <u>1995 Survey</u> | |
|---------------|-----------------------------------------|--------------------|-----------------------------------------|--------------------|
| | <u>Approximate Distance (Miles)</u> | <u>Annual Dose</u> | <u>Approximate Distance (Miles)</u> | <u>Annual Dose</u> |
| N | 1.3 | 0.84 | 1.3 | 0.24 |
| NNE | 2.3 | 0.77 | 2.3 | 0.19 |
| NE | 2.1 | 0.57 | 2.1 | 0.19 |
| ENE | 1.8 | 0.57 | 1.7 | 0.25 |
| E | 2.0 | 0.46 | 2.0 | 0.18 |
| ESE | 2.9 | 0.24 | 2.9 | 0.10 |
| SE | 0.9 | 2.00 | 0.9 | 0.75 |
| SSE | 1.0 | 1.21 | 1.0 | 0.38 |
| S | 1.0 | 1.45 | 1.0 | 0.37 |
| SSW | 1.3 | 1.12 | 1.3 | 0.26 |
| SW | 2.7 | 0.28 | 2.7 | 0.09 |
| WSW | 1.3 | 0.89 | 1.1 | 0.38 |
| W | 1.8 | 0.19 | 1.8 | 0.07 |
| WNW | 0.9 | 0.52 | 0.9 | 0.19 |
| NW | 1.9 | 0.10 | 1.9 | 0.04 |
| NNW | 2.7 | 0.08 | 2.7 | 0.03 |

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

Table G-2

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

mrem/year

| Sector | 1994 Survey | | 1995 Survey | |
|--------|---------------------------------|-------------|---------------------------------|-------------|
| | Approximate Distance (Miles) | Annual Dose | Approximate Distance (Miles) | Annual Dose |
| N | 2.8 | 0.48 | 2.7 | 1.73 |
| NNE | 2.5 | 0.71 | 2.5 | 4.07 |
| NE | 2.4 | 0.79 | 2.4 | 3.53 |
| ENE | 1.8 | 0.81 | 1.8 | 4.96 |
| E | 2.0 | 0.67 | 3.6 | 1.41 |
| ESE | 2.9 | 0.61 | 2.9 | 2.34 |
| SE | 4.7 | 0.33 | b | b |
| SSE | 1.0 | 0.88 | 1.0 | 7.46 |
| S | 1.1 | 0.94 | 1.1 | 7.07 |
| SSW | 1.3 | 0.89 | b | b |
| SW | 5.0 | 0.49 | b | b |
| WSW | 1.7 | 0.72 | 1.7 | 4.30 |
| W | 2.0 | 0.36 | 2.7 | 0.78 |
| WNW | 1.0 | 0.97 | b | b |
| NW | 2.0 | 0.32 | 2.0 | 0.76 |
| NNW | 2.8 | 0.29 | 2.7 | 0.69 |

a. Assumes the plant is operating and 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 Reactor Thyroid from Ingestion of Milk^a
(Nearest Milk-Producing Animal Within 5 Miles of Plant)

| mrem/year | | | | | | |
|----------------------|---------------|-----------------------------------------|--------------------|-------------|-------------|--------------------------------|
| <u>Location</u> | <u>Sector</u> | <u>Approximate Distance (Miles)</u> | <u>Annual Dose</u> | | | <u>X/Q s/m³</u> |
| | | | <u>1993</u> | <u>1994</u> | <u>1995</u> | |
| <u>Cows</u> | | | | | | |
| Farm Mu ^b | ESE | 3.6 | 0.06 | 0.54 | 0.10 | 1.22 E -6 |
| Farm N | ESE | 4.1 | 0.06 | 0.49 | 0.07 | 9.74 E -7 |
| Farm Hu | ESE | 4.7 | 0.04 | 0.41 | 0.05 | 7.49 E -7 |
| Farm L ^b | SSW | 1.3 | 0.64 | 5.12 | 0.94 | 2.15 E -6 |
| Farm Ho ^d | SSW | 1.5 | 0.14 | 1.55 | 0.38 | 2.72 E -6 |
| Farm S | WNW/NW | 4.9 | 0.004 | 0.26 | 0.01 | 8.46 E -8 |
| <u>Goats</u> | | | | | | |
| Farm OH | WSW | 4.8 | 0.05 | 0.68 | c | |

-
- a. Assumes the plant is operating and effluent releases are equivalent to design basis source terms.
b. Milk being sampled at these locations.
c. Milk-producing animals not identified in this sector in 1995.
d. Owner unwilling to provide samples or information. The dose calculated assumes consumption of the milk by an adult and a feeding factor equivalent to the highest reported by the other dairies (41 %). If milk from this location were to be consumed by teens, children or infants, the estimated doses would be 0.60, 1.23 and 2.92 mrem/year, respectively.

APPENDIX H

DATA TABLES

Table H-1

DIRECT RADIATION LEVELS

Average External Gamma Radiation Levels at Various Distances from
Watts Bar Nuclear Plant for Each Quarter - 1995
mrem/Quarter^a

| <u>Distance Miles</u> | <u>Average External Gamma Radiation Levels^b</u> | | | |
|-----------------------------------|------------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | <u>1st Quarter</u> (Dec 94-Feb 94) | <u>2nd Quarter</u> (Mar-May 95) | <u>3rd Quarter</u> (Jun-Aug 95) | <u>4th Quarter</u> (Sep-Nov 95) |
| 0-1 | 18.3 ± 2.5 | 14.7 ± 2.6 | 16.3 ± 2.7 | 17.5 ± 3.4 |
| 1-2 | 15.3 ± 1.4 | 13.7 ± 1.5 | 14.9 ± 1.7 | 15.8 ± 1.7 |
| 2-4 | 15.6 ± 2.6 | 12.6 ± 1.0 | 14.0 ± 1.2 | 14.9 ± 1.9 |
| 4-6 | 15.5 ± 1.9 | 13.0 ± 1.7 | 14.3 ± 1.9 | 15.4 ± 2.4 |
| >6 | 14.3 ± 2.0 | 12.5 ± 2.2 | 13.8 ± 2.0 | 15.9 ± 2.7 |
| Average, 0-2 miles (Onsite) | 17.1 ± 2.6 | 14.3 ± 2.3 | 15.8 ± 2.5 | 16.9 ± 3.0 |
| Average >2 miles (Offsite) | 15.2 ± 2.1 | 12.8 ± 1.8 | 14.1 ± 1.8 | 15.5 ± 2.5 |

a. Data normalized to one quarter (2190 hours).

b. Averages of the individual measurements in the set ±1 standard deviation of the set.

Table H-2

DIRECT RADIATION LEVELS

B. Individual Stations

| Map Location Number | | NRC Station No.* | Direction, Degrees | Approx. Distance, Miles | <u>Environmental Radiation Levels</u> <u>mrem/Quarter</u> | | | | Annual Exposure, mrem/Year |
|---------------------------|--------|---------------------|-----------------------|-------------------------------|--------------------------------------------------------------|---------------------|---------------------|----------------------|----------------------------------|
| | | | | | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter | |
| | | | | | Dec. 1994 Feb. 1995 | March - May 1995 | June - Aug. 1995 | Sept. - Nov. 1995 | |
| 40 | N-1 | 16 | 10 | 1.2 | 16.8 | 15.0 | 15.9 | 14.4 | 62.1 |
| 41 | N-2 | 15 | 350 | 4.7 | 15.0 | 13.2 | 14.5 | 12.5 | 55.2 |
| 42 | NNE-1 | | 21 | 1.2 | 15.9 | 14.5 | 16.7 | 13.1 | 60.2 |
| 10 | NNE-1A | | 22 | 1.9 | 14.4 | 12.5 | 13.1 | 14.8 | 54.8 |
| 43 | NNE-2 | | 20 | 4.1 | 13.0 | 11.6 | 12.6 | 14.0 | 51.2 |
| 3 | NNE-3 | | 17 | 10.4 | 14.3 | 11.6 | 13.0 | 14.6 | 53.5 |
| 44 | NE-1 | | 39 | 0.9 | 19.0 | 16.9 | 19.1 | 24.5 | 79.5 |
| 45 | NE-2 | | 54 | 2.9 | 17.0 | 12.8 | 14.4 | 17.9 | 62.1 |
| 46 | NE-3 | | 47 | 6.1 | 13.5 | 10.2 | 11.8 | 12.2 | 47.7 |
| 47 | ENE-1 | | 74 | 0.7 | 16.7 | 14.8 | 17.0 | 17.1 | 65.6 |
| 48 | ENE-2 | | 69 | 5.8 | 13.7 | 11.8 | 14.0 | 13.8 | 53.3 |
| 74 | ENE-2A | | 69 | 3.5 | 12.0 | 11.0 | 12.2 | 12.1 | 47.3 |
| 4 | ENE-3 | | 56 | 7.6 | 13.4 | 11.4 | 13.3 | 13.9 | 52.0 |
| 49 | E-1 | 20 | 85 | 1.3 | 14.5 | 13.0 | 13.7 | 15.6 | 56.8 |
| 50 | E-2 | | 92 | 5.0 | 15.2 | 13.2 | 15.2 | 15.8 | 59.4 |
| 15 | E-3 | | 90 | 15.0 | 17.8 | 16.8 | 17.1 | 18.1 | 69.8 |
| 51 | ESE-1 | 21 | 109 | 1.2 | 12.6 | 11.0 | 12.4 | 13.0 | 49.0 |
| 52 | ESE-2 | | 106 | 4.4 | 19.6 | 16.2 | 17.5 | 18.3 | 71.6 |
| 11 | SE-1A | 22 | 138 | 0.9 | 19.3 | 12.1 | 13.3 | 13.9 | 58.6 |
| 54 | SE-2 | | 128 | 5.3 | 18.6 | 11.2 | 12.3 | 13.3 | 55.4 |
| 75 | SE-2A | | 144 | 3.1 | 20.2 | 12.4 | 13.6 | 14.2 | 60.4 |
| 55 | SSE-1 | | 156 | 0.6 | 20.8 | 13.4 | 14.9 | 15.3 | 64.4 |
| 56 | SSE-2 | | 156 | 5.8 | 14.8 | 13.9 | 15.0 | 15.8 | 59.5 |

* Locations with TVA and NRC stations co-located.

Table H-2

DIRECT RADIATION LEVELS

B. Individual Stations

| Map Location Number | NRC Station No.* | Direction, Degrees | Approx. Distance, Miles | Environmental Radiation Levels mrem/Quarter | | | | Annual Exposure, mrem/Year |
|---------------------------|---------------------|-----------------------|-------------------------------|------------------------------------------------|------------------------------------|------------------------------------|-------------------------------------|----------------------------------|
| | | | | 1st Quarter Dec. 1993- Feb. 1994 | 2nd Quarter March - May 1994 | 3rd Quarter June - Aug. 1994 | 4th Quarter Sept. - Nov. 1994 | |
| | | | | | | | | |
| 57 | S-1 | 182 | 0.7 | 19.8 | 12.3 | 13.5 | 14.5 | 60.1 |
| 58 | S-2 | 185 | 4.8 | 14.6 | 10.6 | 11.1 | 11.5 | 47.8 |
| 76 | S-2A | 177 | 2.0 | 15.7 | 14.3 | 15.7 | 16.0 | 61.7 |
| 5 | S-3 | 185 | 6.2 | 14.4 | 12.5 | 14.5 | 14.1 | 55.5 |
| 59 | SSW-1 | 199 | 0.8 | 19.3 | 17.5 | 19.5 | 19.2 | 75.5 |
| 12 | SSW-2 | 200 | 1.3 | 16.5 | 14.5 | 15.3 | 14.6 | 60.9 |
| 60 | SSW-3 | 199 | 5.0 | 17.1 | 11.4 | 12.0 | 13.1 | 53.6 |
| 62 | SW-1 | 226 | 0.8 | 20.4 | 16.7 | 18.2 | 18.0 | 73.3 |
| 63 | SW-2 | 220 | 5.3 | 13.9 | 12.4 | 13.7 | 13.2 | 53.2 |
| 6 | SW-3 | 225 | 15.0 | 12.8 | 11.1 | 12.2 | 13.4 | 49.5 |
| 64 | WSW-1 | 255 | 0.9 | 14.5 | 12.4 | 13.7 | 14.5 | 55.1 |
| 65 | WSW-2 | 9 | 4.0 | 15.9 | 14.5 | 15.7 | 18.1 | 64.2 |
| 66 | W-1 | 270 | 0.9 | 15.7 | 13.5 | 15.1 | 18.8 | 63.1 |
| 14 | W-2 | 277 | 4.8 | 12.6 | 10.9 | 12.1 | 13.7 | 49.3 |
| 77 | W-2A | 268 | 3.2 | 14.9 | 13.0 | 15.0 | 15.6 | 58.5 |
| 67 | WNW-1 | 294 | 0.9 | 21.9 | 20.3 | 21.5 | 22.6 | 86.3 |
| 68 | WNW-2 | 292 | 4.9 | 16.9 | 16.0 | 16.7 | 17.4 | 67.0 |
| 69 | NW-1 | 320 | 1.1 | 16.2 | 14.9 | 16.0 | 16.8 | 63.9 |
| 70 | NW-2 | 313 | 4.7 | 16.2 | 14.3 | 16.5 | 16.7 | 63.7 |
| 78 | NW-2A | 321 | 3.0 | 14.0 | 12.0 | 12.9 | 13.5 | 52.4 |
| 2 | NW-3 | 317 | 7.0 | 17.6 | 16.1 | 17.1 | 20.4 | 71.2 |
| 71 | NNW-1 | 1 | 340 | 1.0 | 14.0 | 12.3 | 13.6 | 54.4 |
| 72 | NNW-2 | 333 | 4.5 | 15.2 | 13.7 | 15.0 | 20.9 | 64.8 |
| 73 | NNW-3 | 14 | 329 | 7.0 | 12.2 | 10.9 | 11.8 | 53.1 |
| 7 | NNW-4 | 337 | 15.0 | 12.4 | 11.5 | 12.8 | 18.4 | 55.1 |

* Locations with TVA and NRC stations co-located.

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

RADIOACTIVITY IN AIR FILTER
PC1/M3 - 0.037 BQ/M3

NAME OF FACILITY: WATTS BAR NUCLEAR PLANT
LOCATION OF FACILITY: RHEA TENNESSEE

DOCKET NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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 | | | | | | |
| | 505 | 2.00E-03 | 2.06E-02(401/ 401) PM-4 TEN MILE 9.02E-03- 4.11E-02 7.8 M. NE/ENE | 2.18E-02(52/ 52) 1.16E-02- 4.04E-02 | 2.09E-02(104/ 104) 1.15E-02- 4.03E-02 | |
| GAMMA SCAN (GELI) | | | | | | |
| | 127 | | | | | |
| BE-7 | 2.00E-02 | 9.82E-02(99/ 101) 5.23E-02- 1.42E-01 | PM3 CEDINE BIBLE CAMP 11.5 M. NNE | 1.03E-01(13/ 13) 6.32E-02- 1.42E-01 | 1.03E-01(26/ 26) 6.16E-02- 1.46E-01 | |
| B1-214 | 5.00E-03 | 8.15E-03(21/ 101) 5.00E-03- 1.48E-02 | PM5 DECATUR 6.25 MILES S | 1.17E-02(3/ 13) 1.04E-02- 1.37E-02 | 9.72E-03(4/ 26) 5.70E-03- 2.09E-02 | |
| PB-214 | 5.00E-03 | 8.81E-03(20/ 101) 5.20E-03- 1.50E-02 | PM5 DECATUR 6.25 MILES S | 1.19E-02(3/ 13) 9.10E-03- 1.49E-02 | 1.05E-02(4/ 26) 5.60E-03- 2.31E-02 | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-3

TENNESSEE VALLEY AUTHORITY
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 NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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) | | | | | | |
| | 505 | | | | | |
| BI-214 | 5.00E-02 | 6.76E-02(2/ 401) | LM2 N. WBSP GATE | 8.22E-02(1/ 38) | 5.71E-02(2/ 104) | |
| | | 5.29E-02- 8.22E-02 | 0.5 MILES N | 8.22E-02- 8.22E-02 | 5.45E-02- 5.97E-02 | |
| K-40 | 3.00E-01 | 3.52E-01(4/ 401) | PM3 CEDINE BIBLE | 3.81E-01(1/ 52) | 4.05E-01(1/ 104) | |
| | | 3.28E-01- 3.81E-01 | CAMP 11.5 M. NNE | 3.81E-01- 3.81E-01 | 4.05E-01- 4.05E-01 | |
| PB-214 | 7.00E-02 | 7.94E-02(1/ 401) | LM2 N. WBSP GATE | 7.94E-02(1/ 38) | 9.46E-02(1/ 104) | |
| | | 7.94E-02- 7.94E-02 | 0.5 MILES N | 7.94E-02- 7.94E-02 | 9.46E-02- 9.46E-02 | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-4

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 NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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 |
|------------------------------------------------------|-------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------|
| IODINE-131 | | | | | | |
| 155 | | | | | | |
| | 4.00E-01 | 78 VALUES < LLD | | | 77 VALUES < LLD | |
| GAMMA SCAN (GELI) | | | | | | |
| 156 | | | | | | |
| BI-214 | 2.00E+01 | 7.69E+01(5/ 79) LAYMAN FARM 3.81E+01- 1.29E+02 1.3 MILES SW | | 7.96E+01(4/ 27) 9.11E+01(15/ 77) 3.81E+01- 1.29E+02 2.11E+01- 1.86E+02 | | |
| K-40 | 1.00E+02 | 1.38E+03(79/ 79) MULLINS FARM 9.85E+02- 1.84E+03 3.7 M. ESE | | 1.42E+03(26/ 26) 1.32E+03(77/ 77) 1.23E+03- 1.58E+03 8.13E+02- 1.65E+03 | | |
| PB-214 | 2.00E+01 | 7.04E+01(5/ 79) LAYMAN FARM 3.57E+01- 1.36E+02 1.3 MILES SW | | 7.55E+01(4/ 27) 9.47E+01(14/ 77) 3.57E+01- 1.36E+02 2.51E+01- 1.88E+02 | | |
| SR 89 | | | | | | |
| 23 | | | | | | |
| | 2.00E+00 | 11 VALUES < LLD | | | 12 VALUES < LLD | |
| SR 90 | | | | | | |
| 23 | | | | | | |
| | 2.00E+00 | 2.89E+00(2/ 11) LAYMAN FARM 2.45E+00- 3.34E+00 1.3 MILES SW | | 3.34E+00(1/ 3) 2.11E+00(1/ 12) 3.34E+00- 3.34E+00 2.11E+00- 2.11E+00 | | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-5

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

RADIOACTIVITY IN VEGETATION
PCI/KG - 0.037 BQ/KG (WET WEIGHT)

NAME OF FACILITY: WATTS BAR NUCLEAR PLANT
LOCATION OF FACILITY: RHEA TENNESSEE

DOCKET NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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 |
|------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------|
| IODINE-131 | | | | | | |
| | 39 | 6.00E+00 | 26 VALUES < LLD | | 13 VALUES < LLD | |
| GAMMA SCAN (GELI) | | | | | | |
| | 39 | | | | | |
| BE-7 | 2.00E+02 | 1.27E+03(25/ 26) | LAYMAN FARM | 1.30E+03(12/ 13) | 8.75E+02(12/ 13) | |
| | | 2.67E+02- 3.06E+03 | 1.3 MILES SW | 3.63E+02- 3.06E+03 | 2.68E+02- 2.33E+03 | |
| BI-214 | 5.50E+01 | 9.39E+01(2/ 26) | LAYMAN FARM | 1.10E+02(1/ 13) | 13 VALUES < LLD | |
| | | 7.83E+01- 1.10E+02 | 1.3 MILES SW | 1.10E+02- 1.10E+02 | | |
| K-40 | 4.00E+02 | 6.16E+03(26/ 26) | LAYMAN FARM | 6.30E+03(13/ 13) | 5.66E+03(13/ 13) | |
| | | 3.36E+03- 8.93E+03 | 1.3 MILES SW | 5.20E+03- 7.44E+03 | 4.34E+03- 7.49E+03 | |
| PB-214 | 8.00E+01 | 9.75E+01(2/ 26) | LAYMAN FARM | 1.11E+02(1/ 13) | 13 VALUES < LLD | |
| | | 8.38E+01- 1.11E+02 | 1.3 MILES SW | 1.11E+02- 1.11E+02 | | |
| SR 89 | | | | | | |
| | 12 | 3.10E+01 | 8 VALUES < LLD | | 4 VALUES < LLD | |
| SR 90 | | | | | | |
| | 12 | 1.20E+01 | 3.00E+01(4/ 8) | OWEN HENDERSON FARM | 3.00E+01(4/ 4) | 2.25E+01(2/ 4) |
| | | 1.22E+01- 4.15E+01 | 4.8 MILES WSW | 1.22E+01- 4.15E+01 | 2.07E+01- 2.43E+01 | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-6

TENNESSEE VALLEY AUTHORITY
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 NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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) | | | | | | |
| | 11 | | | | | |
| AC-228 | 2.50E-01 | 1.15E+00(8/ 8) | LM1 ENV DATA STA | 1.38E+00(1/ 1) | 6.99E-01(3/ 3) | |
| | | 8.40E-01- 1.38E+00 | 0.5 MILES SSW | 1.38E+00- 1.38E+00 | 5.88E-01- 7.67E-01 | |
| BE-7 | 2.50E-01 | 8 VALUES < LLD | LM2 N. WBSP GATE | 1 VALUES < LLD | 4.11E-01(1/ 3) | |
| | | | 0.5 MILES N | | 4.11E-01- 4.11E-01 | |
| BI-212 | 4.50E-01 | 1.18E+00(8/ 8) | LM2 N. WBSP GATE | 1.49E+00(1/ 1) | 7.40E-01(3/ 3) | |
| | | 9.20E-01- 1.49E+00 | 0.5 MILES N | 1.49E+00- 1.49E+00 | 5.67E-01- 8.84E-01 | |
| BI-214 | 1.50E-01 | 8.26E-01(8/ 8) | LM1 ENV DATA STA | 9.20E-01(1/ 1) | 6.54E-01(3/ 3) | |
| | | 6.09E-01- 9.20E-01 | 0.5 MILES SSW | 9.20E-01- 9.20E-01 | 5.23E-01- 7.29E-01 | |
| CS-137 | 3.00E-02 | 4.88E-01(8/ 8) | PM2 SPRING CITY | 1.17E+00(1/ 1) | 2.91E-01(3/ 3) | |
| | | 4.84E-02- 1.17E+00 | 7.0 MILES NW | 1.17E+00- 1.17E+00 | 1.42E-01- 5.75E-01 | |
| K-40 | 7.50E-01 | 1.21E+01(8/ 8) | LM-4 WB | 2.68E+01(1/ 1) | 4.20E+00(3/ 3) | |
| | | 3.56E+00- 2.68E+01 | 0.9 MILES SE | 2.68E+01- 2.68E+01 | 4.02E+00- 4.52E+00 | |
| PB-212 | 1.00E-01 | 1.08E+00(8/ 8) | LM2 N. WBSP GATE | 1.26E+00(1/ 1) | 7.19E-01(3/ 3) | |
| | | 8.34E-01- 1.26E+00 | 0.5 MILES N | 1.26E+00- 1.26E+00 | 5.63E-01- 8.15E-01 | |
| PB-214 | 1.50E-01 | 8.97E-01(8/ 8) | LM-3 WB | 1.03E+00(1/ 1) | 7.26E-01(3/ 3) | |
| | | 6.74E-01- 1.03E+00 | 2.1 MILES NNE | 1.03E+00- 1.03E+00 | 5.91E-01- 8.12E-01 | |
| RA-224 | 7.50E-01 | 1.10E+00(6/ 8) | LM2 N. WBSP GATE | 1.32E+00(1/ 1) | 8.38E-01(2/ 3) | |
| | | 8.79E-01- 1.32E+00 | 0.5 MILES N | 1.32E+00- 1.32E+00 | 8.28E-01- 8.47E-01 | |
| RA-226 | 1.50E-01 | 8.26E-01(8/ 8) | LM1 ENV DATA STA | 9.20E-01(1/ 1) | 6.54E-01(3/ 3) | |
| | | 6.09E-01- 9.20E-01 | 0.5 MILES SSW | 9.20E-01- 9.20E-01 | 5.23E-01- 7.29E-01 | |
| TL-208 | 6.00E-02 | 3.68E-01(8/ 8) | LM2 N. WBSP GATE | 4.41E-01(1/ 1) | 2.33E-01(3/ 3) | |
| | | 2.80E-01- 4.41E-01 | 0.5 MILES N | 4.41E-01- 4.41E-01 | 1.82E-01- 2.63E-01 | |
| SR 89 | | | | | | |
| | 11 | | | | | |
| | | 1.60E+00 | 8 VALUES < LLD | | 3 VALUES < LLD | |
| SR 90 | | | | | | |
| | 11 | | | | | |
| | | 4.00E-01 | 8 VALUES < LLD | | 3 VALUES < LLD | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-7

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 NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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 (GEL1) | | | | | | |
| K-40 | 2 | 2.50E+02 | 1.44E+03(1/ 1) OWEN HENDERSON FARM 1.44E+03- 1.44E+03 4.8 MILES WSW | 1.44E+03(1/ 1) 1.44E+03- 1.44E+03 | 7.73E+02(1/ 1) 7.73E+02- 7.73E+02 | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TENNESSEE VALLEY AUTHORITY
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 NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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) | | | | | | |
| K-40 | 2.50E+02 | 1.96E+03(1/ 1) 1.96E+03- 1.96E+03 | 2.0 MILES S | 1.96E+03(1/ 1) 1.96E+03- 1.96E+03 | 1.05E+03(1/ 1) 1.05E+03- 1.05E+03 | 2 |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-9

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 NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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 | | | | | |
| K-40 | 2.50E+02 | 2.25E+03(1/ 1) 2.25E+03- 2.25E+03 | OWEN HENDERSON FARM 4.8 MILES WSW | 2.25E+03(1/ 1) 2.25E+03- 2.25E+03 | 1.92E+03(1/ 1) 1.92E+03- 1.92E+03 | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-10

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 NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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) | | | | | | |
| K-40 | 2.50E+02 | 1.80E+03(1/ 1) 1.80E+03- 1.80E+03 | 2.0 MILES S | 1.80E+03(1/ 1) 1.80E+03- 1.80E+03 | 1.81E+03(1/ 1) 1.81E+03- 1.81E+03 | 2 |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-11

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

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

NAME OF FACILITY: WATTS BAR NUCLEAR PLANT
LOCATION OF FACILITY: RHEA TENNESSEE

DOCKET NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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) | | | | | | |
| K-40 | 2.50E+02 | 3.82E+03(1/ 1) | OWEN HENDERSON FARM | 3.82E+03(1/ 1) | 3.38E+03(1/ 1) | 2 |
| | | 3.82E+03- 3.82E+03 | 4.8 MILES WSW | 3.82E+03- 3.82E+03 | 3.38E+03- 3.38E+03 | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-12

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 NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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) | | | | | | |
| K-40 | 2 | 2.50E+02 | 2.87E+03(1/ 1) MULLINS FARM 2.87E+03- 2.87E+03 3.7 M. ESE | 2.87E+03(1/ 1) 2.87E+03- 2.87E+03 | 2.04E+03(1/ 1) 2.04E+03- 2.04E+03 | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-13

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 NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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 | | | | | | |
| 36 | 1.90E+00 | 3.05E+00(21/ 23) TRM 517.9 | | 3.39E+00(12/ 12) | 2.65E+00(13/ 13) | |
| | | 2.01E+00- 6.60E+00 | 9.9 MILES DOWNSTREA | 2.42E+00- 6.60E+00 | 2.07E+00- 3.17E+00 | |
| GAMMA SCAN (GELI) | | | | | | |
| 36 | | | | | | |
| SR 89 | 5.00E+00 | 23 VALUES < LLD | | | 13 VALUES < LLD | |
| | 12 | | | | | |
| SR 90 | 5.00E+00 | 8 VALUES < LLD | | | 4 VALUES < LLD | |
| | 12 | | | | | |
| TRITIUM | | | | | | |
| | 12 | | | | | |
| | 3.00E+02 | 8 VALUES < LLD | | | 4 VALUES < LLD | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-14

TENNESSEE VALLEY AUTHORITY
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 NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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 | 2.94E+00(21/ 26) CF INDUSTRIES | 3.02E+00(9/ 13) | 2.65E+00(13/ 13) | |
| | | 2.05E+00- 4.83E+00 | TRM 473.0 | 2.27E+00- 4.36E+00 | 2.07E+00- 3.17E+00 | |
| GAMMA SCAN (GELI) | | | | | | |
| | 39 | | | | | |
| BI-214 | | 2.00E+01 | 3.56E+01(2/ 26) RM-2 DAYTON TN | 3.56E+01(2/ 13) | 13 VALUES < LLD | |
| | | | 2.10E+01- 5.01E+01 17.75 MILES NNE | 2.10E+01- 5.01E+01 | | |
| PB-214 | | 2.00E+01 | 2.92E+01(1/ 26) RM-2 DAYTON TN | 2.92E+01(1/ 13) | 13 VALUES < LLD | |
| | | | 2.92E+01- 2.92E+01 17.75 MILES NNE | 2.92E+01- 2.92E+01 | | |
| SR 89 | | | | | | |
| | 12 | | | | | |
| | | 5.00E+00 | 8 VALUES < LLD | | 4 VALUES < LLD | |
| SR 90 | | | | | | |
| | 12 | | | | | |
| | | 2.00E+00 | 8 VALUES < LLD | | 4 VALUES < LLD | |
| TRITIUM | | | | | | |
| | 12 | | | | | |
| | | 3.00E+02 | 3.24E+02(1/ 8) CF INDUSTRIES | 3.24E+02(1/ 4) | 4 VALUES < LLD | |
| | | | 3.24E+02- 3.24E+02 TRM 473.0 | 3.24E+02- 3.24E+02 | | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-15

TENNESSEE VALLEY AUTHORITY
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 NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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 | 8 | 1.90E+00 | 7.70E+00(4/ 4) WBN WELL #1 4.81E+00- 1.03E+01 ONSITE S | 7.70E+00(4/ 4) 4.81E+00- 1.03E+01 | 4 VALUES < LLD | |
| GAMMA SCAN (GELI) | 8 | 2.00E+01 | 4 VALUES < LLD | WBN WELL #1 ONSITE S | 4 VALUES < LLD | 4.63E+02(4/ 4) 3.14E+02- 5.13E+02 |
| B1-214 | 8 | 2.00E+01 | 4 VALUES < LLD | WBN WELL #1 ONSITE S | 4 VALUES < LLD | 4.69E+02(4/ 4) 3.19E+02- 5.30E+02 |
| PB-214 | 8 | 5.00E+00 | 4 VALUES < LLD | | 4 VALUES < LLD | |
| SR 89 | 8 | 2.00E+00 | 4 VALUES < LLD | | 4 VALUES < LLD | |
| SR 90 | 8 | 3.00E+02 | 4 VALUES < LLD | | 4 VALUES < LLD | |
| TRITIUM | 8 | | | | | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-16

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

RADIOACTIVITY IN CHANNEL CATFISH FLESH
PCI/GM - 0.037 BQ/G (DRY WEIGHT)

NAME OF FACILITY: WATTS BAR NUCLEAR PLANT
LOCATION OF FACILITY: RHEA TENNESSEE

DOCKET NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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) | | | | | | |
| K-40 | 4.00E-01 | 1.12E+01(2/ 2) 7.88E+00- 1.45E+01 | CHICKAMAUGA RES TRM 471-530 | 1.12E+01(2/ 2) 7.88E+00- 1.45E+01 | 1.11E+01(2/ 2) 9.47E+00- 1.28E+01 | 4 |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-17

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

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

NAME OF FACILITY: WATTS BAR NUCLEAR PLANT
LOCATION OF FACILITY: RHEA TENNESSEE

DOCKET NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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 | | | | | |
| CS-137 | 3.00E-02 | 5.98E-02(2/ 2) | CHICKAMAUGA RES | 5.98E-02(2/ 2) | 6.44E-02(2/ 2) | |
| | | 4.90E-02- 7.06E-02 | TRM 471-530 | 4.90E-02- 7.06E-02 | 6.24E-02- 6.65E-02 | |
| K-40 | 4.00E-01 | 1.41E+01(2/ 2) | CHICKAMAUGA RES | 1.41E+01(2/ 2) | 1.43E+01(2/ 2) | |
| | | 1.30E+01- 1.53E+01 | TRM 471-530 | 1.30E+01- 1.53E+01 | 1.36E+01- 1.50E+01 | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-18

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

RADIOACTIVITY IN SMALLMOUTH BUFFALO FLESH
PCI/GM - 0.037 BQ/G (DRY WEIGHT)

NAME OF FACILITY: WATTS BAR NUCLEAR PLANT
LOCATION OF FACILITY: RHEA TENNESSEE

DOCKET NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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) | | | | | | |
| K-40 | 4.00E-01 | 1.12E+01(2/ 2) 6.89E+00- 1.56E+01 | CHICKAMAUGA RES TRM 471-530 | 1.12E+01(2/ 2) 6.89E+00- 1.56E+01 | 9.30E+00(2/ 2) 8.96E+00- 9.64E+00 | 4 |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-19

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

RADIOACTIVITY IN SMALLMOUTH BUFFALO WHOLE
PCI/GM - 0.037 BQ/G (DRY WEIGHT)

NAME OF FACILITY: WATTS BAR NUCLEAR PLANT
LOCATION OF FACILITY: RHEA TENNESSEE

DOCKET NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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 | 1.00E-01 | 1.30E-01(1/ 2) | CHICKAMAUGA RES | 1.30E-01(1/ 2) | 2 VALUES < LLD | |
| | | 1.30E-01- 1.30E-01 | TRM 471-530 | 1.30E-01- 1.30E-01 | | |
| K-40 | 4.00E-01 | 5.78E+00(2/ 2) | CHICKAMAUGA RES | 5.78E+00(2/ 2) | 6.63E+00(2/ 2) | |
| | | 5.50E+00- 6.06E+00 | TRM 471-530 | 5.50E+00- 6.06E+00 | 6.36E+00- 6.89E+00 | |
| PB-212 | 4.00E-02 | 8.28E-02(1/ 2) | CHICKAMAUGA RES | 8.28E-02(1/ 2) | 2 VALUES < LLD | |
| | | 8.28E-02- 8.28E-02 | TRM 471-530 | 8.28E-02- 8.28E-02 | | |
| TL-208 | 3.00E-02 | 3.34E-02(1/ 2) | CHICKAMAUGA RES | 3.34E-02(1/ 2) | 2 VALUES < LLD | |
| | | 3.34E-02- 3.34E-02 | TRM 471-530 | 3.34E-02- 3.34E-02 | | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-20

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

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

NAME OF FACILITY: WATTS BAR NUCLEAR PLANT
LOCATION OF FACILITY: RHEA TENNESSEE

DOCKET NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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) | | | | | | |
| | 8 | | | | | |
| AC-228 | 2.50E-01 | 1.33E+00(6/ 6) | TRM 527.4 | 1.38E+00(2/ 2) | 1.44E+00(2/ 2) | |
| | | 9.05E-01- 1.85E+00 | 0.4 MILES DOWNSTREA | 9.05E-01- 1.85E+00 | 1.38E+00- 1.50E+00 | |
| BE-7 | 2.50E-01 | 5.46E-01(3/ 6) | TRM 496.50 | 6.52E-01(2/ 2) | 7.50E-01(2/ 2) | |
| | | 2.80E-01- 1.02E+00 | | 2.80E-01- 1.02E+00 | 4.18E-01- 1.08E+00 | |
| BI-212 | 4.50E-01 | 1.34E+00(6/ 6) | TRM 527.4 | 1.42E+00(2/ 2) | 1.52E+00(2/ 2) | |
| | | 1.01E+00- 1.83E+00 | 0.4 MILES DOWNSTREA | 1.01E+00- 1.83E+00 | 1.47E+00- 1.56E+00 | |
| BI-214 | 1.50E-01 | 9.22E-01(6/ 6) | TRM 527.4 | 9.49E-01(2/ 2) | 9.77E-01(2/ 2) | |
| | | 6.90E-01- 1.21E+00 | 0.4 MILES DOWNSTREA | 6.90E-01- 1.21E+00 | 9.52E-01- 1.00E+00 | |
| CO-60 | 3.00E-02 | 6 VALUES < LLD | TRM 496.50 | 2 VALUES < LLD | 3.07E-02(1/ 2) | |
| | | | | | 3.07E-02- 3.07E-02 | |
| CS-137 | 3.00E-02 | 3.26E-01(6/ 6) | TRM 496.50 | 7.87E-01(2/ 2) | 1.64E+00(2/ 2) | |
| | | 4.12E-02- 8.08E-01 | | 7.65E-01- 8.08E-01 | 1.60E+00- 1.68E+00 | |
| K-40 | 7.50E-01 | 1.34E+01(6/ 6) | TRM 527.4 | 1.35E+01(2/ 2) | 1.49E+01(2/ 2) | |
| | | 1.21E+01- 1.46E+01 | 0.4 MILES DOWNSTREA | 1.33E+01- 1.37E+01 | 1.38E+01- 1.61E+01 | |
| PB-212 | 1.00E-01 | 1.26E+00(6/ 6) | TRM 527.4 | 1.34E+00(2/ 2) | 1.38E+00(2/ 2) | |
| | | 1.01E+00- 1.67E+00 | 0.4 MILES DOWNSTREA | 1.01E+00- 1.67E+00 | 1.34E+00- 1.42E+00 | |
| PB-214 | 1.50E-01 | 1.01E+00(6/ 6) | TRM 527.4 | 1.06E+00(2/ 2) | 1.08E+00(2/ 2) | |
| | | 7.79E-01- 1.35E+00 | 0.4 MILES DOWNSTREA | 7.79E-01- 1.35E+00 | 1.06E+00- 1.09E+00 | |
| RA-224 | 7.50E-01 | 1.43E+00(4/ 6) | TRM 527.4 | 1.53E+00(2/ 2) | 1.51E+00(1/ 2) | |
| | | 1.18E+00- 1.88E+00 | 0.4 MILES DOWNSTREA | 1.18E+00- 1.88E+00 | 1.51E+00- 1.51E+00 | |
| RA-226 | 1.50E-01 | 9.22E-01(6/ 6) | TRM 527.4 | 9.49E-01(2/ 2) | 9.77E-01(2/ 2) | |
| | | 6.90E-01- 1.21E+00 | 0.4 MILES DOWNSTREA | 6.90E-01- 1.21E+00 | 9.52E-01- 1.00E+00 | |
| TL-208 | 6.00E-02 | 4.16E-01(6/ 6) | TRM 527.4 | 4.37E-01(2/ 2) | 4.78E-01(2/ 2) | |
| | | 3.06E-01- 5.67E-01 | 0.4 MILES DOWNSTREA | 3.06E-01- 5.67E-01 | 4.61E-01- 4.96E-01 | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-21

TENNESSEE VALLEY AUTHORITY
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 NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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 | 9.59E-01(2/ 2) | COTTON PORT MARINA | 9.59E-01(2/ 2) | 9.43E-01(2/ 2) | |
| | | 6.05E-01- 1.31E+00 | TRM 513 | 6.05E-01- 1.31E+00 | 8.34E-01- 1.05E+00 | |
| BI-212 | 4.50E-01 | 1.01E+00(2/ 2) | COTTON PORT MARINA | 1.01E+00(2/ 2) | 9.29E-01(2/ 2) | |
| | | 6.94E-01- 1.33E+00 | TRM 513 | 6.94E-01- 1.33E+00 | 7.11E-01- 1.15E+00 | |
| BI-214 | 1.50E-01 | 6.68E-01(2/ 2) | COTTON PORT MARINA | 6.68E-01(2/ 2) | 6.60E-01(2/ 2) | |
| | | 6.13E-01- 7.24E-01 | TRM 513 | 6.13E-01- 7.24E-01 | 5.40E-01- 7.80E-01 | |
| CS-137 | 3.00E-02 | 1.13E-01(2/ 2) | COTTON PORT MARINA | 1.13E-01(2/ 2) | 3.87E-02(1/ 2) | |
| | | 4.74E-02- 1.78E-01 | TRM 513 | 4.74E-02- 1.78E-01 | 3.87E-02- 3.87E-02 | |
| K-40 | 7.50E-01 | 1.14E+01(2/ 2) | COTTON PORT MARINA | 1.14E+01(2/ 2) | 2.80E+00(2/ 2) | |
| | | 2.77E+00- 2.00E+01 | TRM 513 | 2.77E+00- 2.00E+01 | 1.09E+00- 4.50E+00 | |
| PB-212 | 1.00E-01 | 9.45E-01(2/ 2) | COTTON PORT MARINA | 9.45E-01(2/ 2) | 9.56E-01(2/ 2) | |
| | | 5.59E-01- 1.33E+00 | TRM 513 | 5.59E-01- 1.33E+00 | 7.57E-01- 1.15E+00 | |
| PB-214 | 1.50E-01 | 7.45E-01(2/ 2) | COTTON PORT MARINA | 7.45E-01(2/ 2) | 7.32E-01(2/ 2) | |
| | | 7.00E-01- 7.90E-01 | TRM 513 | 7.00E-01- 7.90E-01 | 6.25E-01- 8.39E-01 | |
| RA-224 | 7.50E-01 | 1.40E+00(1/ 2) | COTTON PORT MARINA | 1.40E+00(1/ 2) | 2 VALUES < LLD | |
| | | 1.40E+00- 1.40E+00 | TRM 513 | 1.40E+00- 1.40E+00 | | |
| RA-226 | 1.50E-01 | 6.68E-01(2/ 2) | COTTON PORT MARINA | 6.68E-01(2/ 2) | 6.60E-01(2/ 2) | |
| | | 6.13E-01- 7.24E-01 | TRM 513 | 6.13E-01- 7.24E-01 | 5.40E-01- 7.80E-01 | |
| TL-208 | 6.00E-02 | 2.96E-01(2/ 2) | COTTON PORT MARINA | 2.96E-01(2/ 2) | 3.20E-01(2/ 2) | |
| | | 1.91E-01- 4.02E-01 | TRM 513 | 1.91E-01- 4.02E-01 | 2.45E-01- 3.95E-01 | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-22

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 NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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) | | | | | | |
| | 18 | | | | | |
| AC-228 | 2.50E-01 | 1.23E+00(18/ 18) | YP-14 | 1.89E+00(1/ 1) | 0 VALUES < LLD | |
| | | 7.50E-01- 1.89E+00 | YARD POND | 1.89E+00- 1.89E+00 | | |
| BE-7 | 2.50E-01 | 4.43E-01(11/ 18) | LV-2 | 8.23E-01(1/ 1) | 0 VALUES < LLD | |
| | | 2.71E-01- 8.23E-01 | LOW VOL WASTE POND | 8.23E-01- 8.23E-01 | | |
| B1-212 | 4.50E-01 | 1.25E+00(18/ 18) | LV-3 | 2.06E+00(1/ 1) | 0 VALUES < LLD | |
| | | 6.77E-01- 2.06E+00 | LOW VOL WASTE POND | 2.06E+00- 2.06E+00 | | |
| B1-214 | 1.50E-01 | 8.13E-01(18/ 18) | YP-14 | 1.13E+00(1/ 1) | 0 VALUES < LLD | |
| | | 5.03E-01- 1.13E+00 | YARD POND | 1.13E+00- 1.13E+00 | | |
| CS-137 | 3.00E-02 | 1.39E-01(16/ 18) | YP-15 | 3.84E-01(1/ 1) | 0 VALUES < LLD | |
| | | 3.93E-02- 3.84E-01 | YARD POND | 3.84E-01- 3.84E-01 | | |
| K-40 | 7.50E-01 | 1.33E+01(18/ 18) | YP-15 | 1.79E+01(1/ 1) | 0 VALUES < LLD | |
| | | 8.73E+00- 1.79E+01 | YARD POND | 1.79E+01- 1.79E+01 | | |
| PB-212 | 1.00E-01 | 1.17E+00(18/ 18) | YP-14 | 1.74E+00(1/ 1) | 0 VALUES < LLD | |
| | | 6.88E-01- 1.74E+00 | YARD POND | 1.74E+00- 1.74E+00 | | |
| PB-214 | 1.50E-01 | 8.83E-01(18/ 18) | YP-14 | 1.18E+00(1/ 1) | 0 VALUES < LLD | |
| | | 5.48E-01- 1.18E+00 | YARD POND | 1.18E+00- 1.18E+00 | | |
| RA-224 | 7.50E-01 | 1.30E+00(13/ 18) | LV-3 | 1.89E+00(1/ 1) | 0 VALUES < LLD | |
| | | 9.48E-01- 1.89E+00 | LOW VOL WASTE POND | 1.89E+00- 1.89E+00 | | |
| TL-208 | 6.00E-02 | 3.91E-01(18/ 18) | YP-14 | 6.06E-01(1/ 1) | 0 VALUES < LLD | |
| | | 2.16E-01- 6.06E-01 | YARD POND | 6.06E-01- 6.06E-01 | | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-23

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

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

NAME OF FACILITY: WATTS BAR NUCLEAR PLANT
LOCATION OF FACILITY: RHEA TENNESSEE

DOCKET NO.: 50-390,391
REPORTING PERIOD: 1995

| TYPE AND TOTAL NUMBER OF ANALYSIS PERFORMED | LOWER LIMIT OF DETECTION (LLD) SEE NOTE 1 | ALL 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 | | | | | |
| B1-214 | 5.00E-01 | 6.72E-01(1/ 2) DOWNSTREAM 6.72E-01- 6.72E-01 | | 6.72E-01(1/ 2) 6.72E-01- 6.72E-01 | 8.96E-01(1/ 2) 8.96E-01- 8.96E-01 | |
| PB-214 | 1.00E-01 | 7.80E-01(1/ 2) DOWNSTREAM 7.80E-01- 7.80E-01 | | 7.80E-01(1/ 2) 7.80E-01- 7.80E-01 | 8.09E-01(1/ 2) 8.09E-01- 8.09E-01 | |

NOTE: 1. NOMINAL LOWER LIMIT 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 LOCATIONS IS INDICATED IN PARENTHESES (F).

TABLE H-24

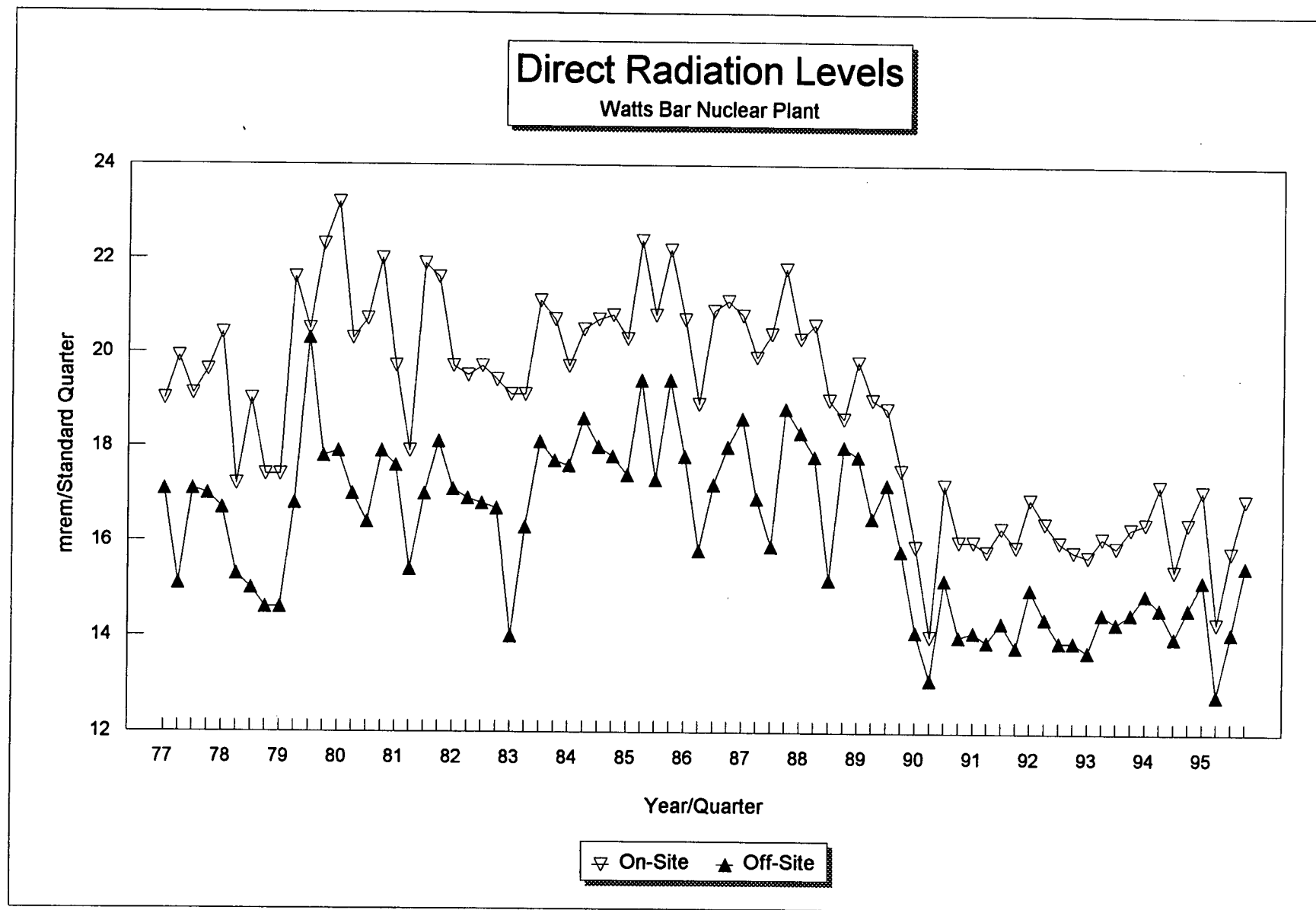
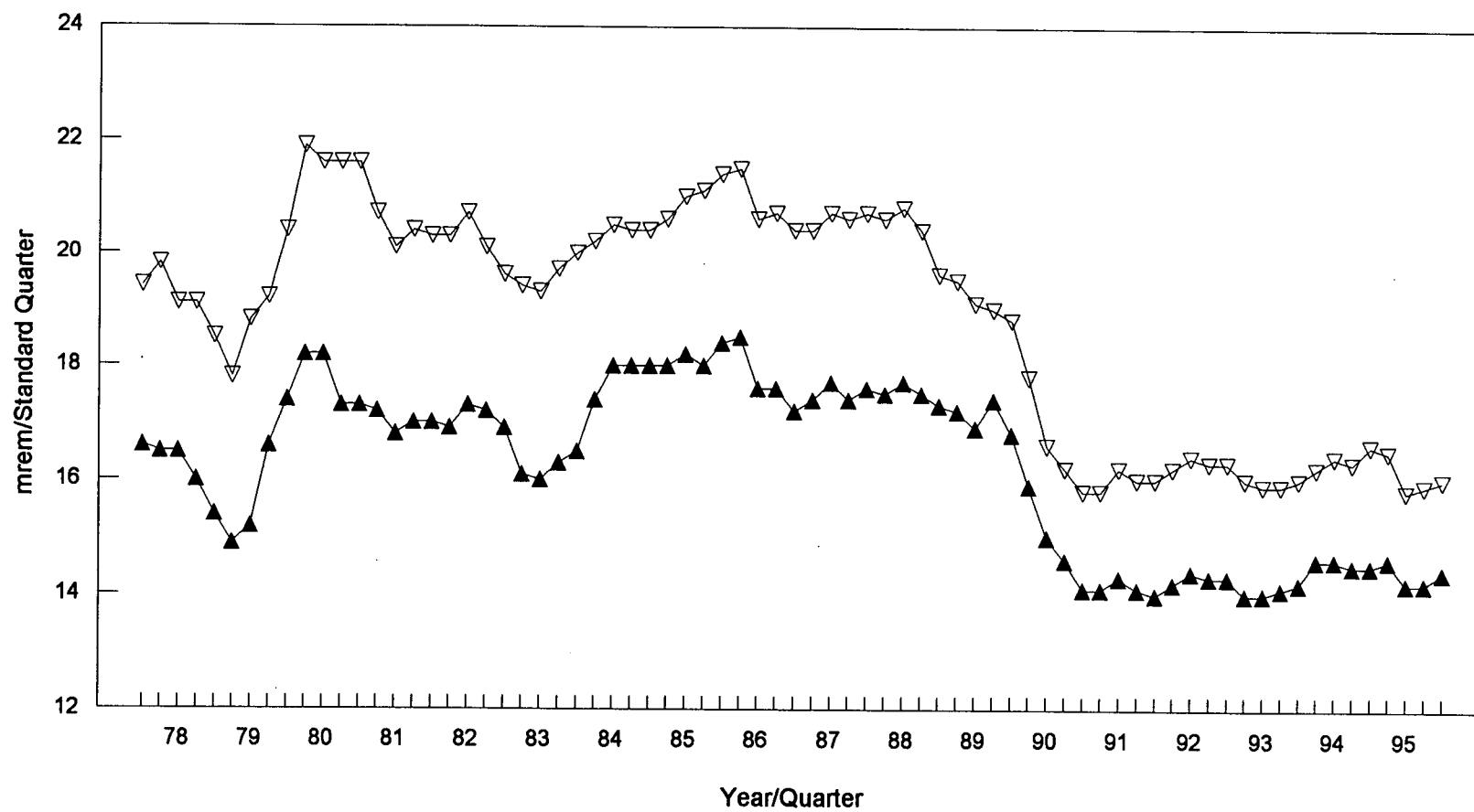


FIGURE H-1

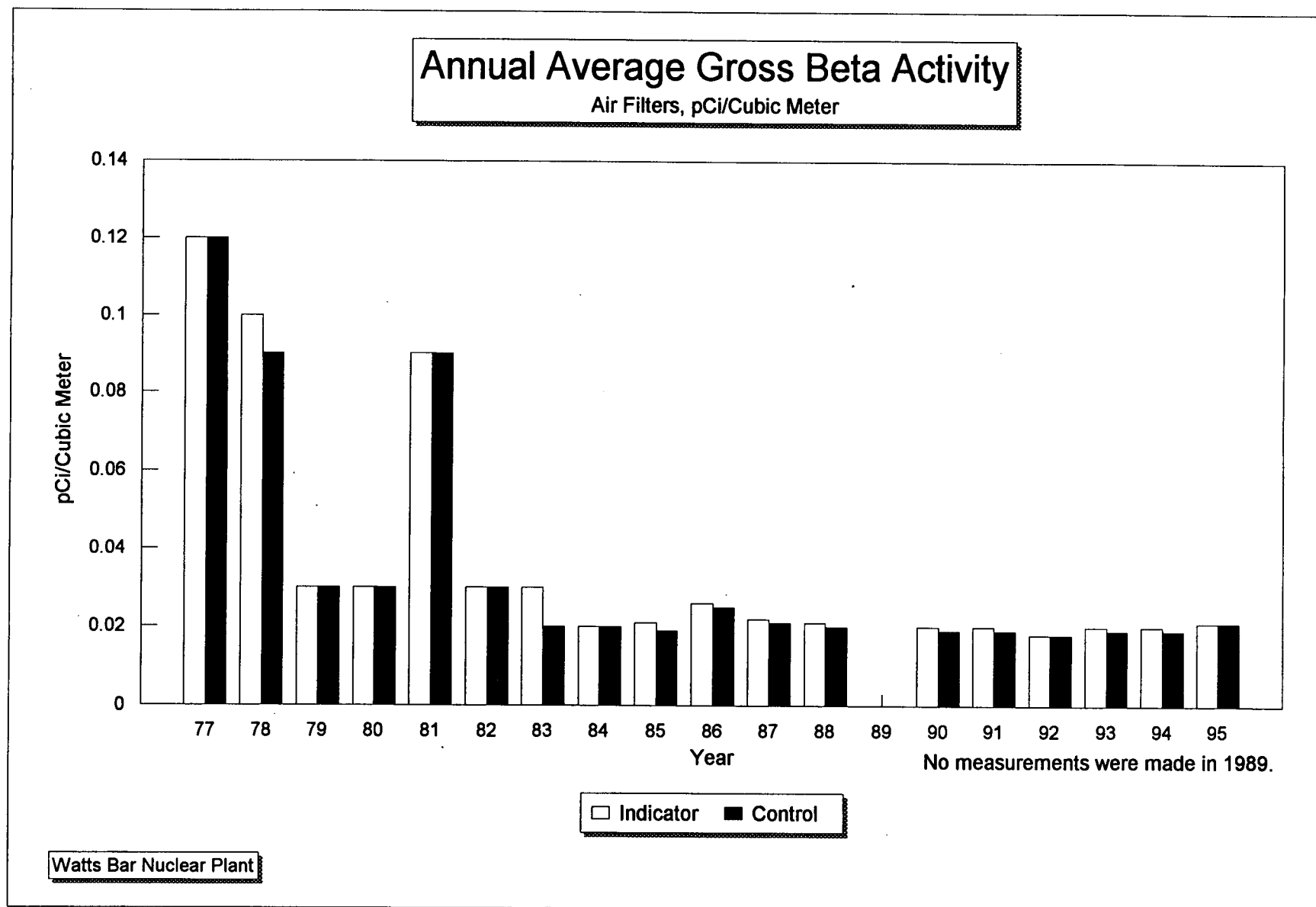
Direct Radiation Levels

Watts Bar Nuclear Plant - Four Quarter Moving Average



▽ On-Site ▲ Off-Site

FIGURE H-2



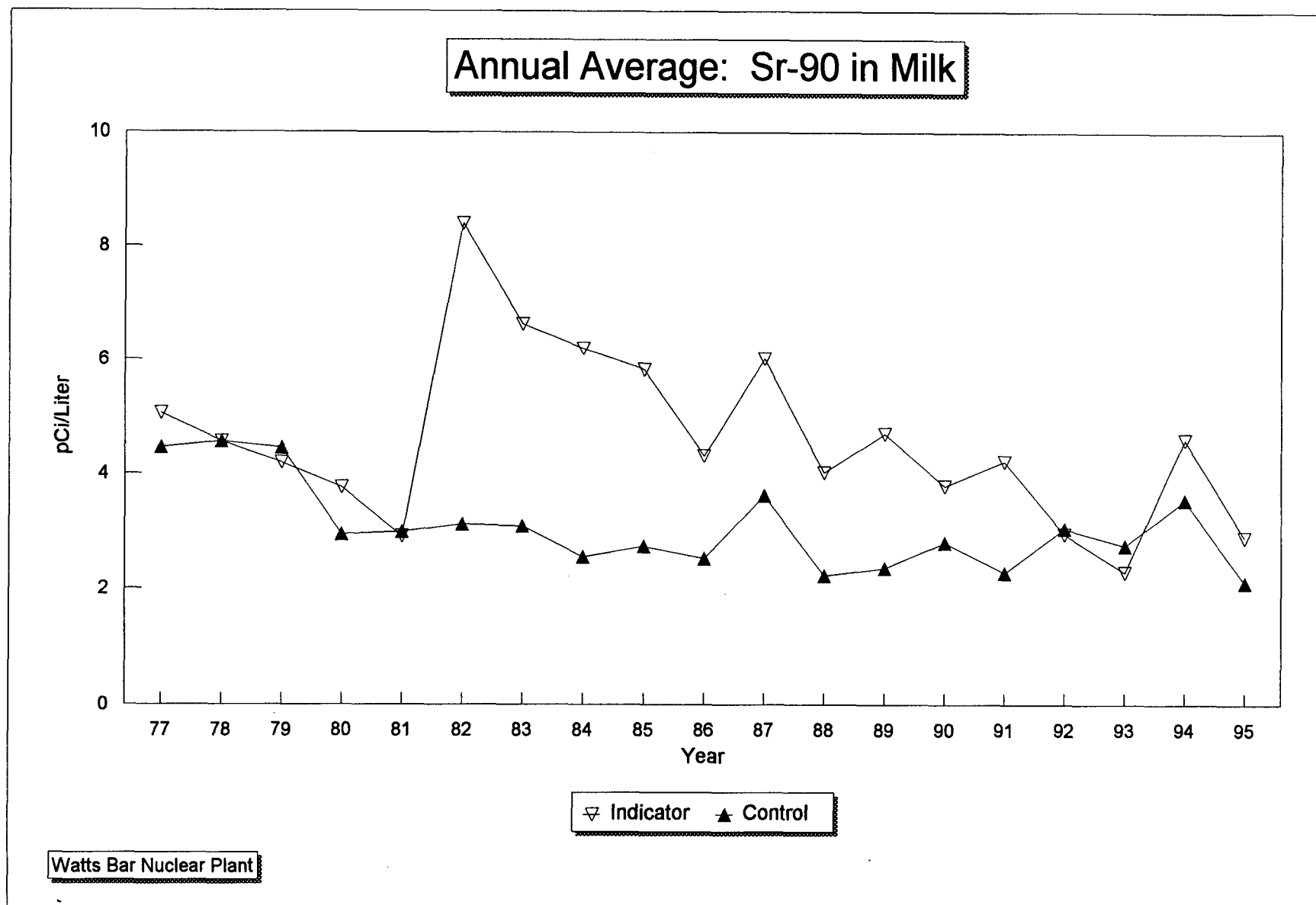


FIGURE H-4

-104-

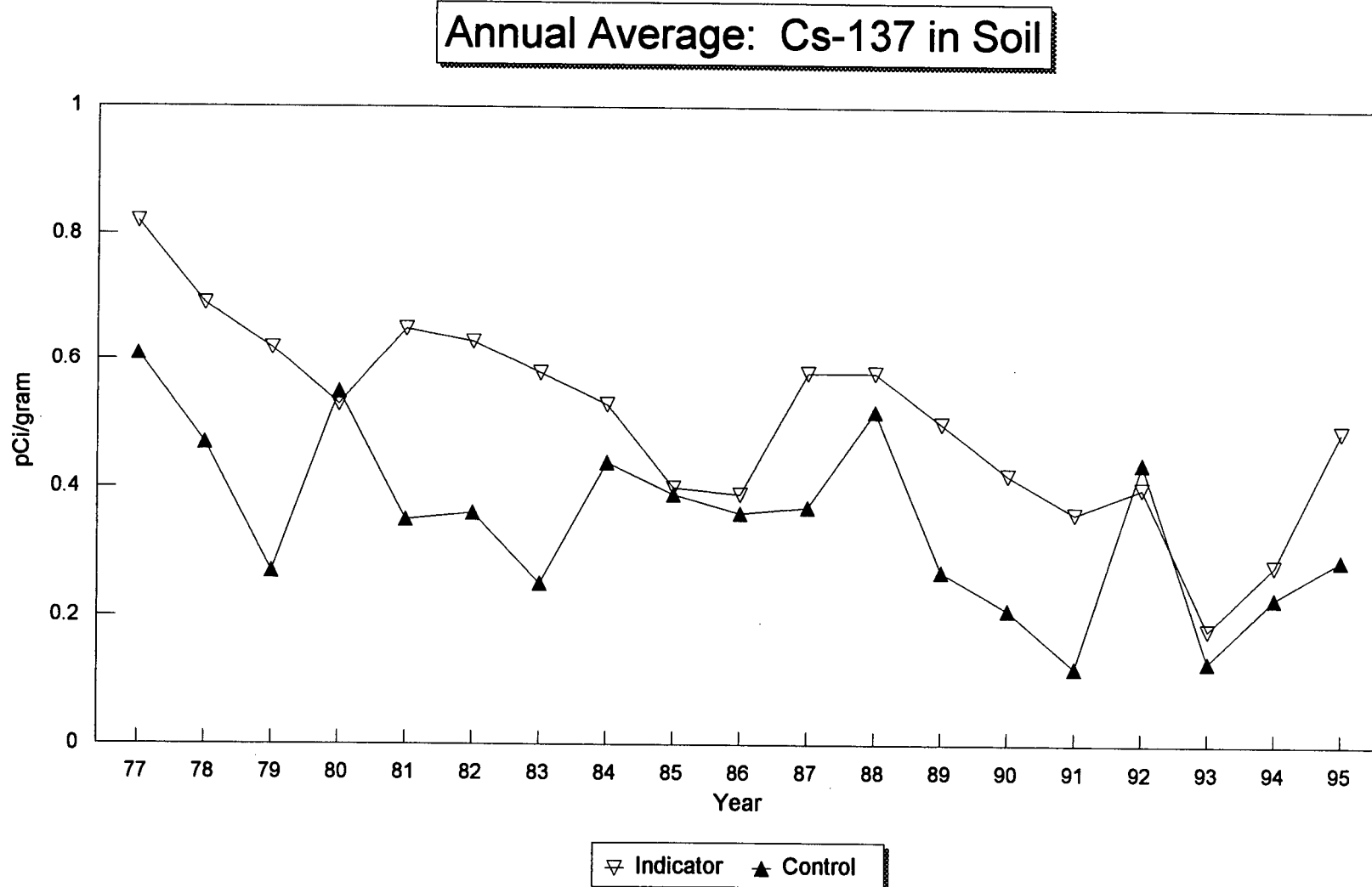
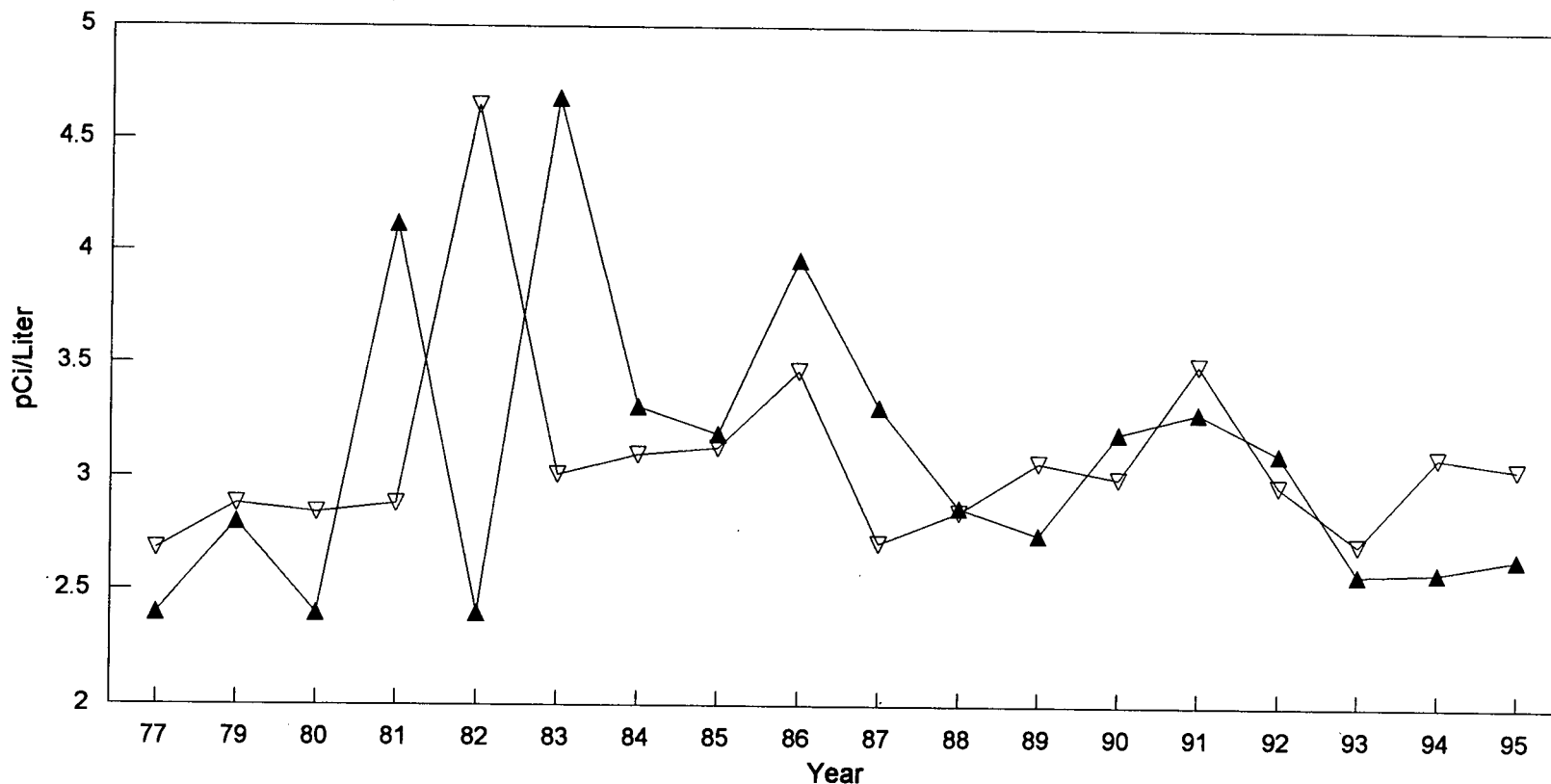


FIGURE H-5

Annual Average Gross Beta Activity

Surface Water, pCi/Liter



No gross beta measurements made in 1978.

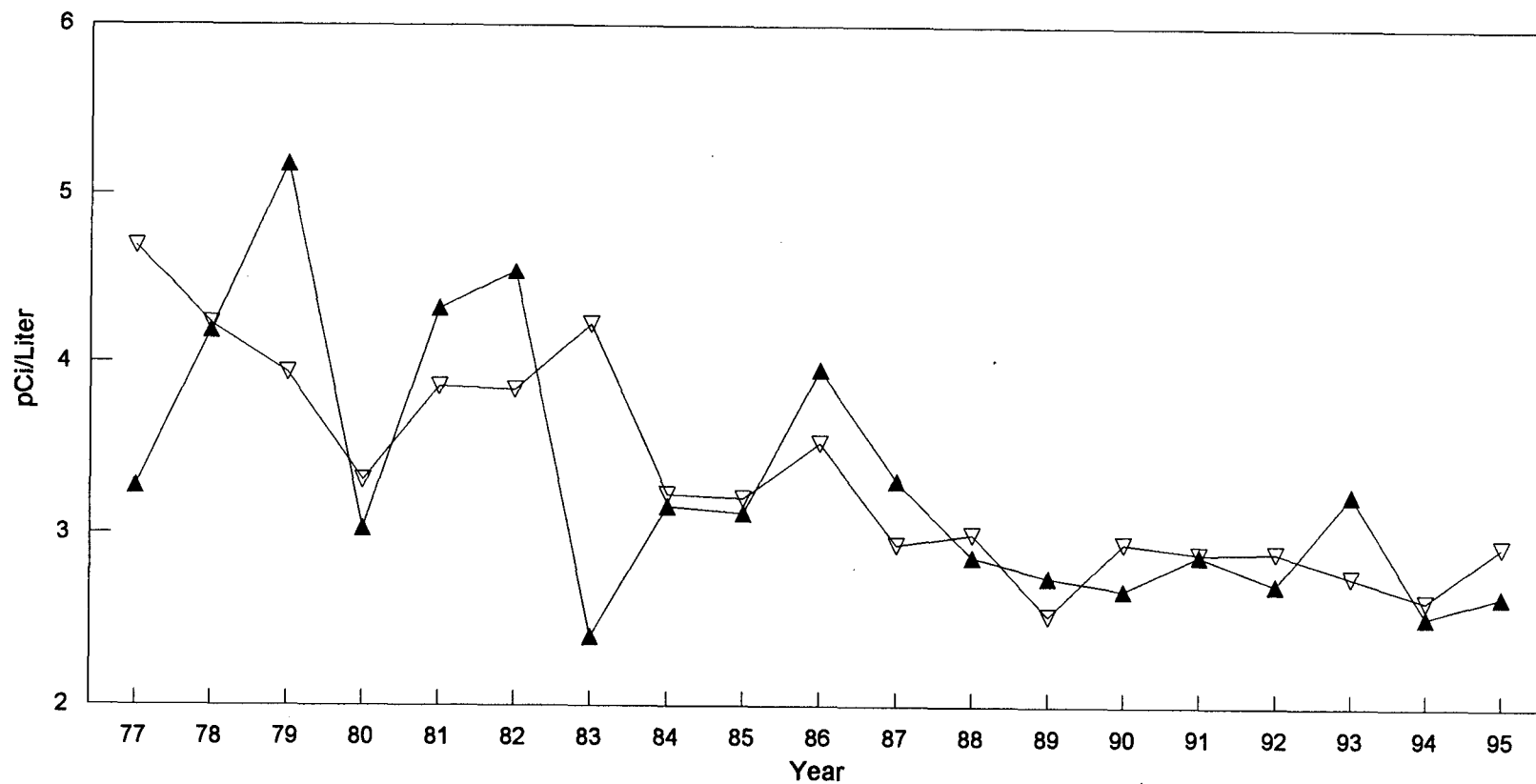
▽ Indicator ▲ Control

Watts Bar Nuclear Plant

Values measured at the control station in 1977, 1980 and 1982 were below the LLD (2.4 pCi/Liter).

Annual Average Gross Beta Activity

Drinking Water, pCi/Liter



▽ Indicator ▲ Control

Watts Bar Nuclear Plant

Value measured at the control station in 1983 was below the LLD of 2.4 pCi/Liter.

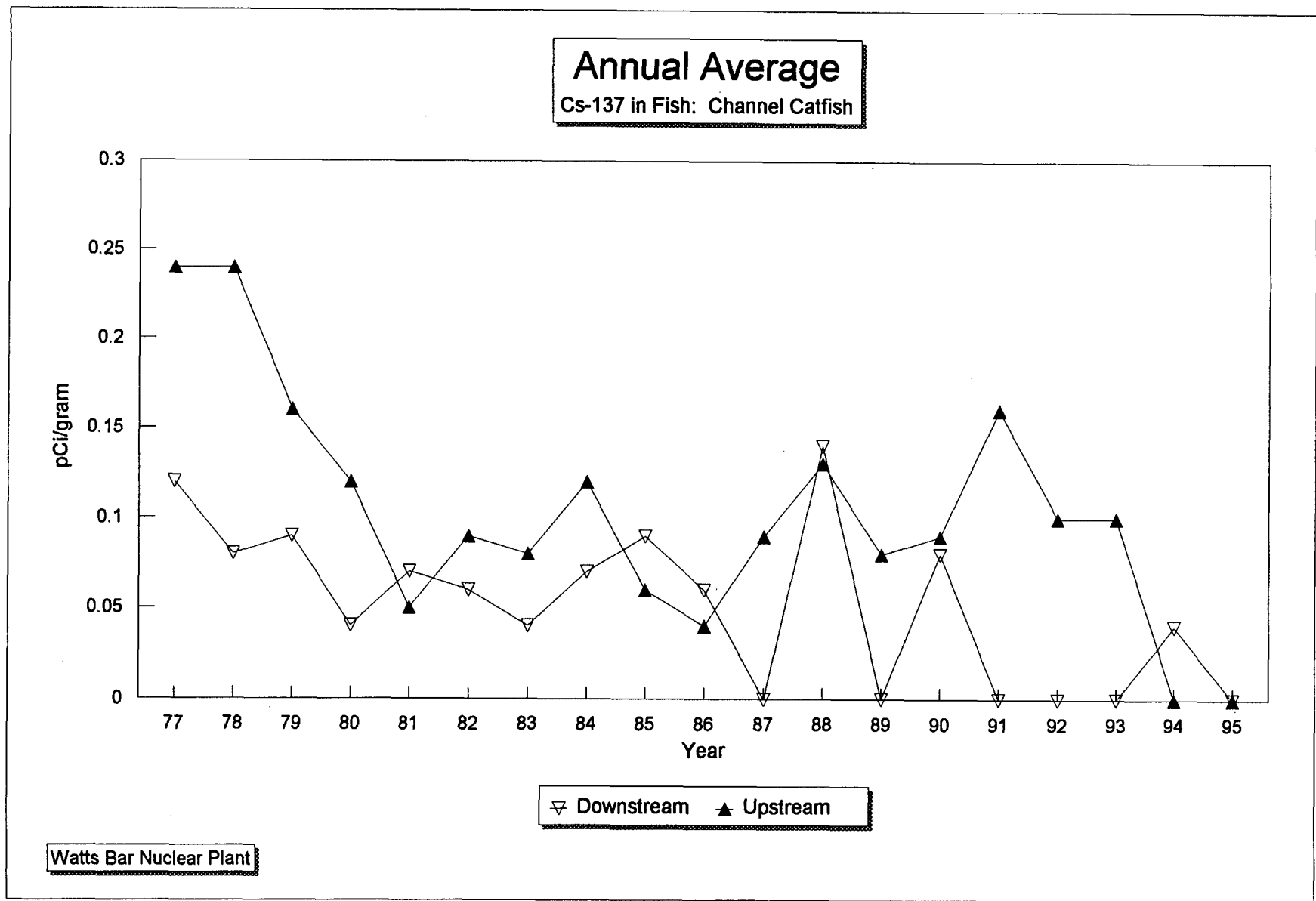
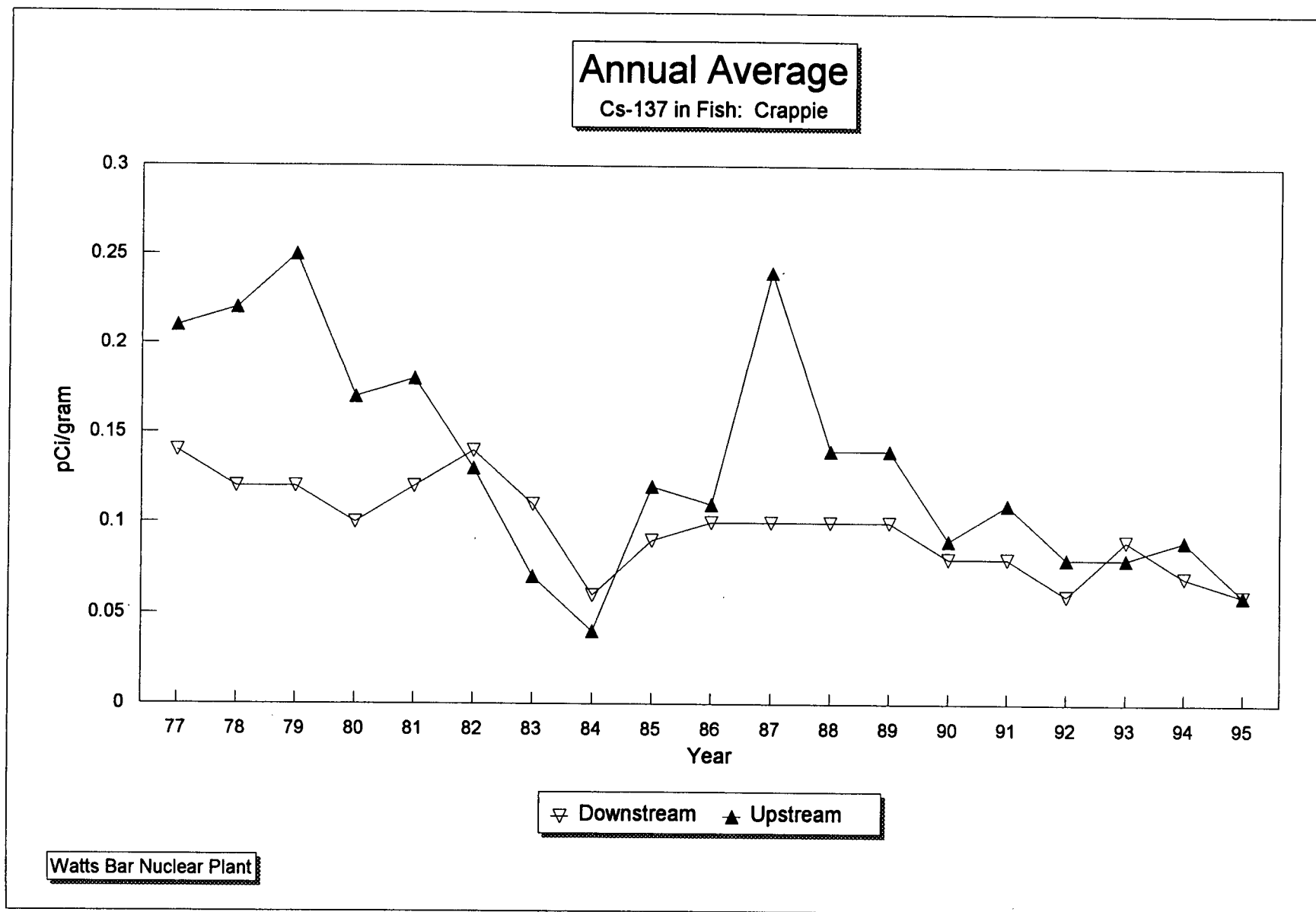


FIGURE H-8



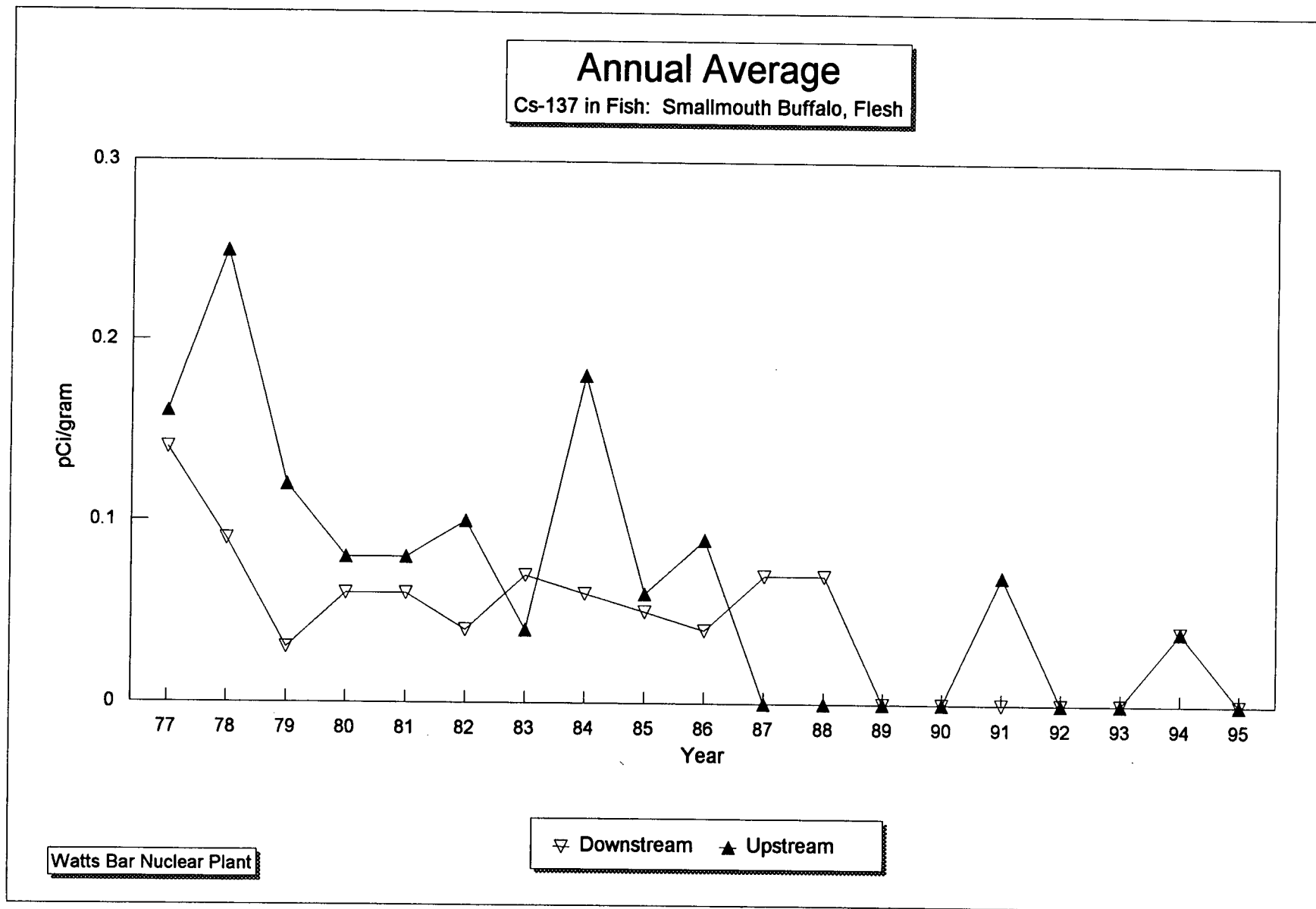


FIGURE H-10

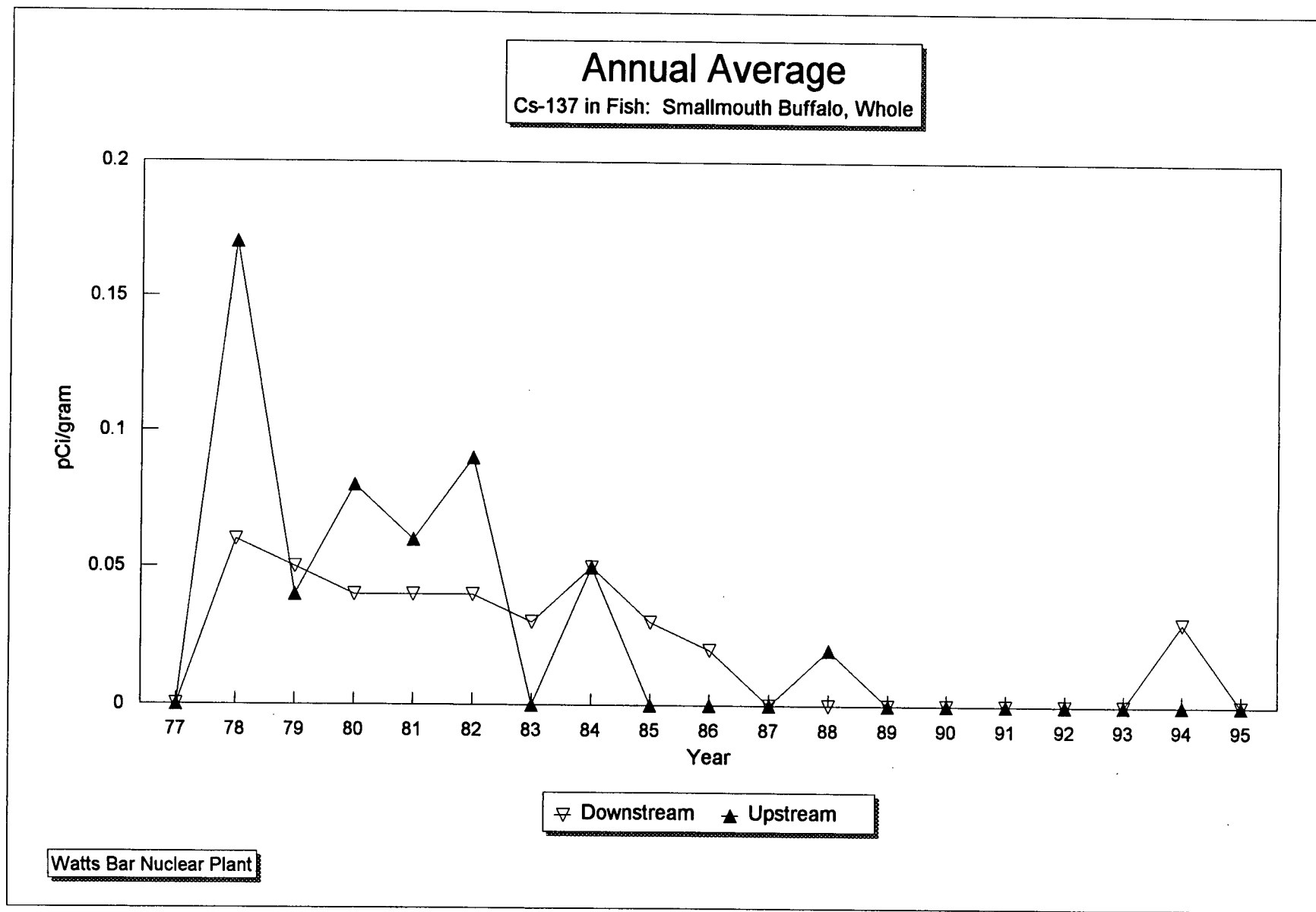


FIGURE H-11

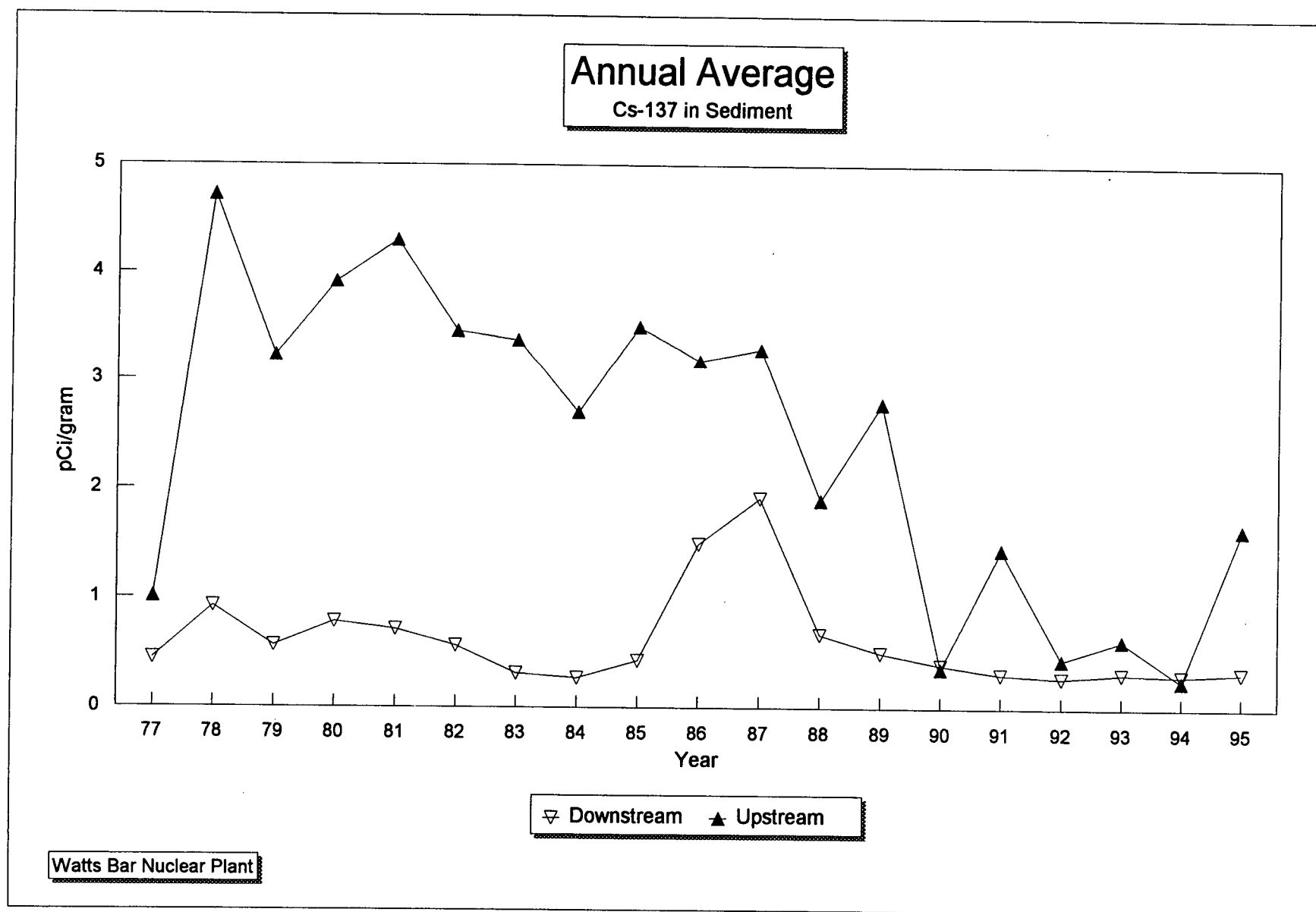


FIGURE H-12

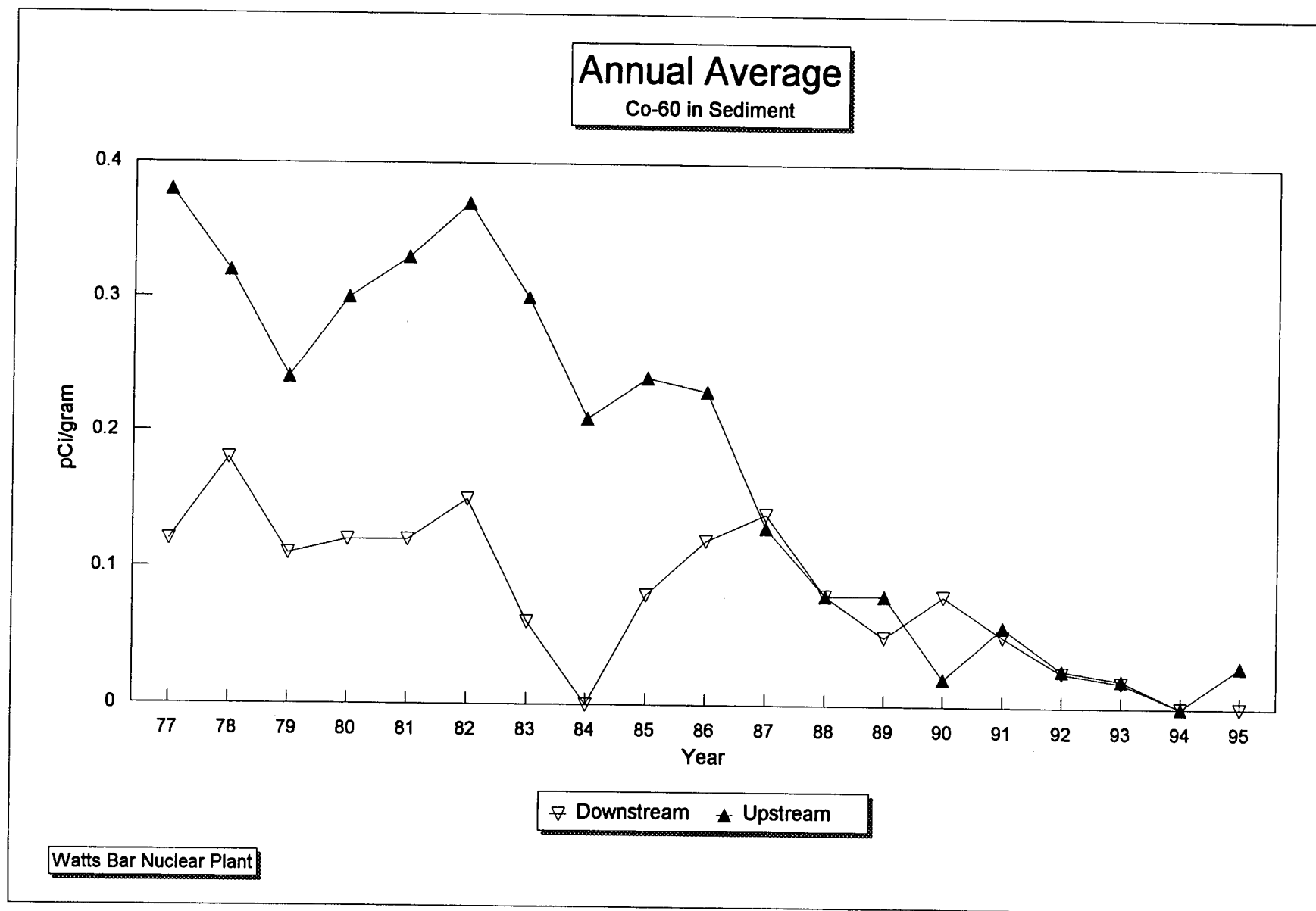
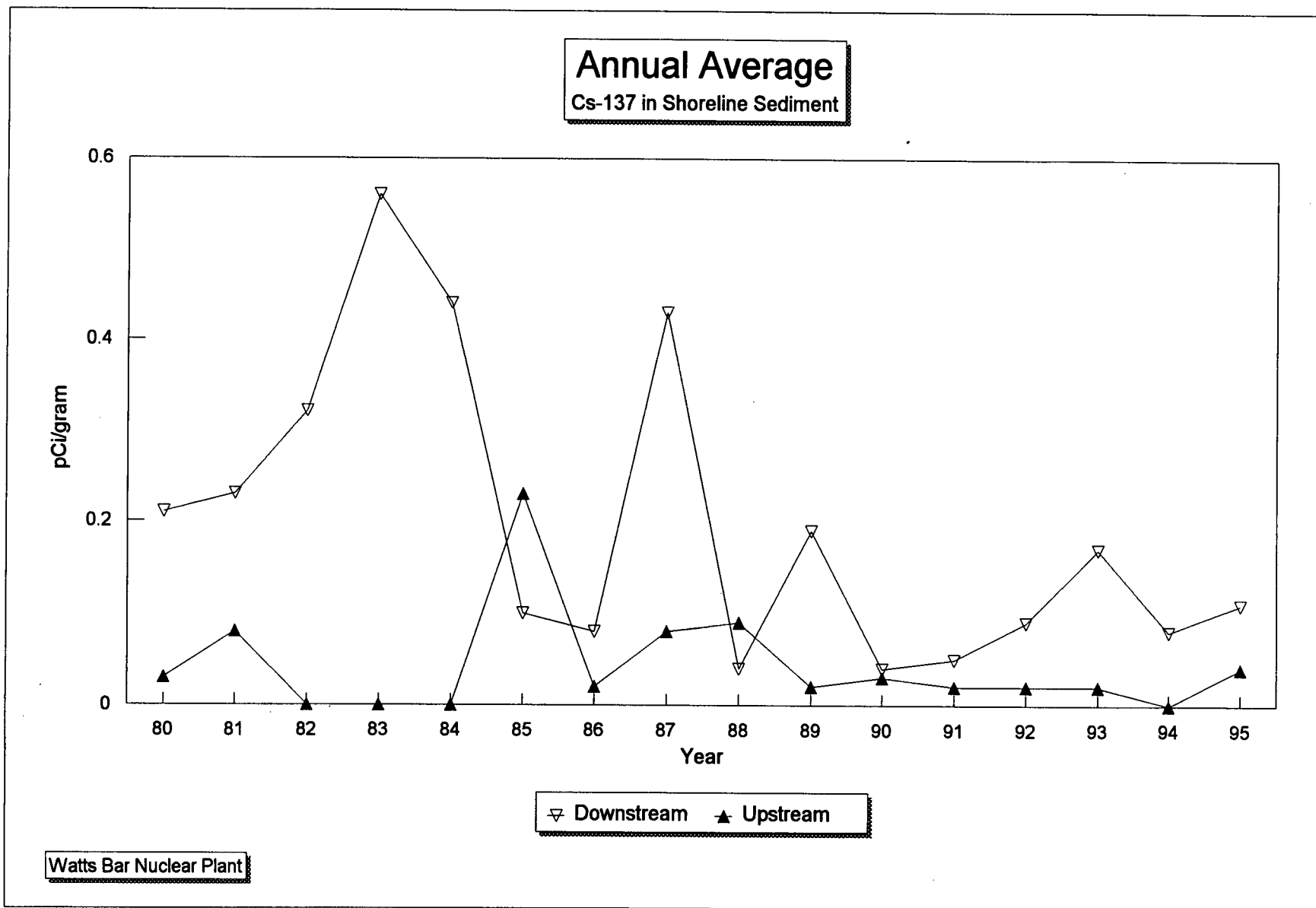


FIGURE H-13



Annual Radiological Environmental Operating Report

Data Supplement

Watts Bar
Nuclear Plant
1995



ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT
WATTS BAR NUCLEAR PLANT
DATA SUPPLEMENT

1995

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION

April 1996

RADIOLOGICAL ENVIRONMENTAL MONITORING DATA
WATTS BAR NUCLEAR PLANT

1995

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 in place of the activity. 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 alpha, 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.

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | | |
|-----------------------------------|-----------------------|------------|------------|------------------|--------|
| | | | TERM | COLLECTED | LAB NO |
| 2116 RM-2 DAYTON TN | 17.75 MILES NNE | GROSS BETA | | | |
| | | | +0.0275 | +0.0030 01/03/95 | 500060 |
| | | | +0.0254 | +0.0027 01/10/95 | 500160 |
| | | | +0.0180 | +0.0020 01/17/95 | 500283 |
| | | | +0.0177 | +0.0020 01/24/95 | 500398 |
| | | | +0.0221 | +0.0024 01/31/95 | 500587 |
| | | | +0.0229 | +0.0025 02/07/95 | 500694 |
| | | | +0.0223 | +0.0024 02/14/95 | 500828 |
| | | | +0.0127 | +0.0015 02/21/95 | 500945 |
| | | | +0.0156 | +0.0018 02/28/95 | 501104 |
| | | | +0.0143 | +0.0016 03/07/95 | 501204 |
| | | | +0.0232 | +0.0025 03/14/95 | 501335 |
| | | | +0.0244 | +0.0027 03/21/95 | 501462 |
| | | | +0.0174 | +0.0019 03/28/95 | 501648 |
| | | | +0.0181 | +0.0020 04/04/95 | 501758 |
| | | | +0.0188 | +0.0021 04/11/95 | 501902 |
| | | | +0.0171 | +0.0019 04/18/95 | 502004 |
| | | | +0.0150 | +0.0017 04/25/95 | 502156 |
| | | | +0.0140 | +0.0016 05/02/95 | 502314 |
| | | | +0.0168 | +0.0019 05/09/95 | 502512 |
| | | | +0.0152 | +0.0017 05/16/95 | 502620 |
| | | | +0.0204 | +0.0022 05/23/95 | 502809 |
| | | | +0.0191 | +0.0021 05/30/95 | 502949 |
| | | | +0.0152 | +0.0017 06/06/95 | 503089 |
| | | | +0.0185 | +0.0021 06/13/95 | 503197 |
| | | | +0.0224 | +0.0024 06/20/95 | 503418 |
| | | | +0.0179 | +0.0020 06/27/95 | 503562 |
| | | | +0.0220 | +0.0024 07/05/95 | 503716 |
| | | | +0.0236 | +0.0026 07/11/95 | 503828 |
| | | | +0.0311 | +0.0033 07/18/95 | 503978 |
| | | | +0.0196 | +0.0022 07/25/95 | 504084 |
| | | | +0.0171 | +0.0019 08/01/95 | 504213 |
| | | | +0.0115 | +0.0014 08/08/95 | 504366 |
| | | | +0.0256 | +0.0028 08/15/95 | 504523 |
| | | | +0.0267 | +0.0029 08/22/95 | 504622 |
| | | | +0.0244 | +0.0026 08/29/95 | 504773 |
| | | | +0.0312 | +0.0033 09/05/95 | 504878 |
| | | | +0.0403 | +0.0042 09/12/95 | 505060 |
| | | | +0.0256 | +0.0028 09/19/95 | 505166 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PC1/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|------------|-------------------------------------|
| 2116 RM-2 DAYTON TN | 17.75 MILES NNE | GROSS BETA | |
| | | +0.0217 | +0.0024 09/26/95 505306 |
| | | +0.0324 | +0.0034 10/03/95 505422 |
| | | +0.0153 | +0.0018 10/10/95 505591 |
| | | +0.0299 | +0.0032 10/17/95 505724 |
| | | +0.0232 | +0.0025 10/24/95 505880 |
| | | +0.0213 | +0.0023 10/31/95 506025 |
| | | +0.0240 | +0.0026 11/07/95 506248 |
| | | +0.0216 | +0.0024 11/14/95 506349 |
| | | +0.0295 | +0.0032 11/20/95 506488 |
| | | +0.0286 | +0.0030 11/28/95 506611 |
| | | +0.0250 | +0.0027 12/05/95 506761 |
| | | +0.0244 | +0.0027 12/12/95 506871 |
| | | +0.0256 | +0.0028 12/19/95 506998 |
| | | +0.0180 | +0.0020 12/26/95 507121 |
| | GAMMA SCAN (GELI) | | |
| | BE-7 | +0.0820 | +0.0095 01/24/95 500471 |
| | | +0.0940 | +0.0083 02/21/95 501018 |
| | | +0.1255 | +0.0098 03/21/95 501543 |
| | | +0.1233 | +0.0098 04/18/95 502078 |
| | | +0.0933 | +0.0087 05/16/95 502703 |
| | | +0.1265 | +0.0111 06/13/95 503287 |
| | | +0.1459 | +0.0113 07/11/95 503900 |
| | | +0.1083 | +0.0089 08/08/95 504437 |
| | | +0.0979 | +0.0079 09/05/95 504958 |
| | | +0.1122 | +0.0100 10/03/95 505495 |
| | | +0.0982 | +0.0089 10/31/95 506127 |
| | | +0.0952 | +0.0099 11/28/95 506683 |
| | | +0.0763 | +0.0072 12/26/95 507201 |
| | BI-214 | +0.0007 | +0.0009 05/16/95 502703 |
| | | +0.0057 | +0.0013 08/08/95 504437 |
| | | +0.0062 | +0.0011 09/05/95 504958 |
| | | +0.0209 | +0.0021 10/03/95 505495 |
| | | +0.0061 | +0.0012 10/31/95 506127 |
| | | +0.0049 | +0.0012 12/26/95 507201 |
| | K-40 | +0.0102 | +0.0066 06/13/95 503287 |
| | PB-214 | +0.0015 | +0.0009 05/16/95 502703 |
| | | +0.0001 | +0.0008 06/13/95 503287 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | | |
|------------------------------------------|-----------------------------|----------|------------|-----------|--------|
| | | | TERM | COLLECTED | LAB NO |
| 2116 RM-2 DAYTON TN 17.75 MILES NNE | GAMMA SCAN (GELI) PB-214 | +0.0065 | +0.0012 | 08/08/95 | 504437 |
| | | +0.0046 | +0.0010 | 09/05/95 | 504958 |
| | | +0.0231 | +0.0020 | 10/03/95 | 505495 |
| | | +0.0056 | +0.0012 | 10/31/95 | 506127 |
| | | +0.0069 | +0.0014 | 12/26/95 | 507201 |
| 3101 LM1 ENV DATA STA 0.5 MILES SSW | GROSS BETA | +0.0285 | +0.0031 | 01/03/95 | 500084 |
| | | +0.0274 | +0.0029 | 01/10/95 | 500187 |
| | | +0.0186 | +0.0021 | 01/17/95 | 500300 |
| | | +0.0137 | +0.0016 | 01/24/95 | 500431 |
| | | +0.0228 | +0.0025 | 01/31/95 | 500611 |
| | | +0.0235 | +0.0025 | 02/07/95 | 500721 |
| | | +0.0190 | +0.0021 | 02/14/95 | 500845 |
| | | +0.0126 | +0.0015 | 02/21/95 | 500979 |
| | | +0.0167 | +0.0019 | 02/28/95 | 501128 |
| | | +0.0134 | +0.0016 | 03/07/95 | 501231 |
| | | +0.0236 | +0.0026 | 03/14/95 | 501352 |
| | | +0.0239 | +0.0026 | 03/21/95 | 501498 |
| | | +0.0166 | +0.0019 | 03/28/95 | 501672 |
| | | +0.0172 | +0.0019 | 04/04/95 | 501785 |
| | | +0.0186 | +0.0021 | 04/11/95 | 501919 |
| | | +0.0167 | +0.0019 | 04/18/95 | 502038 |
| | | +0.0127 | +0.0015 | 04/25/95 | 502180 |
| | | +0.0159 | +0.0018 | 05/02/95 | 502369 |
| | | +0.0163 | +0.0018 | 05/09/95 | 502529 |
| | | +0.0117 | +0.0014 | 05/16/95 | 502665 |
| | | +0.0155 | +0.0018 | 05/23/95 | 502833 |
| | | +0.0203 | +0.0022 | 05/30/95 | 502976 |
| | | +0.0151 | +0.0017 | 06/06/95 | 503106 |
| | | +0.0172 | +0.0019 | 06/13/95 | 503232 |
| | | +0.0199 | +0.0022 | 06/20/95 | 503442 |
| | | +0.0158 | +0.0018 | 06/27/95 | 503589 |
| | | +0.0153 | +0.0017 | 07/05/95 | 503733 |
| | | +0.0192 | +0.0022 | 07/11/95 | 503862 |
| | | +0.0279 | +0.0030 | 07/18/95 | 504002 |
| | | +0.0182 | +0.0020 | 07/25/95 | 504111 |
| | | +0.0154 | +0.0018 | 08/01/95 | 504230 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------------------|-------------------------------------|
| 3101 LM1 ENV DATA STA | 0.5 MILES SSW | GROSS BETA | |
| | | +0.0094 | +0.0012 08/08/95 504399 |
| | | +0.0228 | +0.0025 08/15/95 504547 |
| | | +0.0270 | +0.0029 08/22/95 504649 |
| | | +0.0199 | +0.0022 08/29/95 504790 |
| | | +0.0284 | +0.0030 09/05/95 504914 |
| | | +0.0411 | +0.0043 09/12/95 505084 |
| | | +0.0233 | +0.0025 09/19/95 505193 |
| | | +0.0159 | +0.0018 09/26/95 505323 |
| | | +0.0257 | +0.0028 10/03/95 505456 |
| | | +0.0165 | +0.0019 10/10/95 505615 |
| | | +0.0293 | +0.0031 10/17/95 505752 |
| | | +0.0221 | +0.0024 10/24/95 505897 |
| | | +0.0208 | +0.0023 10/31/95 506081 |
| | | +0.0224 | +0.0024 11/07/95 506272 |
| | | +0.0210 | +0.0023 11/14/95 506375 |
| | | +0.0272 | +0.0029 11/20/95 506505 |
| | | +0.0280 | +0.0030 11/28/95 506645 |
| | | +0.0199 | +0.0022 12/05/95 506785 |
| | | +0.0212 | +0.0023 12/12/95 506898 |
| | | +0.0235 | +0.0026 12/19/95 507015 |
| | | +0.0152 | +0.0017 12/26/95 507157 |
| | | GAMMA SCAN (GELI) | |
| | | NO ACTIVITY DETECTED | 03/21/95 501550 |
| | BE-7 | +0.0631 | +0.0047 01/24/95 500478 |
| | | +0.0899 | +0.0097 02/21/95 501025 |
| | | +0.1035 | +0.0097 04/18/95 502085 |
| | | +0.0844 | +0.0092 05/16/95 502710 |
| | | +0.1177 | +0.0096 06/13/95 503294 |
| | | +0.1160 | +0.0101 07/11/95 503907 |
| | | +0.0852 | +0.0086 08/08/95 504444 |
| | | +0.1006 | +0.0081 09/05/95 504965 |
| | | +0.0940 | +0.0082 10/03/95 505502 |
| | | +0.0975 | +0.0088 10/31/95 506134 |
| | | +0.0827 | +0.0071 11/28/95 506690 |
| | | +0.0794 | +0.0067 12/26/95 507208 |
| | BI-214 | +0.0007 | +0.0009 01/24/95 500478 |
| | | +0.0012 | +0.0009 02/21/95 501025 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 Bq/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR TERM | DATE COLLECTED | LAB NO |
|-----------------------------------|---------------|-----------------------------|----------|------------|----------------|--------|
| 3101 LM1 ENV DATA STA | 0.5 MILES SSW | GAMMA SCAN (GELI) BI-214 | +0.0050 | +0.0012 | 04/18/95 | 502085 |
| | | | +0.0035 | +0.0009 | 05/16/95 | 502710 |
| | | | +0.0018 | +0.0010 | 07/11/95 | 503907 |
| | | | +0.0005 | +0.0008 | 09/05/95 | 504965 |
| | | | +0.0099 | +0.0020 | 10/03/95 | 505502 |
| | | | +0.0068 | +0.0013 | 10/31/95 | 506134 |
| | | | +0.0007 | +0.0007 | 11/28/95 | 506690 |
| | | | +0.0006 | +0.0008 | 12/26/95 | 507208 |
| | | | +0.0004 | +0.0005 | 09/05/95 | 504965 |
| | | | +0.0012 | +0.0007 | 01/24/95 | 500478 |
| | | PB-212 PB-214 | +0.0004 | +0.0011 | 02/21/95 | 501025 |
| | | | +0.0045 | +0.0015 | 04/18/95 | 502085 |
| | | | +0.0036 | +0.0008 | 05/16/95 | 502710 |
| | | | +0.0105 | +0.0018 | 10/03/95 | 505502 |
| | | | +0.0063 | +0.0013 | 10/31/95 | 506134 |
| | | | +0.0012 | +0.0008 | 11/28/95 | 506690 |
| 3102 LM2 N. WBSP GATE | 0.5 MILES N | GROSS BETA | +0.0262 | +0.0028 | 01/03/95 | 500087 |
| | | | +0.0254 | +0.0027 | 01/10/95 | 500189 |
| | | | +0.0166 | +0.0019 | 01/17/95 | 500302 |
| | | | +0.0176 | +0.0020 | 01/24/95 | 500433 |
| | | | +0.0228 | +0.0025 | 01/31/95 | 500614 |
| | | | +0.0224 | +0.0024 | 02/07/95 | 500723 |
| | | | +0.0232 | +0.0025 | 02/14/95 | 500847 |
| | | | +0.0134 | +0.0016 | 02/21/95 | 500981 |
| | | | +0.0150 | +0.0017 | 02/28/95 | 501131 |
| | | | +0.0145 | +0.0017 | 03/07/95 | 501233 |
| | | | +0.0204 | +0.0022 | 03/14/95 | 501354 |
| | | | +0.0215 | +0.0024 | 03/21/95 | 501500 |
| | | | +0.0166 | +0.0019 | 03/28/95 | 501675 |
| | | | +0.0195 | +0.0022 | 04/04/95 | 501787 |
| | | | +0.0181 | +0.0020 | 04/11/95 | 501921 |
| | | | +0.0158 | +0.0018 | 04/18/95 | 502040 |
| | | | +0.0133 | +0.0016 | 04/25/95 | 502183 |
| | | | +0.0153 | +0.0017 | 05/02/95 | 502371 |
| | | | +0.0171 | +0.0019 | 05/09/95 | 502531 |
| | | | +0.0113 | +0.0014 | 05/16/95 | 502667 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------------------|-------------------------------------|
| 3102 LM2 N. WBSP GATE | 0.5 MILES N | GROSS BETA | |
| | | +0.0161 | +0.0018 05/23/95 502836 |
| | | +0.0179 | +0.0020 05/30/95 502978 |
| | | +0.0150 | +0.0017 06/07/95 503108 |
| | | +0.0181 | +0.0021 06/13/95 503235 |
| | | +0.0186 | +0.0021 06/20/95 503445 |
| | | +0.0154 | +0.0018 06/27/95 503591 |
| | | +0.0215 | +0.0023 07/05/95 503735 |
| | | +0.0188 | +0.0022 07/11/95 503864 |
| | | +0.0298 | +0.0031 07/18/95 504005 |
| | | +0.0169 | +0.0019 07/25/95 504113 |
| | | +0.0147 | +0.0017 08/01/95 504232 |
| | | +0.0219 | +0.0024 11/14/95 506377 |
| | | +0.0267 | +0.0029 11/20/95 506507 |
| | | +0.0276 | +0.0029 11/28/95 506647 |
| | | +0.0232 | +0.0025 12/05/95 506788 |
| | | +0.0226 | +0.0025 12/12/95 506900 |
| | | +0.0235 | +0.0026 12/19/95 507017 |
| | | +0.0158 | +0.0018 12/26/95 507159 |
| | | GAMMA SCAN (GEL1) | |
| | | NO ACTIVITY DETECTED | 11/28/95 506691 |
| | BE-7 | +0.0611 | +0.0059 01/24/95 500479 |
| | | +0.0910 | +0.0075 02/21/95 501026 |
| | | +0.1107 | +0.0102 03/21/95 501551 |
| | | +0.1170 | +0.0080 04/18/95 502086 |
| | | +0.0857 | +0.0082 05/16/95 502711 |
| | | +0.1129 | +0.0095 06/13/95 503295 |
| | | +0.1250 | +0.0093 07/11/95 503908 |
| | | +0.1007 | +0.0092 08/08/95 504445 |
| | | +0.0759 | +0.0075 12/26/95 507209 |
| | BI-214 | +0.0018 | +0.0010 04/18/95 502086 |
| | | +0.0007 | +0.0007 07/11/95 503908 |
| | | +0.0033 | +0.0009 12/26/95 507209 |
| | PB-212 | +0.0004 | +0.0005 06/13/95 503295 |
| | | +0.0001 | +0.0005 12/26/95 507209 |
| | PB-214 | +0.0024 | +0.0010 04/18/95 502086 |
| | | +0.0052 | +0.0013 05/16/95 502711 |
| | | +0.0003 | +0.0009 08/08/95 504445 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PC1/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | | |
|----------------------------------------|---------------------------------------|----------|------------|-----------|--------|
| | | | TERM | COLLECTED | LAB NO |
| 3102 LM2 N. WBSP GATE 0.5 MILES N | GAMMA SCAN (GELI) PB-214 TL-208 | +0.0011 | +0.0005 | 12/26/95 | 507209 |
| | | +0.0001 | +0.0003 | 06/13/95 | 503295 |
| | | | | | |
| 3106 PM2 SPRING CITY 7.0 MILES NW | GROSS BETA | +0.0291 | +0.0032 | 01/03/95 | 500091 |
| | | +0.0260 | +0.0028 | 01/10/95 | 500192 |
| | | +0.0165 | +0.0019 | 01/17/95 | 500305 |
| | | +0.0186 | +0.0021 | 01/24/95 | 500436 |
| | | +0.0219 | +0.0024 | 01/31/95 | 500618 |
| | | +0.0240 | +0.0026 | 02/07/95 | 500726 |
| | | +0.0228 | +0.0025 | 02/14/95 | 500850 |
| | | +0.0124 | +0.0015 | 02/21/95 | 500984 |
| | | +0.0158 | +0.0018 | 02/28/95 | 501135 |
| | | +0.0146 | +0.0017 | 03/07/95 | 501236 |
| | | +0.0211 | +0.0023 | 03/14/95 | 501357 |
| | | +0.0214 | +0.0024 | 03/21/95 | 501503 |
| | | +0.0153 | +0.0017 | 03/28/95 | 501679 |
| | | +0.0187 | +0.0021 | 04/04/95 | 501790 |
| | | +0.0206 | +0.0023 | 04/11/95 | 501924 |
| | | +0.0148 | +0.0017 | 04/18/95 | 502043 |
| | | +0.0140 | +0.0016 | 04/25/95 | 502187 |
| | | +0.0162 | +0.0018 | 05/02/95 | 502374 |
| | | +0.0161 | +0.0018 | 05/09/95 | 502534 |
| | | +0.0128 | +0.0015 | 05/16/95 | 502670 |
| | | +0.0179 | +0.0020 | 05/23/95 | 502840 |
| | | +0.0193 | +0.0021 | 05/30/95 | 502981 |
| | | +0.0149 | +0.0017 | 06/06/95 | 503111 |
| | | +0.0169 | +0.0019 | 06/13/95 | 503240 |
| | | +0.0201 | +0.0022 | 06/20/95 | 503449 |
| | | +0.0189 | +0.0021 | 06/27/95 | 503594 |
| | | +0.0209 | +0.0023 | 07/05/95 | 503738 |
| | | +0.0217 | +0.0024 | 07/11/95 | 503867 |
| | | +0.0188 | +0.0021 | 07/25/95 | 504116 |
| | | +0.0144 | +0.0017 | 08/01/95 | 504235 |
| | | +0.0094 | +0.0012 | 08/08/95 | 504404 |
| | | +0.0234 | +0.0025 | 08/15/95 | 504554 |
| | | +0.0282 | +0.0030 | 08/22/95 | 504654 |
| | | +0.0193 | +0.0021 | 08/30/95 | 504795 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | |
|-----------------------------------|-----------------------|----------|------------------|------------------|
| | | | TERM | COLLECTED LAB NO |
| 3106 PM2 SPRING CITY 7.0 MILES NW | GROSS BETA | +0.0302 | +0.0032 09/05/95 | 504919 |
| | | +0.0401 | +0.0042 09/12/95 | 505091 |
| | | +0.0216 | +0.0024 09/19/95 | 505198 |
| | | +0.0205 | +0.0023 09/26/95 | 505328 |
| | | +0.0278 | +0.0030 10/03/95 | 505461 |
| | | +0.0151 | +0.0017 10/10/95 | 505622 |
| | | +0.0275 | +0.0030 10/17/95 | 505757 |
| | | +0.0234 | +0.0025 10/24/95 | 505902 |
| | | +0.0183 | +0.0020 10/31/95 | 506086 |
| | | +0.0196 | +0.0022 11/07/95 | 506279 |
| | | +0.0203 | +0.0022 11/14/95 | 506380 |
| | | +0.0272 | +0.0029 11/21/95 | 506510 |
| | | +0.0269 | +0.0029 11/28/95 | 506650 |
| | | +0.0242 | +0.0026 12/05/95 | 506792 |
| | | +0.0223 | +0.0024 12/12/95 | 506903 |
| | | +0.0238 | +0.0026 12/19/95 | 507020 |
| | | +0.0168 | +0.0019 12/26/95 | 507162 |
| | GAMMA SCAN (GELI) | | | |
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| | | | | |
| | AC-228 BE-7 | +0.0024 | +0.0018 08/08/95 | 504446 |
| | | +0.0523 | +0.0046 01/24/95 | 500480 |
| | | +0.0945 | +0.0099 02/21/95 | 501027 |
| | | +0.1139 | +0.0087 03/21/95 | 501552 |
| | | +0.1298 | +0.0116 04/18/95 | 502087 |
| | | +0.0870 | +0.0087 05/16/95 | 502712 |
| | | +0.1126 | +0.0108 06/13/95 | 503296 |
| | | +0.1189 | +0.0092 07/11/95 | 503909 |
| | | +0.0971 | +0.0116 08/08/95 | 504446 |
| | | +0.0976 | +0.0096 09/05/95 | 504967 |
| | BI-214 | +0.0974 | +0.0073 10/03/95 | 505504 |
| | | +0.0839 | +0.0064 10/31/95 | 506136 |
| | | +0.0832 | +0.0074 11/28/95 | 506692 |
| | | +0.0852 | +0.0084 12/26/95 | 507210 |
| | | +0.0023 | +0.0008 04/18/95 | 502087 |
| | | +0.0011 | +0.0008 05/16/95 | 502712 |
| | | +0.0007 | +0.0010 06/13/95 | 503296 |
| | | +0.0001 | +0.0009 07/11/95 | 503909 |
| | | +0.0010 | +0.0011 08/08/95 | 504446 |
| | | | | |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR TERM | DATE COLLECTED | LAB NO |
|-----------------------------------|-----------------------|-----------------------------|---------------|-------------------|--------|
| 3106 PM2 SPRING CITY | 7.0 MILES NW | GAMMA SCAN (GELI) BI-214 | +0.0027 | 09/05/95 | 504967 |
| | | | +0.0058 | 10/03/95 | 505504 |
| | | | +0.0060 | 10/31/95 | 506136 |
| | | | +0.0032 | 11/28/95 | 506692 |
| | | | +0.0027 | 12/26/95 | 507210 |
| | | | +0.0063 | 10/31/95 | 506136 |
| | | | +0.0061 | 12/26/95 | 507210 |
| | | | +0.0015 | 01/24/95 | 500480 |
| | | | +0.0023 | 04/18/95 | 502087 |
| | | | +0.0006 | 07/11/95 | 503909 |
| | | K-40 PB-214 | +0.0037 | 08/08/95 | 504446 |
| | | | +0.0035 | 09/05/95 | 504967 |
| | | | +0.0060 | 10/03/95 | 505504 |
| | | | +0.0078 | 10/31/95 | 506136 |
| | | | +0.0037 | 11/28/95 | 506692 |
| | | | +0.0010 | 12/26/95 | 507210 |
| 3107 PM3 CEDINE BIBLE | CAMP 11.5 M. NNE | GROSS BETA | +0.0276 | 01/03/95 | 500094 |
| | | | +0.0281 | 01/10/95 | 500194 |
| | | | +0.0176 | 01/17/95 | 500307 |
| | | | +0.0158 | 01/24/95 | 500438 |
| | | | +0.0220 | 01/31/95 | 500621 |
| | | | +0.0223 | 02/07/95 | 500728 |
| | | | +0.0234 | 02/14/95 | 500852 |
| | | | +0.0113 | 02/21/95 | 500986 |
| | | | +0.0185 | 02/28/95 | 501138 |
| | | | +0.0147 | 03/07/95 | 501238 |
| | | | +0.0236 | 03/14/95 | 501359 |
| | | | +0.0226 | 03/21/95 | 501505 |
| | | | +0.0148 | 03/28/95 | 501682 |
| | | | +0.0197 | 04/04/95 | 501792 |
| | | | +0.0186 | 04/11/95 | 501926 |
| | | | +0.0147 | 04/18/95 | 502045 |
| | | | +0.0149 | 04/25/95 | 502190 |
| | | | +0.0162 | 05/02/95 | 502376 |
| | | | +0.0162 | 05/10/95 | 502536 |
| | | | +0.0139 | 05/16/95 | 502672 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|------------|-------------------------------------|
| 3107 PM3 CEDINE BIBLE | CAMP 11.5 M. NNE | GROSS BETA | |
| | | +0.0164 | +0.0019 05/23/95 502843 |
| | | +0.0188 | +0.0021 05/30/95 502983 |
| | | +0.0139 | +0.0016 06/06/95 503113 |
| | | +0.0168 | +0.0019 06/13/95 503243 |
| | | +0.0191 | +0.0021 06/20/95 503452 |
| | | +0.0185 | +0.0021 06/27/95 503596 |
| | | +0.0212 | +0.0023 07/05/95 503740 |
| | | +0.0248 | +0.0027 07/11/95 503869 |
| | | +0.0278 | +0.0030 07/18/95 504012 |
| | | +0.0186 | +0.0021 07/25/95 504118 |
| | | +0.0159 | +0.0018 08/01/95 504237 |
| | | +0.0114 | +0.0014 08/08/95 504406 |
| | | +0.0265 | +0.0028 08/15/95 504557 |
| | | +0.0298 | +0.0032 08/22/95 504656 |
| | | +0.0233 | +0.0025 08/30/95 504797 |
| | | +0.0297 | +0.0032 09/05/95 504921 |
| | | +0.0383 | +0.0040 09/12/95 505094 |
| | | +0.0250 | +0.0027 09/19/95 505200 |
| | | +0.0202 | +0.0022 09/26/95 505330 |
| | | +0.0313 | +0.0033 10/03/95 505463 |
| | | +0.0178 | +0.0020 10/10/95 505625 |
| | | +0.0284 | +0.0030 10/17/95 505759 |
| | | +0.0240 | +0.0026 10/24/95 505904 |
| | | +0.0190 | +0.0021 10/31/95 506088 |
| | | +0.0224 | +0.0024 11/07/95 506282 |
| | | +0.0221 | +0.0024 11/14/95 506382 |
| | | +0.0295 | +0.0032 11/21/95 506512 |
| | | +0.0263 | +0.0028 11/28/95 506652 |
| | | +0.0235 | +0.0026 12/05/95 506795 |
| | | +0.0218 | +0.0024 12/12/95 506905 |
| | | +0.0201 | +0.0022 12/19/95 507022 |
| | | +0.0162 | +0.0018 12/26/95 507164 |
| | GAMMA SCAN (GELI) | | |
| | BE-7 | +0.0632 | +0.0061 01/24/95 500481 |
| | | +0.0885 | +0.0088 02/21/95 501028 |
| | | +0.1220 | +0.0105 03/21/95 501553 |
| | | +0.1223 | +0.0092 04/18/95 502088 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 3107 PM3 CEDINE BIBLE | CAMP 11.5 M. NNE | GAMMA SCAN (GELI) | |
| | BE-7 | +0.0932 | +0.0097 05/16/95 502713 |
| | | +0.1242 | +0.0097 06/13/95 503297 |
| | | +0.1417 | +0.0099 07/11/95 503910 |
| | | +0.0956 | +0.0081 08/08/95 504447 |
| | | +0.1235 | +0.0096 09/05/95 504968 |
| | | +0.1112 | +0.0086 10/03/95 505505 |
| | | +0.0844 | +0.0085 10/31/95 506137 |
| | | +0.0969 | +0.0080 11/28/95 506693 |
| | | +0.0728 | +0.0057 12/26/95 507211 |
| | BI-214 | +0.0018 | +0.0008 03/21/95 501553 |
| | | +0.0042 | +0.0009 04/18/95 502088 |
| | | +0.0011 | +0.0010 08/08/95 504447 |
| | | +0.0025 | +0.0008 09/05/95 504968 |
| | | +0.0096 | +0.0017 10/03/95 505505 |
| | | +0.0099 | +0.0018 10/31/95 506137 |
| | | +0.0038 | +0.0011 11/28/95 506693 |
| | | +0.0045 | +0.0011 12/26/95 507211 |
| | K-40 | +0.0043 | +0.0076 08/08/95 504447 |
| | | +0.0073 | +0.0049 12/26/95 507211 |
| | PB-212 | +0.0003 | +0.0004 04/18/95 502088 |
| | PB-214 | +0.0063 | +0.0010 04/18/95 502088 |
| | | +0.0007 | +0.0007 07/11/95 503910 |
| | | +0.0022 | +0.0008 09/05/95 504968 |
| | | +0.0138 | +0.0016 10/03/95 505505 |
| | | +0.0087 | +0.0011 10/31/95 506137 |
| | | +0.0040 | +0.0008 11/28/95 506693 |
| | | +0.0036 | +0.0009 12/26/95 507211 |
| 3108 PM-4 TEN MILE | 7.8 M. NE/ENE | GROSS BETA | |
| | | +0.0326 | +0.0035 01/04/95 500097 |
| | | +0.0264 | +0.0029 01/10/95 500196 |
| | | +0.0168 | +0.0019 01/18/95 500309 |
| | | +0.0174 | +0.0020 01/24/95 500440 |
| | | +0.0235 | +0.0025 02/01/95 500624 |
| | | +0.0244 | +0.0026 02/08/95 500730 |
| | | +0.0238 | +0.0026 02/15/95 500854 |
| | | +0.0133 | +0.0016 02/22/95 500988 |
| | | +0.0168 | +0.0019 03/01/95 501141 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | | |
|-----------------------------------|-----------------------|------------|------------|------------------|--------|
| | | | TERM | COLLECTED | LAB NO |
| 3108 PM-4 TEN MILE | 7.8 M. NE/ENE | GROSS BETA | | | |
| | | | +0.0139 | +0.0016 03/08/95 | 501240 |
| | | | +0.0274 | +0.0029 03/15/95 | 501361 |
| | | | +0.0256 | +0.0028 03/22/95 | 501507 |
| | | | +0.0191 | +0.0021 03/29/95 | 501685 |
| | | | +0.0199 | +0.0022 04/05/95 | 501794 |
| | | | +0.0208 | +0.0023 04/12/95 | 501928 |
| | | | +0.0206 | +0.0023 04/19/95 | 502047 |
| | | | +0.0128 | +0.0015 04/25/95 | 502193 |
| | | | +0.0149 | +0.0017 05/03/95 | 502378 |
| | | | +0.0174 | +0.0020 05/09/95 | 502538 |
| | | | +0.0136 | +0.0016 05/17/95 | 502674 |
| | | | +0.0177 | +0.0020 05/24/95 | 502846 |
| | | | +0.0179 | +0.0020 05/31/95 | 502985 |
| | | | +0.0154 | +0.0017 06/07/95 | 503115 |
| | | | +0.0209 | +0.0023 06/14/95 | 503247 |
| | | | +0.0209 | +0.0023 06/21/95 | 503455 |
| | | | +0.0185 | +0.0021 06/28/95 | 503598 |
| | | | +0.0207 | +0.0022 07/06/95 | 503742 |
| | | | +0.0213 | +0.0024 07/12/95 | 503871 |
| | | | +0.0310 | +0.0033 07/19/95 | 504015 |
| | | | +0.0185 | +0.0021 07/26/95 | 504120 |
| | | | +0.0142 | +0.0016 08/02/95 | 504239 |
| | | | +0.0116 | +0.0014 08/09/95 | 504408 |
| | | | +0.0245 | +0.0027 08/15/95 | 504560 |
| | | | +0.0314 | +0.0033 08/23/95 | 504658 |
| | | | +0.0243 | +0.0026 08/30/95 | 504799 |
| | | | +0.0316 | +0.0034 09/06/95 | 504923 |
| | | | +0.0404 | +0.0042 09/12/95 | 505097 |
| | | | +0.0216 | +0.0024 09/20/95 | 505202 |
| | | | +0.0197 | +0.0022 09/27/95 | 505332 |
| | | | +0.0291 | +0.0031 10/03/95 | 505465 |
| | | | +0.0194 | +0.0021 10/11/95 | 505628 |
| | | | +0.0307 | +0.0033 10/17/95 | 505761 |
| | | | +0.0266 | +0.0028 10/25/95 | 505906 |
| | | | +0.0199 | +0.0022 10/31/95 | 506090 |
| | | | +0.0208 | +0.0023 11/08/95 | 506285 |
| | | | +0.0198 | +0.0022 11/15/95 | 506384 |
| | | | +0.0298 | +0.0032 11/21/95 | 506514 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | | |
|-----------------------------------|-----------------------|----------|------------|-----------|-----------------|
| | | | TERM | COLLECTED | LAB NO |
| 3108 PM-4 TEN MILE 7.8 M. NE/ENE | GROSS BETA | +0.0268 | +0.0029 | 11/29/95 | 506654 |
| | | +0.0244 | +0.0026 | 12/06/95 | 506798 |
| | | +0.0249 | +0.0027 | 12/13/95 | 506907 |
| | | +0.0215 | +0.0024 | 12/19/95 | 507024 |
| | | +0.0186 | +0.0021 | 12/27/95 | 507166 |
| | GAMMA SCAN (GELI) | | | | |
| | | BE-7 | +0.0576 | +0.0057 | 01/24/95 500482 |
| | | | +0.0900 | +0.0093 | 02/22/95 501029 |
| | | | +0.1284 | +0.0096 | 03/22/95 501554 |
| | | | +0.1299 | +0.0098 | 04/19/95 502089 |
| | | | +0.0976 | +0.0069 | 05/17/95 502714 |
| | | | +0.1143 | +0.0101 | 06/14/95 503298 |
| | | | +0.1345 | +0.0087 | 07/12/95 503911 |
| | | | +0.0881 | +0.0076 | 08/09/95 504448 |
| | | | +0.1125 | +0.0091 | 09/06/95 504969 |
| | | | +0.1070 | +0.0084 | 10/03/95 505506 |
| | | | +0.0891 | +0.0086 | 10/31/95 506138 |
| | | | +0.0974 | +0.0102 | 11/29/95 506694 |
| | | | +0.0753 | +0.0108 | 12/27/95 507212 |
| | BI-214 | +0.0026 | +0.0008 | 03/22/95 | 501554 |
| | | +0.0011 | +0.0008 | 04/19/95 | 502089 |
| | | +0.0009 | +0.0009 | 05/17/95 | 502714 |
| | | +0.0048 | +0.0013 | 09/06/95 | 504969 |
| | | +0.0115 | +0.0014 | 10/03/95 | 505506 |
| | | +0.0148 | +0.0018 | 10/31/95 | 506138 |
| | | +0.0021 | +0.0011 | 11/29/95 | 506694 |
| | | +0.0066 | +0.0013 | 12/27/95 | 507212 |
| | PB-212 PB-214 | +0.0003 | +0.0006 | 05/17/95 | 502714 |
| | | +0.0032 | +0.0008 | 03/22/95 | 501554 |
| | | +0.0034 | +0.0009 | 04/19/95 | 502089 |
| | | +0.0001 | +0.0005 | 05/17/95 | 502714 |
| | | +0.0015 | +0.0008 | 07/12/95 | 503911 |
| | | +0.0048 | +0.0009 | 09/06/95 | 504969 |
| | | +0.0113 | +0.0014 | 10/03/95 | 505506 |
| | | +0.0150 | +0.0017 | 10/31/95 | 506138 |
| | | +0.0026 | +0.0008 | 11/29/95 | 506694 |
| | | +0.0072 | +0.0015 | 12/27/95 | 507212 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PC1/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|--------------|-----------------------|----------|-------------------------------------|
| 3109 PM5 DECATUR | 6.25 MILES S | GROSS BETA | | |
| | | | +0.0296 | +0.0032 01/04/95 500100 |
| | | | +0.0281 | +0.0031 01/11/95 500198 |
| | | | +0.0148 | +0.0017 01/18/95 500311 |
| | | | +0.0185 | +0.0021 01/25/95 500442 |
| | | | +0.0239 | +0.0026 02/01/95 500627 |
| | | | +0.0241 | +0.0026 02/08/95 500732 |
| | | | +0.0253 | +0.0028 02/15/95 500856 |
| | | | +0.0147 | +0.0017 02/22/95 500990 |
| | | | +0.0149 | +0.0017 03/01/95 501144 |
| | | | +0.0126 | +0.0015 03/08/95 501242 |
| | | | +0.0272 | +0.0029 03/15/95 501363 |
| | | | +0.0223 | +0.0024 03/22/95 501509 |
| | | | +0.0185 | +0.0021 03/29/95 501688 |
| | | | +0.0201 | +0.0022 04/05/95 501796 |
| | | | +0.0206 | +0.0023 04/12/95 501930 |
| | | | +0.0187 | +0.0021 04/19/95 502049 |
| | | | +0.0110 | +0.0014 04/25/95 502196 |
| | | | +0.0172 | +0.0019 05/03/95 502380 |
| | | | +0.0189 | +0.0021 05/09/95 502540 |
| | | | +0.0121 | +0.0014 05/17/95 502676 |
| | | | +0.0149 | +0.0017 05/24/95 502849 |
| | | | +0.0195 | +0.0021 05/31/95 502987 |
| | | | +0.0170 | +0.0019 06/07/95 503117 |
| | | | +0.0190 | +0.0021 06/14/95 503250 |
| | | | +0.0221 | +0.0024 06/21/95 503458 |
| | | | +0.0198 | +0.0022 06/28/95 503600 |
| | | | +0.0220 | +0.0024 07/06/95 503744 |
| | | | +0.0213 | +0.0024 07/12/95 503873 |
| | | | +0.0301 | +0.0032 07/19/95 504018 |
| | | | +0.0189 | +0.0021 07/26/95 504122 |
| | | | +0.0150 | +0.0017 08/02/95 504241 |
| | | | +0.0108 | +0.0013 08/09/95 504410 |
| | | | +0.0271 | +0.0029 08/15/95 504563 |
| | | | +0.0274 | +0.0029 08/23/95 504660 |
| | | | +0.0183 | +0.0020 08/30/95 504801 |
| | | | +0.0301 | +0.0032 09/06/95 504925 |
| | | | +0.0400 | +0.0042 09/12/95 505100 |
| | | | +0.0223 | +0.0024 09/20/95 505204 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN AIR FILTER
 PCI/M3 - 0.037 Bq/M3
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR TERM | DATE COLLECTED | LAB NO |
|-----------------------------------|-----------------------|----------|------------|----------------|--------|
| 3109 PMS DECATUR 6.25 MILES S | GROSS BETA | +0.0207 | +0.0023 | 09/27/95 | 505334 |
| | | +0.0257 | +0.0028 | 10/04/95 | 505467 |
| | | +0.0187 | +0.0021 | 10/11/95 | 505631 |
| | | +0.0304 | +0.0033 | 10/17/95 | 505763 |
| | | +0.0251 | +0.0027 | 10/25/95 | 505908 |
| | | +0.0206 | +0.0023 | 10/31/95 | 506092 |
| | | +0.0219 | +0.0024 | 11/08/95 | 506288 |
| | | +0.0196 | +0.0022 | 11/15/95 | 506386 |
| | | +0.0315 | +0.0034 | 11/21/95 | 506516 |
| | | +0.0227 | +0.0025 | 11/29/95 | 506656 |
| | | +0.0227 | +0.0025 | 12/06/95 | 506801 |
| | | +0.0225 | +0.0025 | 12/13/95 | 506909 |
| | | +0.0187 | +0.0021 | 12/19/95 | 507026 |
| | | +0.0182 | +0.0020 | 12/26/95 | 507168 |
| | GAMMA SCAN (GELI) | | | | |
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| | | | | | |
| | BE-7 | +0.0650 | +0.0062 | 01/25/95 | 500483 |
| | | +0.0767 | +0.0071 | 02/22/95 | 501030 |
| | | +0.1264 | +0.0093 | 03/22/95 | 501555 |
| | | +0.1243 | +0.0106 | 04/19/95 | 502090 |
| | | +0.0905 | +0.0087 | 05/17/95 | 502715 |
| | | +0.1183 | +0.0090 | 06/14/95 | 503299 |
| | | +0.1347 | +0.0114 | 07/12/95 | 503912 |
| | | +0.0865 | +0.0080 | 08/09/95 | 504449 |
| | | +0.1076 | +0.0087 | 09/06/95 | 504970 |
| | | +0.0889 | +0.0092 | 10/04/95 | 505507 |
| | | +0.0924 | +0.0088 | 10/31/95 | 506139 |
| | BI-214 | +0.0895 | +0.0085 | 11/29/95 | 506695 |
| | | +0.0793 | +0.0073 | 12/26/95 | 507213 |
| | | +0.0009 | +0.0008 | 01/25/95 | 500483 |
| | | +0.0016 | +0.0008 | 04/19/95 | 502090 |
| | | +0.0045 | +0.0014 | 05/17/95 | 502715 |
| | | +0.0001 | +0.0007 | 07/12/95 | 503912 |
| | | +0.0035 | +0.0009 | 09/06/95 | 504970 |
| | | +0.0104 | +0.0013 | 10/04/95 | 505507 |
| | | +0.0137 | +0.0015 | 10/31/95 | 506139 |
| | | +0.0035 | +0.0011 | 11/29/95 | 506695 |
| | | +0.0110 | +0.0015 | 12/26/95 | 507213 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN AIR FILTER
 PCI/M3 - 0.037 BQ/M3
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|---------------|---------------------------|----------|-------------------------------------|
| 3109 PM5 DECATUR | 6.25 MILES S | GAMMA SCAN (GELI) K-40 | +0.0084 | +0.0065 10/04/95 505507 |
| | | | +0.0072 | +0.0058 11/29/95 506695 |
| | | | +0.0007 | +0.0005 07/12/95 503912 |
| | | | +0.0002 | +0.0005 08/09/95 504449 |
| | | | +0.0026 | +0.0007 02/22/95 501030 |
| | | | +0.0010 | +0.0011 05/17/95 502715 |
| | | | +0.0043 | +0.0008 09/06/95 504970 |
| | | | +0.0118 | +0.0020 10/04/95 505507 |
| | | | +0.0149 | +0.0014 10/31/95 506139 |
| | | | +0.0043 | +0.0011 11/29/95 506695 |
| | | | +0.0091 | +0.0017 12/26/95 507213 |
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| | | | | |
| 3203 LM-3 WB | 2.1 MILES NNE | GROSS BETA | +0.0307 | +0.0033 01/03/95 500103 |
| | | | +0.0252 | +0.0027 01/10/95 500211 |
| | | | +0.0153 | +0.0018 01/17/95 500313 |
| | | | +0.0159 | +0.0018 01/24/95 500447 |
| | | | +0.0211 | +0.0023 01/31/95 500630 |
| | | | +0.0222 | +0.0024 02/07/95 500745 |
| | | | +0.0216 | +0.0024 02/14/95 500858 |
| | | | +0.0136 | +0.0016 02/21/95 500995 |
| | | | +0.0163 | +0.0019 02/28/95 501147 |
| | | | +0.0146 | +0.0017 03/07/95 501256 |
| | | | +0.0232 | +0.0025 03/15/95 501365 |
| | | | +0.0222 | +0.0025 03/21/95 501514 |
| | | | +0.0148 | +0.0017 03/28/95 501691 |
| | | | +0.0187 | +0.0021 04/04/95 501809 |
| | | | +0.0176 | +0.0020 04/11/95 501932 |
| | | | +0.0168 | +0.0019 04/18/95 502055 |
| | | | +0.0139 | +0.0016 04/25/95 502199 |
| | | | +0.0161 | +0.0018 05/02/95 502402 |
| | | | +0.0171 | +0.0019 05/09/95 502542 |
| | | | +0.0108 | +0.0013 05/16/95 502681 |
| | | | +0.0145 | +0.0017 05/23/95 502852 |
| | | | +0.0172 | +0.0019 05/30/95 503001 |
| | | | +0.0125 | +0.0015 06/07/95 503119 |
| | | | +0.0156 | +0.0018 06/13/95 503256 |
| | | | +0.0183 | +0.0020 06/20/95 503461 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 3203 LM-3 WB | 2.1 MILES NNE | GROSS BETA | |
| | | +0.0178 | +0.0020 06/27/95 503613 |
| | | +0.0201 | +0.0022 07/05/95 503746 |
| | | +0.0211 | +0.0024 07/11/95 503878 |
| | | +0.0251 | +0.0027 07/18/95 504021 |
| | | +0.0189 | +0.0021 07/25/95 504136 |
| | | +0.0150 | +0.0017 08/01/95 504243 |
| | | +0.0090 | +0.0012 08/08/95 504415 |
| | | +0.0216 | +0.0023 08/15/95 504566 |
| | | +0.0274 | +0.0029 08/22/95 504674 |
| | | +0.0184 | +0.0020 08/29/95 504803 |
| | | +0.0267 | +0.0029 09/05/95 504930 |
| | | +0.0373 | +0.0039 09/12/95 505103 |
| | | +0.0197 | +0.0022 09/19/95 505218 |
| | | +0.0181 | +0.0020 09/26/95 505336 |
| | | +0.0277 | +0.0030 10/03/95 505473 |
| | | +0.0148 | +0.0017 10/10/95 505634 |
| | | +0.0294 | +0.0031 10/17/95 505776 |
| | | +0.0225 | +0.0025 10/24/95 505910 |
| | | +0.0198 | +0.0022 10/31/95 506105 |
| | | +0.0190 | +0.0021 11/07/95 506291 |
| | | +0.0205 | +0.0022 11/14/95 506400 |
| | | +0.0263 | +0.0029 11/20/95 506518 |
| | | +0.0267 | +0.0028 11/28/95 506661 |
| | | +0.0231 | +0.0025 12/05/95 506804 |
| | | +0.0221 | +0.0024 12/12/95 506924 |
| | | +0.0220 | +0.0024 12/19/95 507028 |
| | | +0.0181 | +0.0020 12/26/95 507173 |
| | | GAMMA SCAN (GELI) | |
| | | BE-7 | |
| | | +0.0628 | +0.0084 01/24/95 500484 |
| | | +0.0958 | +0.0073 02/21/95 501031 |
| | | +0.1193 | +0.0097 03/21/95 501556 |
| | | +0.1315 | +0.0093 04/18/95 502091 |
| | | +0.0973 | +0.0083 05/16/95 502716 |
| | | +0.0957 | +0.0084 06/13/95 503300 |
| | | +0.1341 | +0.0102 07/11/95 503913 |
| | | +0.0927 | +0.0072 08/08/95 504450 |
| | | +0.0793 | +0.0079 09/05/95 504971 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 3203 LM-3 WB | 2.1 MILES NNE | GAMMA SCAN (GELI) | |
| | BE-7 | +0.0790 | +0.0080 10/03/95 505508 |
| | | +0.0851 | +0.0087 10/31/95 506140 |
| | | +0.0936 | +0.0073 11/28/95 506696 |
| | | +0.0832 | +0.0082 12/26/95 507214 |
| | BI-214 | +0.0054 | +0.0010 01/24/95 500484 |
| | | +0.0007 | +0.0009 05/16/95 502716 |
| | | +0.0008 | +0.0009 07/11/95 503913 |
| | | +0.0003 | +0.0010 08/08/95 504450 |
| | | +0.0051 | +0.0013 09/05/95 504971 |
| | | +0.0069 | +0.0011 10/03/95 505508 |
| | | +0.0081 | +0.0016 10/31/95 506140 |
| | | +0.0014 | +0.0009 11/28/95 506696 |
| | | +0.0074 | +0.0013 12/26/95 507214 |
| | K-40 | +0.0007 | +0.0050 05/16/95 502716 |
| | PB-212 | +0.0002 | +0.0010 07/11/95 503913 |
| | | +0.0010 | +0.0007 12/26/95 507214 |
| | PB-214 | +0.0058 | +0.0009 01/24/95 500484 |
| | | +0.0005 | +0.0007 02/21/95 501031 |
| | | +0.0012 | +0.0009 07/11/95 503913 |
| | | +0.0049 | +0.0009 09/05/95 504971 |
| | | +0.0062 | +0.0012 10/03/95 505508 |
| | | +0.0089 | +0.0012 10/31/95 506140 |
| | | +0.0014 | +0.0009 11/28/95 506696 |
| | | +0.0085 | +0.0013 12/26/95 507214 |
| | TL-208 | +0.0000 | +0.0003 05/16/95 502716 |
| | | +0.0004 | +0.0004 10/03/95 505508 |
| 3204 LM-4 WB | 0.9 MILES SE | GROSS BETA | |
| | | +0.0272 | +0.0029 01/03/95 500106 |
| | | +0.0242 | +0.0026 01/10/95 500213 |
| | | +0.0182 | +0.0020 01/17/95 500315 |
| | | +0.0182 | +0.0020 01/24/95 500449 |
| | | +0.0237 | +0.0026 01/31/95 500633 |
| | | +0.0229 | +0.0025 02/07/95 500747 |
| | | +0.0217 | +0.0024 02/14/95 500860 |
| | | +0.0147 | +0.0017 02/21/95 500997 |
| | | +0.0167 | +0.0019 02/28/95 501150 |
| | | +0.0129 | +0.0015 03/07/95 501258 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|------------|-------------------------------------|
| 3204 LM-4 WB | 0.9 MILES SE | GROSS BETA | |
| | | +0.0242 | +0.0026 03/15/95 501367 |
| | | +0.0207 | +0.0023 03/21/95 501516 |
| | | +0.0164 | +0.0018 03/28/95 501694 |
| | | +0.0175 | +0.0019 04/04/95 501811 |
| | | +0.0166 | +0.0018 04/12/95 501934 |
| | | +0.0183 | +0.0021 04/18/95 502057 |
| | | +0.0146 | +0.0017 04/25/95 502202 |
| | | +0.0146 | +0.0017 05/02/95 502404 |
| | | +0.0155 | +0.0018 05/09/95 502544 |
| | | +0.0123 | +0.0014 05/16/95 502683 |
| | | +0.0167 | +0.0018 05/24/95 502855 |
| | | +0.0170 | +0.0019 05/30/95 503003 |
| | | +0.0128 | +0.0015 06/07/95 503121 |
| | | +0.0188 | +0.0021 06/13/95 503259 |
| | | +0.0209 | +0.0023 06/20/95 503464 |
| | | +0.0180 | +0.0020 06/27/95 503615 |
| | | +0.0196 | +0.0021 07/05/95 503748 |
| | | +0.0200 | +0.0022 07/11/95 503880 |
| | | +0.0275 | +0.0029 07/19/95 504024 |
| | | +0.0198 | +0.0022 07/25/95 504138 |
| | | +0.0143 | +0.0016 08/01/95 504245 |
| | | +0.0126 | +0.0015 08/08/95 504417 |
| | | +0.0263 | +0.0028 08/15/95 504569 |
| | | +0.0289 | +0.0031 08/22/95 504676 |
| | | +0.0204 | +0.0022 08/30/95 504805 |
| | | +0.0295 | +0.0032 09/05/95 504932 |
| | | +0.0380 | +0.0040 09/12/95 505106 |
| | | +0.0249 | +0.0027 09/19/95 505220 |
| | | +0.0195 | +0.0022 09/26/95 505338 |
| | | +0.0286 | +0.0030 10/03/95 505475 |
| | | +0.0182 | +0.0020 10/10/95 505637 |
| | | +0.0287 | +0.0031 10/17/95 505778 |
| | | +0.0208 | +0.0023 10/24/95 505912 |
| | | +0.0193 | +0.0021 10/31/95 506107 |
| | | +0.0220 | +0.0024 11/07/95 506294 |
| | | +0.0206 | +0.0023 11/14/95 506402 |
| | | +0.0305 | +0.0032 11/21/95 506520 |
| | | +0.0258 | +0.0028 11/28/95 506663 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|--------------|-----------------------|----------|-------------------------------------|
| 3204 LM-4 WB | 0.9 MILES SE | GROSS BETA | +0.0220 | +0.0024 12/05/95 506807 |
| | | | +0.0209 | +0.0023 12/12/95 506926 |
| | | | +0.0238 | +0.0026 12/19/95 507030 |
| | | | +0.0166 | +0.0019 12/26/95 507175 |
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| | | GAMMA SCAN (GELI) | | |
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| 3205 RM-3 WB | 15 MILES NNW | GROSS BETA | | |
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TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | | |
|-----------------------------------|-----------------------|------------|------------|------------------|--------|
| | | | TERM | COLLECTED | LAB NO |
| 3205 RM-3 WB | 15 MILES NNW | GROSS BETA | | | |
| | | | +0.0222 | +0.0024 01/10/95 | 500215 |
| | | | +0.0146 | +0.0017 01/17/95 | 500317 |
| | | | +0.0153 | +0.0017 01/24/95 | 500451 |
| | | | +0.0187 | +0.0021 01/31/95 | 500636 |
| | | | +0.0226 | +0.0024 02/07/95 | 500749 |
| | | | +0.0206 | +0.0023 02/14/95 | 500862 |
| | | | +0.0121 | +0.0014 02/21/95 | 500999 |
| | | | +0.0148 | +0.0017 02/28/95 | 501153 |
| | | | +0.0132 | +0.0015 03/07/95 | 501260 |
| | | | +0.0219 | +0.0024 03/14/95 | 501369 |
| | | | +0.0223 | +0.0024 03/21/95 | 501518 |
| | | | +0.0158 | +0.0018 03/28/95 | 501697 |
| | | | +0.0196 | +0.0022 04/04/95 | 501813 |
| | | | +0.0180 | +0.0020 04/11/95 | 501936 |
| | | | +0.0173 | +0.0019 04/18/95 | 502059 |
| | | | +0.0120 | +0.0014 04/25/95 | 502205 |
| | | | +0.0143 | +0.0016 05/02/95 | 502406 |
| | | | +0.0148 | +0.0017 05/10/95 | 502546 |
| | | | +0.0140 | +0.0016 05/16/95 | 502685 |
| | | | +0.0167 | +0.0019 05/23/95 | 502858 |
| | | | +0.0179 | +0.0020 05/30/95 | 503005 |
| | | | +0.0143 | +0.0016 06/06/95 | 503123 |
| | | | +0.0163 | +0.0018 06/13/95 | 503262 |
| | | | +0.0197 | +0.0022 06/20/95 | 503467 |
| | | | +0.0192 | +0.0021 06/27/95 | 503617 |
| | | | +0.0211 | +0.0023 07/05/95 | 503750 |
| | | | +0.0195 | +0.0022 07/11/95 | 503882 |
| | | | +0.0305 | +0.0032 07/18/95 | 504027 |
| | | | +0.0182 | +0.0020 07/25/95 | 504140 |
| | | | +0.0160 | +0.0018 08/01/95 | 504247 |
| | | | +0.0118 | +0.0014 08/08/95 | 504419 |
| | | | +0.0231 | +0.0025 08/15/95 | 504572 |
| | | | +0.0311 | +0.0033 08/22/95 | 504678 |
| | | | +0.0207 | +0.0023 08/30/95 | 504807 |
| | | | +0.0321 | +0.0034 09/05/95 | 504934 |
| | | | +0.0391 | +0.0041 09/12/95 | 505109 |
| | | | +0.0229 | +0.0025 09/19/95 | 505222 |
| | | | +0.0176 | +0.0020 09/26/95 | 505340 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 3205 RM-3 WB | 15 MILES NNW | GROSS BETA | |
| | | +0.0286 | +0.0031 10/03/95 505477 |
| | | +0.0145 | +0.0017 10/10/95 505640 |
| | | +0.0266 | +0.0029 10/17/95 505780 |
| | | +0.0188 | +0.0021 10/24/95 505914 |
| | | +0.0186 | +0.0021 10/31/95 506109 |
| | | +0.0221 | +0.0024 11/07/95 506297 |
| | | +0.0185 | +0.0021 11/14/95 506404 |
| | | +0.0310 | +0.0033 11/21/95 506522 |
| | | +0.0262 | +0.0028 11/28/95 506665 |
| | | +0.0227 | +0.0025 12/05/95 506810 |
| | | +0.0210 | +0.0023 12/12/95 506928 |
| | | +0.0228 | +0.0025 12/19/95 507032 |
| | | +0.0171 | +0.0019 12/26/95 507177 |
| | | GAMMA SCAN (GELI) | |
| | BE-7 | +0.0616 | +0.0049 01/24/95 500486 |
| | | +0.0924 | +0.0082 02/21/95 501033 |
| | | +0.1155 | +0.0086 03/21/95 501558 |
| | | +0.1059 | +0.0072 04/18/95 502093 |
| | | +0.0935 | +0.0099 05/16/95 502718 |
| | | +0.1096 | +0.0087 06/13/95 503302 |
| | | +0.1324 | +0.0102 07/11/95 503915 |
| | | +0.1101 | +0.0094 08/08/95 504452 |
| | | +0.1167 | +0.0087 09/05/95 504973 |
| | | +0.0904 | +0.0084 10/03/95 505510 |
| | | +0.0957 | +0.0093 10/31/95 506142 |
| | | +0.0812 | +0.0059 11/28/95 506698 |
| | | +0.0864 | +0.0083 12/26/95 507216 |
| | BI-214 | +0.0029 | +0.0008 01/24/95 500486 |
| | | +0.0003 | +0.0009 03/21/95 501558 |
| | | +0.0005 | +0.0007 05/16/95 502718 |
| | | +0.0010 | +0.0007 09/05/95 504973 |
| | | +0.0047 | +0.0013 10/03/95 505510 |
| | | +0.0026 | +0.0009 10/31/95 506142 |
| | | +0.0029 | +0.0009 11/28/95 506698 |
| | | +0.0010 | +0.0008 12/26/95 507216 |
| | PB-214 | +0.0024 | +0.0010 01/24/95 500486 |
| | | +0.0000 | +0.0008 05/16/95 502718 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN AIR FILTER
 PCI/M3 - 0.037 BQ/M3
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO | |
|-----------------------------------|--------------|-----------------------------|----------|-------------------------------------|-----------------|
| 3205 RM-3 WB | 15 MILES NNW | GAMMA SCAN (GELI) PB-214 | +0.0049 | +0.0008 | 10/03/95 505510 |
| | | | +0.0019 | +0.0007 | 10/31/95 506142 |
| | | | +0.0025 | +0.0013 | 11/28/95 506698 |
| | | TL-208 | +0.0001 | +0.0003 | 04/18/95 502093 |
| | | | | | |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER QC-TN
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|------------|-------------------------------------|
| 2116 RM-2 DAYTON TN | 17.75 MILES NNE | GROSS BETA | |
| | | +0.0275 | +0.0007 01/03/95 500061 |
| | | +0.0238 | +0.0006 01/10/95 500161 |
| | | +0.0170 | +0.0005 01/17/95 500284 |
| | | +0.0163 | +0.0005 01/24/95 500399 |
| | | +0.0213 | +0.0006 01/31/95 500588 |
| | | +0.0211 | +0.0008 02/07/95 500695 |
| | | +0.0206 | +0.0006 02/14/95 500829 |
| | | +0.0133 | +0.0005 02/21/95 500946 |
| | | +0.0153 | +0.0006 02/28/95 501105 |
| | | +0.0145 | +0.0006 03/07/95 501205 |
| | | +0.0214 | +0.0008 03/14/95 501336 |
| | | +0.0220 | +0.0009 03/21/95 501463 |
| | | +0.0167 | +0.0005 03/28/95 501649 |
| | | +0.0183 | +0.0010 04/04/95 501759 |
| | | +0.0161 | +0.0014 04/11/95 501903 |
| | | +0.0144 | +0.0014 04/18/95 502005 |
| | | +0.0123 | +0.0009 04/25/95 502157 |
| | | +0.0145 | +0.0010 05/02/95 502315 |
| | | +0.0180 | +0.0016 05/09/95 502513 |
| | | +0.0117 | +0.0013 05/16/95 502621 |
| | | +0.0172 | +0.0015 05/23/95 502810 |
| | | +0.0173 | +0.0010 05/30/95 502950 |
| | | +0.0147 | +0.0010 06/06/95 503090 |
| | | +0.0183 | +0.0015 06/13/95 503198 |
| | | +0.0191 | +0.0015 06/20/95 503419 |
| | | +0.0180 | +0.0015 06/27/95 503563 |
| | | +0.0189 | +0.0007 07/05/95 503717 |
| | | +0.0191 | +0.0009 07/11/95 503829 |
| | | +0.0272 | +0.0009 07/18/95 503979 |
| | | +0.0159 | +0.0008 07/25/95 504085 |
| | | +0.0128 | +0.0007 08/01/95 504214 |
| | | +0.0101 | +0.0007 08/08/95 504367 |
| | | +0.0234 | +0.0008 08/15/95 504524 |
| | | +0.0300 | +0.0009 08/22/95 504623 |
| | | +0.0202 | +0.0008 08/29/95 504774 |
| | | +0.0321 | +0.0010 09/05/95 504879 |
| | | +0.0380 | +0.0010 09/12/95 505061 |
| | | +0.0219 | +0.0009 09/19/95 505167 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN AIR FILTER QC-TN
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | | |
|-------------------------------------|-----------------------|----------|------------|-----------|--------|
| | | | TERM | COLLECTED | LAB NO |
| 2116 RM-2 DAYTON TN 17.75 MILES NNE | GROSS BETA | +0.0198 | +0.0008 | 09/26/95 | 505307 |
| | | +0.0289 | +0.0010 | 10/03/95 | 505423 |
| | | +0.0157 | +0.0008 | 10/10/95 | 505592 |
| | | +0.0296 | +0.0010 | 10/17/95 | 505725 |
| | | +0.0212 | +0.0008 | 10/24/95 | 505881 |
| | | +0.0188 | +0.0009 | 10/31/95 | 506026 |
| | | +0.0219 | +0.0009 | 11/07/95 | 506249 |
| | | +0.0239 | +0.0009 | 11/14/95 | 506350 |
| | | +0.0314 | +0.0011 | 11/20/95 | 506489 |
| | | +0.0306 | +0.0009 | 11/28/95 | 506612 |
| | | +0.0227 | +0.0009 | 12/05/95 | 506762 |
| | | +0.0215 | +0.0009 | 12/12/95 | 506872 |
| | | +0.0235 | +0.0009 | 12/19/95 | 506999 |
| | | +0.0170 | +0.0008 | 12/26/95 | 507122 |
| 3102 LM2 N. WBSP GATE 0.5 MILES N | GROSS BETA | +0.0265 | +0.0007 | 01/03/95 | 500088 |
| | | +0.0245 | +0.0009 | 01/10/95 | 500190 |
| | | +0.0166 | +0.0006 | 01/17/95 | 500303 |
| | | +0.0167 | +0.0006 | 01/24/95 | 500434 |
| | | +0.0229 | +0.0007 | 01/31/95 | 500615 |
| | | +0.0224 | +0.0006 | 02/07/95 | 500724 |
| | | +0.0217 | +0.0006 | 02/14/95 | 500848 |
| | | +0.0140 | +0.0005 | 02/21/95 | 500982 |
| | | +0.0154 | +0.0006 | 02/28/95 | 501132 |
| | | +0.0136 | +0.0006 | 03/07/95 | 501234 |
| | | +0.0232 | +0.0009 | 03/14/95 | 501355 |
| | | +0.0206 | +0.0008 | 03/21/95 | 501501 |
| | | +0.0158 | +0.0005 | 03/28/95 | 501676 |
| | | +0.0169 | +0.0011 | 04/04/95 | 501788 |
| | | +0.0156 | +0.0015 | 04/11/95 | 501922 |
| | | +0.0156 | +0.0015 | 04/18/95 | 502041 |
| | | +0.0120 | +0.0010 | 04/25/95 | 502184 |
| | | +0.0152 | +0.0010 | 05/02/95 | 502372 |
| | | +0.0152 | +0.0014 | 05/09/95 | 502532 |
| | | +0.0099 | +0.0012 | 05/16/95 | 502668 |
| | | +0.0147 | +0.0013 | 05/23/95 | 502837 |
| | | +0.0177 | +0.0011 | 05/30/95 | 502979 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN AIR FILTER QC-TN
 PCI/M3 - 0.037 BQ/M3
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------|-------------------------------------|
| 3102 LM2 N. WBSP GATE 0.5 MILES N | GROSS BETA | +0.0141 | +0.0008 06/07/95 503109 |
| | | +0.0161 | +0.0017 06/13/95 503236 |
| | | +0.0178 | +0.0015 06/20/95 503446 |
| | | +0.0171 | +0.0015 06/27/95 503592 |
| | | +0.0183 | +0.0070 07/05/95 503736 |
| | | +0.0203 | +0.0010 07/11/95 503865 |
| | | +0.0269 | +0.0008 07/18/95 504006 |
| | | +0.0163 | +0.0008 07/25/95 504114 |
| | | +0.0145 | +0.0008 08/01/95 504233 |
| | | +0.0224 | +0.0008 11/14/95 506378 |
| | | +0.0303 | +0.0010 11/20/95 506508 |
| | | +0.0304 | +0.0009 11/28/95 506648 |
| | | +0.0237 | +0.0009 12/05/95 506789 |
| | | +0.0207 | +0.0009 12/12/95 506901 |
| | | +0.0210 | +0.0009 12/19/95 507018 |
| | | +0.0178 | +0.0008 12/26/95 507160 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN APPLES
 PCI/KG - 0.037 BQ/KG (WET WT)
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|----------------------------------------|-------------------------------------|-----------------------|------------------------------------------------------|
| 2116 RM-2 DAYTON TN 17.75 MILES NNE | GAMMA SCAN (GELI) BI-214 K-40 | +12.6040 +772.7200 | +22.8880 06/27/95 502302 +90.0270 06/27/95 502302 |
| 3209 OWEN HENDERSON FARM 4.8 MILES WSW | GAMMA SCAN (GELI) K-40 | +1437.1000 | +164.4800 07/05/95 502368 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN CABBAGE
 PCI/KG - 0.037 BQ/KG (WET WT)
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-------------------------------------|-------------------------------------|-----------------------|------------------------------------------------------|
| 2116 RM-2 DAYTON TN 17.75 MILES NNE | GAMMA SCAN (GELI) K-40 | +1047.1000 | +100.3300 05/30/95 502294 |
| 3168 2.0 MILES S | GAMMA SCAN (GELI) K-40 PB-212 | +1960.7000 +5.1531 | +205.3900 07/05/95 502362 +3.9993 07/05/95 502362 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CABBAGE QC-TN
PCI/KG - 0.037 BQ/KG (WET WT)
01/01/95 TO 12/31/95

STATION CODE/LOCATION/DESCRIPTION

ANALYSIS
(NUCLIDE)

ACTIVITY

ERROR DATE
TERM COLLECTED LAB NO

3168 2.0 MILES S

GAMMA SCAN (GELI)
K-40

+2861.0000

+79.5000 07/05/95 504030

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN CHANNEL CATFISH FLESH
 PCI/GM - 0.037 BQ/G (DRY WEIGHT)
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-------------|-----------------------|----------|-------------------------------------|
| 2160 CHICKAMAUGA RES | TRM 471-530 | GAMMA SCAN (GEL1) | | |
| | | BI-214 | +0.0516 | +0.0132 10/09/95 506045 |
| | | K-40 | +14.5220 | +0.8033 04/28/95 502323 |
| | | | +7.8789 | +0.4935 10/09/95 506045 |
| | | PB-214 | +0.0520 | +0.0189 10/09/95 506045 |
| 2161 WATTS BAR RES | TRM 530-602 | GAMMA SCAN (GEL1) | | |
| | | BI-214 | +0.0685 | +0.0308 10/18/95 506050 |
| | | CS-137 | +0.0613 | +0.0106 04/28/95 502329 |
| | | | +0.0504 | +0.0059 10/18/95 506050 |
| | | K-40 | +12.7680 | +0.7545 04/28/95 502329 |
| | | | +9.4703 | +0.4882 10/18/95 506050 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN CHARCOAL FILTER
 PCI/M3 - 0.037 BQ/M3
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------------------|-------------------------------------|
| 2116 RM-2 DAYTON TN | 17.75 MILES NNE | GAMMA SCAN (GELI) | |
| | | NO ACTIVITY DETECTED | 01/10/95 500162 |
| | | NO ACTIVITY DETECTED | 01/17/95 500285 |
| | | NO ACTIVITY DETECTED | 01/24/95 500400 |
| | | NO ACTIVITY DETECTED | 01/31/95 500589 |
| | | NO ACTIVITY DETECTED | 02/21/95 500947 |
| | | NO ACTIVITY DETECTED | 02/28/95 501106 |
| | | NO ACTIVITY DETECTED | 03/07/95 501206 |
| | | NO ACTIVITY DETECTED | 03/14/95 501337 |
| | | NO ACTIVITY DETECTED | 03/21/95 501464 |
| | | NO ACTIVITY DETECTED | 03/28/95 501650 |
| | | NO ACTIVITY DETECTED | 04/04/95 501760 |
| | | NO ACTIVITY DETECTED | 04/18/95 502006 |
| | | NO ACTIVITY DETECTED | 04/25/95 502158 |
| | | NO ACTIVITY DETECTED | 05/02/95 502316 |
| | | NO ACTIVITY DETECTED | 05/09/95 502514 |
| | | NO ACTIVITY DETECTED | 05/16/95 502622 |
| | | NO ACTIVITY DETECTED | 05/23/95 502811 |
| | | NO ACTIVITY DETECTED | 05/30/95 502951 |
| | | NO ACTIVITY DETECTED | 06/06/95 503091 |
| | | NO ACTIVITY DETECTED | 06/13/95 503199 |
| | | NO ACTIVITY DETECTED | 06/20/95 503420 |
| | | NO ACTIVITY DETECTED | 06/27/95 503564 |
| | | NO ACTIVITY DETECTED | 07/11/95 503830 |
| | | NO ACTIVITY DETECTED | 07/18/95 503980 |
| | | NO ACTIVITY DETECTED | 07/25/95 504086 |
| | | NO ACTIVITY DETECTED | 08/08/95 504368 |
| | | NO ACTIVITY DETECTED | 08/29/95 504775 |
| | | NO ACTIVITY DETECTED | 09/19/95 505168 |
| | | NO ACTIVITY DETECTED | 10/03/95 505424 |
| | | NO ACTIVITY DETECTED | 10/31/95 506027 |
| | | NO ACTIVITY DETECTED | 11/07/95 506250 |
| | | NO ACTIVITY DETECTED | 11/14/95 506351 |
| | | NO ACTIVITY DETECTED | 12/05/95 506763 |
| | | NO ACTIVITY DETECTED | 12/12/95 506873 |
| | | NO ACTIVITY DETECTED | 12/19/95 507000 |
| | | NO ACTIVITY DETECTED | 12/26/95 507123 |
| | BI-214 | +0.0234 | +0.0075 10/10/95 505593 |
| | | +0.0451 | +0.0108 10/24/95 505882 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CHARCOAL FILTER
PC1/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-------------------------------------|-----------------------------|----------------------|-------------------------------------|
| 2116 RM-2 DAYTON TN 17.75 MILES NNE | GAMMA SCAN (GELI) BI-214 | +0.0597 | +0.0124 11/20/95 506490 |
| | | +0.0222 | +0.0080 11/28/95 506613 |
| | K-40 | +0.1459 | +0.0392 04/11/95 501904 |
| | | +0.2408 | +0.0449 09/05/95 504880 |
| | | +0.2930 | +0.0626 11/20/95 506490 |
| | PB-212 PB-214 | +0.2800 | +0.0460 11/28/95 506613 |
| | | +0.0001 | +0.0026 07/05/95 503718 |
| | | +0.0332 | +0.0102 01/03/95 500062 |
| | | +0.0322 | +0.0148 02/07/95 500696 |
| | | +0.0102 | +0.0059 02/14/95 500830 |
| | | +0.0117 | +0.0070 08/01/95 504215 |
| | | +0.0162 | +0.0054 08/15/95 504525 |
| | | +0.0298 | +0.0147 08/22/95 504624 |
| | | +0.0250 | +0.0097 09/12/95 505062 |
| | | +0.0230 | +0.0101 09/26/95 505308 |
| | | +0.0183 | +0.0066 10/10/95 505593 |
| | | +0.0191 | +0.0054 10/17/95 505726 |
| | | +0.0493 | +0.0093 10/24/95 505882 |
| | | +0.0946 | +0.0172 11/20/95 506490 |
| | | +0.0192 | +0.0071 11/28/95 506613 |
| 3101 LM1 ENV DATA STA 0.5 MILES SSW | GAMMA SCAN (GELI) | NO ACTIVITY DETECTED | 01/10/95 500188 |
| | | NO ACTIVITY DETECTED | 01/17/95 500301 |
| | | NO ACTIVITY DETECTED | 01/24/95 500432 |
| | | NO ACTIVITY DETECTED | 02/14/95 500846 |
| | | NO ACTIVITY DETECTED | 02/21/95 500980 |
| | | NO ACTIVITY DETECTED | 02/28/95 501129 |
| | | NO ACTIVITY DETECTED | 03/07/95 501232 |
| | | NO ACTIVITY DETECTED | 03/14/95 501353 |
| | | NO ACTIVITY DETECTED | 03/21/95 501499 |
| | | NO ACTIVITY DETECTED | 03/28/95 501673 |
| | | NO ACTIVITY DETECTED | 04/04/95 501786 |
| | | NO ACTIVITY DETECTED | 04/11/95 501920 |
| | | NO ACTIVITY DETECTED | 04/18/95 502039 |
| | | NO ACTIVITY DETECTED | 04/25/95 502181 |
| | | NO ACTIVITY DETECTED | 05/09/95 502530 |
| | | NO ACTIVITY DETECTED | 05/16/95 502666 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CHARCOAL FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------------------|-------------------------------------|
| 3101 LM1 ENV DATA STA | 0.5 MILES SSW | GAMMA SCAN (GEL1) | |
| | | NO ACTIVITY DETECTED | 05/23/95 502834 |
| | | NO ACTIVITY DETECTED | 05/30/95 502977 |
| | | NO ACTIVITY DETECTED | 06/06/95 503107 |
| | | NO ACTIVITY DETECTED | 06/13/95 503233 |
| | | NO ACTIVITY DETECTED | 06/20/95 503443 |
| | | NO ACTIVITY DETECTED | 06/27/95 503590 |
| | | NO ACTIVITY DETECTED | 07/11/95 503863 |
| | | NO ACTIVITY DETECTED | 07/18/95 504003 |
| | | NO ACTIVITY DETECTED | 07/25/95 504112 |
| | | NO ACTIVITY DETECTED | 08/01/95 504231 |
| | | NO ACTIVITY DETECTED | 08/08/95 504400 |
| | | NO ACTIVITY DETECTED | 08/15/95 504548 |
| | | NO ACTIVITY DETECTED | 08/22/95 504650 |
| | | NO ACTIVITY DETECTED | 08/29/95 504791 |
| | | NO ACTIVITY DETECTED | 09/12/95 505085 |
| | | NO ACTIVITY DETECTED | 09/19/95 505194 |
| | | NO ACTIVITY DETECTED | 11/07/95 506273 |
| | | NO ACTIVITY DETECTED | 11/14/95 506376 |
| | BI-214 | +0.0313 | +0.0105 01/03/95 500085 |
| | | +0.0237 | +0.0085 09/26/95 505324 |
| | | +0.0227 | +0.0092 10/17/95 505753 |
| | | +0.0308 | +0.0098 10/24/95 505898 |
| | | +0.0351 | +0.0097 11/20/95 506506 |
| | | +0.0037 | +0.0053 11/28/95 506646 |
| | | +0.0057 | +0.0069 12/05/95 506786 |
| | | +0.0275 | +0.0101 12/26/95 507158 |
| | K-40 | +0.2288 | +0.0629 07/05/95 503734 |
| | | +0.1957 | +0.0478 10/03/95 505457 |
| | | +0.2677 | +0.0699 10/17/95 505753 |
| | | +0.2685 | +0.0642 12/26/95 507158 |
| | PB-214 | +0.0366 | +0.0099 01/03/95 500085 |
| | | +0.0092 | +0.0052 01/31/95 500612 |
| | | +0.0193 | +0.0101 02/07/95 500722 |
| | | +0.0152 | +0.0078 05/02/95 502370 |
| | | +0.0100 | +0.0047 09/05/95 504915 |
| | | +0.0063 | +0.0093 09/26/95 505324 |
| | | +0.0135 | +0.0061 10/03/95 505457 |
| | | +0.0081 | +0.0064 10/10/95 505616 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CHARCOAL FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | | |
|------------------------------------------|-----------------------------|----------------------|------------|-----------|--------|
| | | | TERM | COLLECTED | LAB NO |
| 3101 LM1 ENV DATA STA 0.5 MILES SSW | GAMMA SCAN (GELI) PB-214 | +0.0425 | +0.0098 | 10/17/95 | 505753 |
| | | +0.0123 | +0.0096 | 10/24/95 | 505898 |
| | | +0.0119 | +0.0042 | 10/31/95 | 506082 |
| | | +0.0269 | +0.0082 | 11/20/95 | 506506 |
| | | +0.0218 | +0.0096 | 11/28/95 | 506646 |
| | | +0.0360 | +0.0101 | 12/12/95 | 506899 |
| | | +0.0140 | +0.0061 | 12/19/95 | 507016 |
| | | +0.0354 | +0.0093 | 12/26/95 | 507158 |
| | | | | | |
| | | | | | |
| 3102 LM2 N. WBSP GATE 0.5 MILES N | GAMMA SCAN (GELI) | NO ACTIVITY DETECTED | | 01/10/95 | 500191 |
| | | NO ACTIVITY DETECTED | | 01/17/95 | 500304 |
| | | NO ACTIVITY DETECTED | | 01/31/95 | 500616 |
| | | NO ACTIVITY DETECTED | | 02/07/95 | 500725 |
| | | NO ACTIVITY DETECTED | | 02/14/95 | 500849 |
| | | NO ACTIVITY DETECTED | | 02/21/95 | 500983 |
| | | NO ACTIVITY DETECTED | | 02/28/95 | 501133 |
| | | NO ACTIVITY DETECTED | | 03/07/95 | 501235 |
| | | NO ACTIVITY DETECTED | | 03/21/95 | 501502 |
| | | NO ACTIVITY DETECTED | | 03/28/95 | 501677 |
| | | NO ACTIVITY DETECTED | | 04/04/95 | 501789 |
| | | NO ACTIVITY DETECTED | | 04/11/95 | 501923 |
| | | NO ACTIVITY DETECTED | | 04/18/95 | 502042 |
| | | NO ACTIVITY DETECTED | | 04/25/95 | 502185 |
| | | NO ACTIVITY DETECTED | | 05/02/95 | 502373 |
| | | NO ACTIVITY DETECTED | | 05/09/95 | 502533 |
| | | NO ACTIVITY DETECTED | | 05/16/95 | 502669 |
| | | NO ACTIVITY DETECTED | | 05/30/95 | 502980 |
| | | NO ACTIVITY DETECTED | | 06/07/95 | 503110 |
| | | NO ACTIVITY DETECTED | | 06/27/95 | 503593 |
| | | NO ACTIVITY DETECTED | | 07/11/95 | 503866 |
| | | NO ACTIVITY DETECTED | | 07/18/95 | 504007 |
| | | NO ACTIVITY DETECTED | | 07/25/95 | 504115 |
| | | NO ACTIVITY DETECTED | | 08/01/95 | 504234 |
| | | NO ACTIVITY DETECTED | | 11/14/95 | 506379 |
| | | NO ACTIVITY DETECTED | | 12/19/95 | 507019 |
| | B1-214 | +0.0056 | +0.0061 | 05/23/95 | 502838 |
| | | +0.0822 | +0.0133 | 11/20/95 | 506509 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CHARCOAL FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------|-------------------------------------|
| 3102 LM2 N. WBSP GATE 0.5 MILES N | GAMMA SCAN (GELI) | | |
| | BI-214 | +0.0185 | +0.0061 11/28/95 506649 |
| | PB-212 | +0.0000 | +0.0030 06/20/95 503447 |
| | PB-214 | +0.0245 | +0.0111 01/03/95 500089 |
| | | +0.0219 | +0.0072 01/24/95 500435 |
| | | +0.0018 | +0.0040 03/14/95 501356 |
| | | +0.0130 | +0.0101 06/13/95 503237 |
| | | +0.0018 | +0.0057 07/05/95 503737 |
| | | +0.0794 | +0.0134 11/20/95 506509 |
| | | +0.0372 | +0.0126 11/28/95 506649 |
| | | +0.0275 | +0.0104 12/05/95 506790 |
| | | +0.0357 | +0.0109 12/12/95 506902 |
| | | +0.0195 | +0.0074 12/26/95 507161 |
| 3106 PM2 SPRING CITY 7.0 MILES NW | GAMMA SCAN (GELI) | | |
| | NO ACTIVITY DETECTED | | 01/17/95 500306 |
| | NO ACTIVITY DETECTED | | 01/31/95 500619 |
| | NO ACTIVITY DETECTED | | 02/07/95 500727 |
| | NO ACTIVITY DETECTED | | 02/21/95 500985 |
| | NO ACTIVITY DETECTED | | 02/28/95 501136 |
| | NO ACTIVITY DETECTED | | 03/07/95 501237 |
| | NO ACTIVITY DETECTED | | 03/14/95 501358 |
| | NO ACTIVITY DETECTED | | 03/21/95 501504 |
| | NO ACTIVITY DETECTED | | 03/28/95 501680 |
| | NO ACTIVITY DETECTED | | 04/04/95 501791 |
| | NO ACTIVITY DETECTED | | 04/11/95 501925 |
| | NO ACTIVITY DETECTED | | 04/18/95 502044 |
| | NO ACTIVITY DETECTED | | 04/25/95 502188 |
| | NO ACTIVITY DETECTED | | 05/02/95 502375 |
| | NO ACTIVITY DETECTED | | 05/09/95 502535 |
| | NO ACTIVITY DETECTED | | 05/16/95 502671 |
| | NO ACTIVITY DETECTED | | 05/23/95 502841 |
| | NO ACTIVITY DETECTED | | 06/06/95 503112 |
| | NO ACTIVITY DETECTED | | 06/13/95 503241 |
| | NO ACTIVITY DETECTED | | 06/20/95 503450 |
| | NO ACTIVITY DETECTED | | 06/27/95 503595 |
| | NO ACTIVITY DETECTED | | 07/05/95 503739 |
| | NO ACTIVITY DETECTED | | 07/11/95 503868 |
| | NO ACTIVITY DETECTED | | 07/25/95 504117 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CHARCOAL FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------------------|-------------------------------------|
| 3106 PM2 SPRING CITY | 7.0 MILES NW | GAMMA SCAN (GELI) | |
| | | NO ACTIVITY DETECTED | 08/01/95 504236 |
| | | NO ACTIVITY DETECTED | 08/08/95 504405 |
| | | NO ACTIVITY DETECTED | 08/15/95 504555 |
| | | NO ACTIVITY DETECTED | 08/22/95 504655 |
| | | NO ACTIVITY DETECTED | 08/30/95 504796 |
| | | NO ACTIVITY DETECTED | 09/05/95 504920 |
| | | NO ACTIVITY DETECTED | 10/03/95 505462 |
| | | NO ACTIVITY DETECTED | 10/17/95 505758 |
| | | NO ACTIVITY DETECTED | 10/31/95 506087 |
| | | NO ACTIVITY DETECTED | 11/07/95 506280 |
| | | NO ACTIVITY DETECTED | 12/26/95 507163 |
| | BI-214 | +0.0310 | +0.0097 01/03/95 500092 |
| | | +0.0379 | +0.0091 01/24/95 500437 |
| | | +0.0346 | +0.0091 10/24/95 505903 |
| | | +0.0319 | +0.0096 11/14/95 506381 |
| | | +0.0369 | +0.0088 11/21/95 506511 |
| | | +0.0293 | +0.0091 11/28/95 506651 |
| | | +0.0260 | +0.0086 12/05/95 506793 |
| | K-40 | +0.2129 | +0.0681 02/14/95 500851 |
| | | +0.2428 | +0.0709 05/30/95 502982 |
| | | +0.2220 | +0.0415 10/24/95 505903 |
| | | +0.2446 | +0.0552 11/14/95 506381 |
| | | +0.2515 | +0.0630 11/28/95 506651 |
| | | +0.1970 | +0.0504 12/12/95 506904 |
| | PB-214 | +0.0215 | +0.0102 01/03/95 500092 |
| | | +0.0185 | +0.0078 01/10/95 500193 |
| | | +0.0387 | +0.0095 01/24/95 500437 |
| | | +0.0276 | +0.0073 02/14/95 500851 |
| | | +0.0131 | +0.0077 09/12/95 505092 |
| | | +0.0487 | +0.0116 09/19/95 505199 |
| | | +0.0205 | +0.0096 09/26/95 505329 |
| | | +0.0238 | +0.0055 10/10/95 505623 |
| | | +0.0422 | +0.0087 10/24/95 505903 |
| | | +0.0481 | +0.0104 11/14/95 506381 |
| | | +0.0392 | +0.0068 11/21/95 506511 |
| | | +0.0238 | +0.0081 11/28/95 506651 |
| | | +0.0231 | +0.0087 12/05/95 506793 |
| | | +0.0176 | +0.0061 12/12/95 506904 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CHARCOAL FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|----------------------------------------|-----------------------------|----------|-------------------------------------|
| 3106 PM2 SPRING CITY 7.0 MILES NW | GAMMA SCAN (GELI) PB-214 | +0.0128 | +0.0092 12/19/95 507021 |
| 3107 PM3 CEDINE BIBLE CAMP 11.5 M. NNE | GAMMA SCAN (GELI) | | |
| | NO ACTIVITY DETECTED | | 01/03/95 500095 |
| | NO ACTIVITY DETECTED | | 01/10/95 500195 |
| | NO ACTIVITY DETECTED | | 01/24/95 500439 |
| | NO ACTIVITY DETECTED | | 01/31/95 500622 |
| | NO ACTIVITY DETECTED | | 02/14/95 500853 |
| | NO ACTIVITY DETECTED | | 02/21/95 500987 |
| | NO ACTIVITY DETECTED | | 02/28/95 501139 |
| | NO ACTIVITY DETECTED | | 03/07/95 501239 |
| | NO ACTIVITY DETECTED | | 03/14/95 501360 |
| | NO ACTIVITY DETECTED | | 03/21/95 501506 |
| | NO ACTIVITY DETECTED | | 03/28/95 501683 |
| | NO ACTIVITY DETECTED | | 04/04/95 501793 |
| | NO ACTIVITY DETECTED | | 04/11/95 501927 |
| | NO ACTIVITY DETECTED | | 04/18/95 502046 |
| | NO ACTIVITY DETECTED | | 04/25/95 502191 |
| | NO ACTIVITY DETECTED | | 05/10/95 502537 |
| | NO ACTIVITY DETECTED | | 05/16/95 502673 |
| | NO ACTIVITY DETECTED | | 05/23/95 502844 |
| | NO ACTIVITY DETECTED | | 05/30/95 502984 |
| | NO ACTIVITY DETECTED | | 06/06/95 503114 |
| | NO ACTIVITY DETECTED | | 06/13/95 503244 |
| | NO ACTIVITY DETECTED | | 06/20/95 503453 |
| | NO ACTIVITY DETECTED | | 06/27/95 503597 |
| | NO ACTIVITY DETECTED | | 07/05/95 503741 |
| | NO ACTIVITY DETECTED | | 07/25/95 504119 |
| | NO ACTIVITY DETECTED | | 08/01/95 504238 |
| | NO ACTIVITY DETECTED | | 08/22/95 504657 |
| | NO ACTIVITY DETECTED | | 08/30/95 504798 |
| | NO ACTIVITY DETECTED | | 09/19/95 505201 |
| | NO ACTIVITY DETECTED | | 11/28/95 506653 |
| | NO ACTIVITY DETECTED | | 12/05/95 506796 |
| | BI-214 | +0.0167 | +0.0069 02/07/95 500729 |
| | | +0.0158 | +0.0076 07/18/95 504013 |
| | | +0.0063 | +0.0078 09/12/95 505095 |
| | | +0.0133 | +0.0070 10/10/95 505626 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CHARCOAL FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-----------------------------|--------------------------------------|
| 3107 PM3 CEDINE BIBLE | CAMP 11.5 M. NNE | GAMMA SCAN (GELI) BI-214 | +0.0280 +0.0073 10/24/95 505905 |
| | | | +0.0331 +0.0092 11/21/95 506513 |
| | | | +0.0529 +0.0110 12/26/95 507165 |
| | | K-40 | +0.3809 +0.0714 07/11/95 503870 |
| | | | +0.2241 +0.0394 08/15/95 504558 |
| | | | +0.2985 +0.0550 09/26/95 505331 |
| | PB-214 | | +0.2419 +0.0535 10/10/95 505626 |
| | | | +0.2394 +0.0467 10/24/95 505905 |
| | | | +0.0205 +0.0095 01/17/95 500308 |
| | | | +0.0282 +0.0093 02/07/95 500729 |
| | | | +0.0122 +0.0063 05/02/95 502377 |
| | | | +0.0100 +0.0046 08/08/95 504407 |
| | | | +0.0096 +0.0061 08/15/95 504558 |
| | | | +0.0037 +0.0081 09/05/95 504922 |
| | | | +0.0110 +0.0084 09/12/95 505095 |
| | | | +0.0003 +0.0065 10/03/95 505464 |
| | | | +0.0221 +0.0052 10/10/95 505626 |
| | | | +0.0300 +0.0115 10/17/95 505760 |
| | | | +0.0274 +0.0072 10/24/95 505905 |
| | | | +0.0177 +0.0043 10/31/95 506089 |
| | | | +0.0083 +0.0082 11/07/95 506283 |
| | | | +0.0355 +0.0102 11/14/95 506383 |
| | | | +0.0320 +0.0173 11/21/95 506513 |
| | | | +0.0193 +0.0078 12/12/95 506906 |
| | | | +0.0077 +0.0067 12/19/95 507023 |
| | | | +0.0524 +0.0128 12/26/95 507165 |
| 3108 PM-4 TEN MILE | 7.8 M. NE/ENE | GAMMA SCAN (GELI) | NO ACTIVITY DETECTED 01/10/95 500197 |
| | | | NO ACTIVITY DETECTED 01/18/95 500310 |
| | | | NO ACTIVITY DETECTED 01/24/95 500441 |
| | | | NO ACTIVITY DETECTED 02/15/95 500855 |
| | | | NO ACTIVITY DETECTED 02/22/95 500989 |
| | | | NO ACTIVITY DETECTED 03/01/95 501142 |
| | | | NO ACTIVITY DETECTED 03/08/95 501241 |
| | | | NO ACTIVITY DETECTED 03/22/95 501508 |
| | | | NO ACTIVITY DETECTED 03/29/95 501686 |
| | | | NO ACTIVITY DETECTED 04/05/95 501795 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN CHARCOAL FILTER
 PC1/M3 - 0.037 BQ/M3
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR TERM | DATE COLLECTED | LAB NO |
|-----------------------------------|-----------------------|----------------------|------------|----------------|--------|
| 3108 PM-4 TEN MILE | 7.8 M. NE/ENE | GAMMA SCAN (GELI) | | | |
| | | NO ACTIVITY DETECTED | | 04/12/95 | 501929 |
| | | NO ACTIVITY DETECTED | | 04/19/95 | 502048 |
| | | NO ACTIVITY DETECTED | | 04/25/95 | 502194 |
| | | NO ACTIVITY DETECTED | | 05/09/95 | 502539 |
| | | NO ACTIVITY DETECTED | | 05/17/95 | 502675 |
| | | NO ACTIVITY DETECTED | | 05/24/95 | 502847 |
| | | NO ACTIVITY DETECTED | | 05/31/95 | 502986 |
| | | NO ACTIVITY DETECTED | | 06/07/95 | 503116 |
| | | NO ACTIVITY DETECTED | | 06/14/95 | 503248 |
| | | NO ACTIVITY DETECTED | | 06/21/95 | 503456 |
| | | NO ACTIVITY DETECTED | | 06/28/95 | 503599 |
| | | NO ACTIVITY DETECTED | | 07/06/95 | 503743 |
| | | NO ACTIVITY DETECTED | | 07/12/95 | 503872 |
| | | NO ACTIVITY DETECTED | | 07/19/95 | 504016 |
| | | NO ACTIVITY DETECTED | | 08/02/95 | 504240 |
| | | NO ACTIVITY DETECTED | | 08/09/95 | 504409 |
| | | NO ACTIVITY DETECTED | | 08/15/95 | 504561 |
| | | NO ACTIVITY DETECTED | | 08/23/95 | 504659 |
| | | NO ACTIVITY DETECTED | | 08/30/95 | 504800 |
| | | NO ACTIVITY DETECTED | | 09/12/95 | 505098 |
| | | NO ACTIVITY DETECTED | | 09/27/95 | 505333 |
| | | NO ACTIVITY DETECTED | | 10/03/95 | 505466 |
| | | NO ACTIVITY DETECTED | | 10/31/95 | 506091 |
| | | NO ACTIVITY DETECTED | | 11/08/95 | 506286 |
| | | NO ACTIVITY DETECTED | | 12/06/95 | 506799 |
| | | NO ACTIVITY DETECTED | | 12/19/95 | 507025 |
| | BI-214 | +0.0134 | +0.0076 | 02/01/95 | 500625 |
| | | +0.0244 | +0.0066 | 10/11/95 | 505629 |
| | | +0.0205 | +0.0071 | 10/25/95 | 505907 |
| | | +0.0189 | +0.0060 | 11/15/95 | 506385 |
| | | +0.0211 | +0.0079 | 11/21/95 | 506515 |
| | | +0.0177 | +0.0093 | 12/13/95 | 506908 |
| | | +0.0226 | +0.0091 | 12/27/95 | 507167 |
| | K-40 | +0.2305 | +0.0580 | 10/11/95 | 505629 |
| | | +0.1873 | +0.0494 | 11/15/95 | 506385 |
| | | +0.1879 | +0.0465 | 11/21/95 | 506515 |
| | | +0.2016 | +0.0466 | 12/27/95 | 507167 |
| | PB-212 | +0.0028 | +0.0039 | 11/29/95 | 506655 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CHARCOAL FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | | |
|-----------------------------------|----------------------------------------------|----------------------|------------|-----------|--------|
| | | | TERM | COLLECTED | LAB NO |
| 3108 PM-4 TEN MILE | 7.8 M. NE/ENE GAMMA SCAN (GELI) PB-214 | +0.0183 | +0.0108 | 01/04/95 | 500098 |
| | | +0.0053 | +0.0074 | 02/01/95 | 500625 |
| | | +0.0178 | +0.0074 | 02/08/95 | 500731 |
| | | +0.0107 | +0.0064 | 03/15/95 | 501362 |
| | | +0.0098 | +0.0047 | 05/03/95 | 502379 |
| | | +0.0071 | +0.0060 | 07/26/95 | 504121 |
| | | +0.0214 | +0.0074 | 09/06/95 | 504924 |
| | | +0.0069 | +0.0051 | 09/20/95 | 505203 |
| | | +0.0196 | +0.0055 | 10/11/95 | 505629 |
| | | +0.0501 | +0.0133 | 10/17/95 | 505762 |
| | | +0.0265 | +0.0074 | 10/25/95 | 505907 |
| | | +0.0373 | +0.0094 | 11/21/95 | 506515 |
| | | +0.0049 | +0.0086 | 12/13/95 | 506908 |
| | | +0.0283 | +0.0122 | 12/27/95 | 507167 |
| 3109 PM5 DECATUR | 6.25 MILES S GAMMA SCAN (GELI) | NO ACTIVITY DETECTED | | 01/04/95 | 500101 |
| | | NO ACTIVITY DETECTED | | 01/11/95 | 500199 |
| | | NO ACTIVITY DETECTED | | 01/18/95 | 500312 |
| | | NO ACTIVITY DETECTED | | 01/25/95 | 500443 |
| | | NO ACTIVITY DETECTED | | 02/01/95 | 500628 |
| | | NO ACTIVITY DETECTED | | 02/08/95 | 500733 |
| | | NO ACTIVITY DETECTED | | 02/15/95 | 500857 |
| | | NO ACTIVITY DETECTED | | 02/22/95 | 500991 |
| | | NO ACTIVITY DETECTED | | 03/01/95 | 501145 |
| | | NO ACTIVITY DETECTED | | 03/08/95 | 501243 |
| | | NO ACTIVITY DETECTED | | 03/15/95 | 501364 |
| | | NO ACTIVITY DETECTED | | 03/22/95 | 501510 |
| | | NO ACTIVITY DETECTED | | 03/29/95 | 501689 |
| | | NO ACTIVITY DETECTED | | 04/05/95 | 501797 |
| | | NO ACTIVITY DETECTED | | 04/12/95 | 501931 |
| | | NO ACTIVITY DETECTED | | 04/19/95 | 502050 |
| | | NO ACTIVITY DETECTED | | 04/25/95 | 502197 |
| | | NO ACTIVITY DETECTED | | 05/03/95 | 502381 |
| | | NO ACTIVITY DETECTED | | 05/09/95 | 502541 |
| | | NO ACTIVITY DETECTED | | 05/17/95 | 502677 |
| | | NO ACTIVITY DETECTED | | 05/24/95 | 502850 |
| | | NO ACTIVITY DETECTED | | 05/31/95 | 502988 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CHARCOAL FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------------------|-------------------------------------|
| 3109 PM5 DECATUR | 6.25 MILES S | GAMMA SCAN (GELI) | |
| | | NO ACTIVITY DETECTED | 06/07/95 503118 |
| | | NO ACTIVITY DETECTED | 06/14/95 503251 |
| | | NO ACTIVITY DETECTED | 06/21/95 503459 |
| | | NO ACTIVITY DETECTED | 06/28/95 503601 |
| | | NO ACTIVITY DETECTED | 07/06/95 503745 |
| | | NO ACTIVITY DETECTED | 07/12/95 503874 |
| | | NO ACTIVITY DETECTED | 07/19/95 504019 |
| | | NO ACTIVITY DETECTED | 08/02/95 504242 |
| | | NO ACTIVITY DETECTED | 08/15/95 504564 |
| | | NO ACTIVITY DETECTED | 08/23/95 504661 |
| | | NO ACTIVITY DETECTED | 08/30/95 504802 |
| | | NO ACTIVITY DETECTED | 10/04/95 505468 |
| | | NO ACTIVITY DETECTED | 11/08/95 506289 |
| | | NO ACTIVITY DETECTED | 11/21/95 506517 |
| | BI-214 | +0.0103 | +0.0083 09/06/95 504926 |
| | | +0.0310 | +0.0077 10/17/95 505764 |
| | | +0.0388 | +0.0096 12/19/95 507027 |
| | | +0.0116 | +0.0053 12/26/95 507169 |
| | K-40 | +0.3277 | +0.0616 07/26/95 504123 |
| | | +0.1823 | +0.0638 08/09/95 504411 |
| | | +0.1331 | +0.0413 09/06/95 504926 |
| | | +0.3591 | +0.0806 09/12/95 505101 |
| | | +0.2168 | +0.0481 09/20/95 505205 |
| | | +0.2920 | +0.0731 12/19/95 507027 |
| | PB-214 | +0.0297 | +0.0111 09/06/95 504926 |
| | | +0.0074 | +0.0032 09/12/95 505101 |
| | | +0.0215 | +0.0082 09/27/95 505335 |
| | | +0.0263 | +0.0082 10/11/95 505632 |
| | | +0.0423 | +0.0098 10/17/95 505764 |
| | | +0.0449 | +0.0083 10/25/95 505909 |
| | | +0.0174 | +0.0088 10/31/95 506093 |
| | | +0.0267 | +0.0079 11/15/95 506387 |
| | | +0.0393 | +0.0120 11/29/95 506657 |
| | | +0.0167 | +0.0092 12/06/95 506802 |
| | | +0.0331 | +0.0093 12/13/95 506910 |
| | | +0.0497 | +0.0121 12/19/95 507027 |
| | | +0.0142 | +0.0059 12/26/95 507169 |
| 3203 LM-3 WB | 2.1 MILES NNE | GAMMA SCAN (GELI) | |
| | | NO ACTIVITY DETECTED | 01/03/95 500104 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CHARCOAL FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------------------|-------------------------------------|
| 3203 LM-3 WB | 2.1 MILES NNE | GAMMA SCAN (GELI) | |
| | | NO ACTIVITY DETECTED | 01/10/95 500212 |
| | | NO ACTIVITY DETECTED | 01/31/95 500631 |
| | | NO ACTIVITY DETECTED | 02/28/95 501148 |
| | | NO ACTIVITY DETECTED | 03/07/95 501257 |
| | | NO ACTIVITY DETECTED | 03/21/95 501515 |
| | | NO ACTIVITY DETECTED | 04/04/95 501810 |
| | | NO ACTIVITY DETECTED | 04/18/95 502056 |
| | | NO ACTIVITY DETECTED | 05/02/95 502403 |
| | | NO ACTIVITY DETECTED | 05/09/95 502543 |
| | | NO ACTIVITY DETECTED | 05/16/95 502682 |
| | | NO ACTIVITY DETECTED | 05/23/95 502853 |
| | | NO ACTIVITY DETECTED | 06/07/95 503120 |
| | | NO ACTIVITY DETECTED | 06/13/95 503257 |
| | | NO ACTIVITY DETECTED | 06/20/95 503462 |
| | | NO ACTIVITY DETECTED | 06/27/95 503614 |
| | | NO ACTIVITY DETECTED | 07/05/95 503747 |
| | | NO ACTIVITY DETECTED | 07/11/95 503879 |
| | | NO ACTIVITY DETECTED | 07/18/95 504022 |
| | | NO ACTIVITY DETECTED | 07/25/95 504137 |
| | | NO ACTIVITY DETECTED | 08/01/95 504244 |
| | | NO ACTIVITY DETECTED | 08/08/95 504416 |
| | | NO ACTIVITY DETECTED | 08/29/95 504804 |
| | | NO ACTIVITY DETECTED | 09/05/95 504931 |
| | | NO ACTIVITY DETECTED | 09/12/95 505104 |
| | | NO ACTIVITY DETECTED | 09/19/95 505219 |
| | | NO ACTIVITY DETECTED | 10/03/95 505474 |
| | | NO ACTIVITY DETECTED | 10/10/95 505635 |
| | | NO ACTIVITY DETECTED | 10/31/95 506106 |
| | | NO ACTIVITY DETECTED | 11/28/95 506662 |
| | B1-214 | +0.0255 | +0.0098 01/24/95 500448 |
| | | +0.0228 | +0.0076 02/07/95 500746 |
| | | +0.0099 | +0.0055 05/30/95 503002 |
| | | +0.0249 | +0.0076 10/17/95 505777 |
| | | +0.0139 | +0.0062 11/14/95 506401 |
| | | +0.0314 | +0.0098 11/20/95 506519 |
| | | +0.0340 | +0.0079 12/12/95 506925 |
| | | +0.0235 | +0.0092 12/26/95 507174 |
| | K-40 | +0.1861 | +0.0696 03/28/95 501692 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CHARCOAL FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------------------|-------------------------------------|
| 3203 LM-3 WB | 2.1 MILES NNE | GAMMA SCAN (GELI) | |
| | K-40 | +0.2234 | +0.0535 11/14/95 506401 |
| | | +0.1574 | +0.0394 12/12/95 506925 |
| | PB-212 | +0.0039 | +0.0040 02/21/95 500996 |
| | | +0.0018 | +0.0029 04/11/95 501933 |
| | | +0.0029 | +0.0032 04/25/95 502200 |
| | PB-214 | +0.0291 | +0.0088 01/17/95 500314 |
| | | +0.0353 | +0.0098 01/24/95 500448 |
| | | +0.0131 | +0.0066 02/07/95 500746 |
| | | +0.0039 | +0.0066 02/14/95 500859 |
| | | +0.0096 | +0.0049 03/15/95 501366 |
| | | +0.0049 | +0.0079 08/15/95 504567 |
| | | +0.0138 | +0.0068 08/22/95 504675 |
| | | +0.0101 | +0.0075 09/26/95 505337 |
| | | +0.0281 | +0.0083 10/17/95 505777 |
| | | +0.0116 | +0.0081 10/24/95 505911 |
| | | +0.0068 | +0.0059 11/07/95 506292 |
| | | +0.0341 | +0.0096 11/20/95 506519 |
| | | +0.0211 | +0.0061 12/05/95 506805 |
| | | +0.0341 | +0.0106 12/12/95 506925 |
| | | +0.0233 | +0.0087 12/19/95 507029 |
| | | +0.0313 | +0.0107 12/26/95 507174 |
| 3204 LM-4 WB | 0.9 MILES SE | GAMMA SCAN (GELI) | |
| | | NO ACTIVITY DETECTED | 01/10/95 500214 |
| | | NO ACTIVITY DETECTED | 01/24/95 500450 |
| | | NO ACTIVITY DETECTED | 02/07/95 500748 |
| | | NO ACTIVITY DETECTED | 02/21/95 500998 |
| | | NO ACTIVITY DETECTED | 02/28/95 501151 |
| | | NO ACTIVITY DETECTED | 03/07/95 501259 |
| | | NO ACTIVITY DETECTED | 03/15/95 501368 |
| | | NO ACTIVITY DETECTED | 03/21/95 501517 |
| | | NO ACTIVITY DETECTED | 03/28/95 501695 |
| | | NO ACTIVITY DETECTED | 04/04/95 501812 |
| | | NO ACTIVITY DETECTED | 04/18/95 502058 |
| | | NO ACTIVITY DETECTED | 05/02/95 502405 |
| | | NO ACTIVITY DETECTED | 05/09/95 502545 |
| | | NO ACTIVITY DETECTED | 05/16/95 502684 |
| | | NO ACTIVITY DETECTED | 05/24/95 502856 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CHARCOAL FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR TERM | DATE COLLECTED | LAB NO |
|-----------------------------------|-----------------------|----------------------|---------------|-------------------|--------|
| 3204 LM-4 WB | 0.9 MILES SE | GAMMA SCAN (GELI) | | | |
| | | NO ACTIVITY DETECTED | | 05/30/95 | 503004 |
| | | NO ACTIVITY DETECTED | | 06/07/95 | 503122 |
| | | NO ACTIVITY DETECTED | | 06/13/95 | 503260 |
| | | NO ACTIVITY DETECTED | | 06/27/95 | 503616 |
| | | NO ACTIVITY DETECTED | | 07/11/95 | 503881 |
| | | NO ACTIVITY DETECTED | | 07/19/95 | 504025 |
| | | NO ACTIVITY DETECTED | | 07/25/95 | 504139 |
| | | NO ACTIVITY DETECTED | | 08/01/95 | 504246 |
| | | NO ACTIVITY DETECTED | | 08/08/95 | 504418 |
| | | NO ACTIVITY DETECTED | | 08/15/95 | 504570 |
| | | NO ACTIVITY DETECTED | | 08/22/95 | 504677 |
| | | NO ACTIVITY DETECTED | | 08/30/95 | 504806 |
| | | NO ACTIVITY DETECTED | | 09/05/95 | 504933 |
| | | NO ACTIVITY DETECTED | | 09/19/95 | 505221 |
| | | NO ACTIVITY DETECTED | | 09/26/95 | 505339 |
| | | NO ACTIVITY DETECTED | | 10/03/95 | 505476 |
| | | NO ACTIVITY DETECTED | | 10/10/95 | 505638 |
| | | NO ACTIVITY DETECTED | | 10/31/95 | 506108 |
| | | NO ACTIVITY DETECTED | | 11/28/95 | 506664 |
| | | NO ACTIVITY DETECTED | | 12/19/95 | 507031 |
| | BI-214 | +0.0014 | +0.0049 | 04/12/95 | 501935 |
| | | +0.0140 | +0.0062 | 10/24/95 | 505913 |
| | | +0.0114 | +0.0059 | 12/12/95 | 506927 |
| | K-40 | +0.1703 | +0.0388 | 04/25/95 | 502203 |
| | | +0.2114 | +0.0646 | 06/20/95 | 503465 |
| | | +0.2986 | +0.0531 | 07/05/95 | 503749 |
| | | +0.1730 | +0.0433 | 09/12/95 | 505107 |
| | | +0.2005 | +0.0427 | 10/24/95 | 505913 |
| | | +0.3393 | +0.0682 | 12/12/95 | 506927 |
| | PB-212 | +0.0024 | +0.0026 | 01/31/95 | 500634 |
| | | +0.0016 | +0.0040 | 06/20/95 | 503465 |
| | PB-214 | +0.0118 | +0.0072 | 01/03/95 | 500107 |
| | | +0.0063 | +0.0061 | 01/17/95 | 500316 |
| | | +0.0131 | +0.0060 | 02/14/95 | 500861 |
| | | +0.0262 | +0.0060 | 10/17/95 | 505779 |
| | | +0.0146 | +0.0054 | 10/24/95 | 505913 |
| | | +0.0176 | +0.0059 | 11/07/95 | 506295 |
| | | +0.0116 | +0.0051 | 11/14/95 | 506403 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CHARCOAL FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-----------------------------|-------------------------------------|
| 3204 LM-4 WB | 0.9 MILES SE | GAMMA SCAN (GELI) PB-214 | |
| | | +0.0490 | +0.0115 11/21/95 506521 |
| | | +0.0124 | +0.0092 12/05/95 506808 |
| | | +0.0186 | +0.0065 12/26/95 507176 |
| 3205 RM-3 WB | 15 MILES NNW | GAMMA SCAN (GELI) | |
| | | NO ACTIVITY DETECTED | 01/10/95 500216 |
| | | NO ACTIVITY DETECTED | 01/17/95 500318 |
| | | NO ACTIVITY DETECTED | 01/24/95 500452 |
| | | NO ACTIVITY DETECTED | 01/31/95 500637 |
| | | NO ACTIVITY DETECTED | 02/07/95 500750 |
| | | NO ACTIVITY DETECTED | 02/14/95 500863 |
| | | NO ACTIVITY DETECTED | 02/21/95 501000 |
| | | NO ACTIVITY DETECTED | 02/28/95 501154 |
| | | NO ACTIVITY DETECTED | 03/07/95 501261 |
| | | NO ACTIVITY DETECTED | 03/14/95 501370 |
| | | NO ACTIVITY DETECTED | 03/21/95 501519 |
| | | NO ACTIVITY DETECTED | 03/28/95 501698 |
| | | NO ACTIVITY DETECTED | 04/04/95 501814 |
| | | NO ACTIVITY DETECTED | 04/11/95 501937 |
| | | NO ACTIVITY DETECTED | 04/18/95 502060 |
| | | NO ACTIVITY DETECTED | 04/25/95 502206 |
| | | NO ACTIVITY DETECTED | 05/02/95 502407 |
| | | NO ACTIVITY DETECTED | 05/10/95 502547 |
| | | NO ACTIVITY DETECTED | 05/16/95 502686 |
| | | NO ACTIVITY DETECTED | 05/23/95 502859 |
| | | NO ACTIVITY DETECTED | 05/30/95 503006 |
| | | NO ACTIVITY DETECTED | 06/06/95 503124 |
| | | NO ACTIVITY DETECTED | 06/13/95 503263 |
| | | NO ACTIVITY DETECTED | 06/20/95 503468 |
| | | NO ACTIVITY DETECTED | 06/27/95 503618 |
| | | NO ACTIVITY DETECTED | 07/05/95 503751 |
| | | NO ACTIVITY DETECTED | 07/11/95 503883 |
| | | NO ACTIVITY DETECTED | 07/18/95 504028 |
| | | NO ACTIVITY DETECTED | 07/25/95 504141 |
| | | NO ACTIVITY DETECTED | 08/01/95 504248 |
| | | NO ACTIVITY DETECTED | 08/08/95 504420 |
| | | NO ACTIVITY DETECTED | 08/15/95 504573 |
| | | NO ACTIVITY DETECTED | 08/22/95 504679 |

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CHARCOAL FILTER
PCI/M3 - 0.037 BQ/M3
01/01/95 TO 12/31/95

ANALYSIS
(NUCLIDE)

| ERROR | DATE | TERM | COLLECTED | LAB NO |
|-------|------|------|-----------|--------|
| | | | | |

15 MILES NNW

GAMMA SCAN (GELI)

[illegible]

| | |
|----------|--------|
| 08/30/95 | 504808 |
| 09/05/95 | 504935 |
| 09/19/95 | 505223 |
| 09/26/95 | 505341 |
| 10/03/95 | 505478 |
| 10/10/95 | 505641 |
| 10/31/95 | 506110 |
| 11/14/95 | 506405 |
| 12/05/95 | 506811 |
| 12/19/95 | 507033 |
| 12/26/95 | 507178 |

BI-214

+0.0152
+0.0160
+0.0299
+0.0545
+0.0083
+0.0178
+0.1757
+0.4046
+0.0387
+0.0208
+0.0114
+0.0492
+0.0400
+0.0287

| | | |
|---------|----------|--------|
| +0.0080 | 01/03/95 | 500110 |
| +0.0090 | 10/17/95 | 505781 |
| +0.0115 | 10/24/95 | 505915 |
| +0.0121 | 11/21/95 | 506523 |
| +0.0091 | 11/28/95 | 506666 |
| +0.0082 | 12/12/95 | 506929 |
| +0.0398 | 01/03/95 | 500110 |
| +0.0711 | 11/21/95 | 506523 |
| +0.0231 | 09/12/95 | 505110 |
| +0.0074 | 10/24/95 | 505915 |
| +0.0070 | 11/07/95 | 506298 |
| +0.0143 | 11/21/95 | 506523 |
| +0.0099 | 11/28/95 | 506666 |
| +0.0076 | 12/12/95 | 506929 |

K-40

PB-214

+0.0178
+0.1757
+0.4046
+0.0387
+0.0208
+0.0114
+0.0492
+0.0400
+0.0287

| | | |
|---------|----------|--------|
| +0.0082 | 11/28/95 | 506929 |
| +0.0398 | 12/12/95 | 506929 |
| +0.0398 | 01/03/95 | 500110 |
| +0.0711 | 11/21/95 | 506523 |
| +0.0231 | 09/12/95 | 505110 |
| +0.0074 | 10/24/95 | 505915 |
| +0.0070 | 11/07/95 | 506298 |
| +0.0143 | 11/21/95 | 506523 |
| +0.0099 | 11/28/95 | 506666 |
| +0.0076 | 12/12/95 | 506929 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN CLAM FLESH
 PCI/GM - 0.037 BQ/G (DRY WEIGHT)
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | |
|-----------------------------------|-----------------------|----------|------------------|------------------|
| | | | TERM | COLLECTED LAB NO |
| 3143 DOWNSTREAM | GAMMA SCAN (GELI) | | | |
| | AC-228 | +0.1434 | +0.1261 04/24/95 | 502396 |
| | BI-214 | +0.6718 | +0.1268 10/26/95 | 506100 |
| | K-40 | +1.3511 | +0.4928 04/24/95 | 502396 |
| | | +1.2344 | +0.9427 10/26/95 | 506100 |
| | PB-214 | +0.7805 | +0.1276 10/26/95 | 506100 |
| 3144 UPSTREAM | GAMMA SCAN (GELI) | | | |
| | AC-228 | +0.1528 | +0.1075 10/26/95 | 506101 |
| | BI-214 | +0.8960 | +0.1303 10/26/95 | 506101 |
| | K-40 | +1.6929 | +0.5327 04/20/95 | 502397 |
| | | +1.6711 | +0.6816 10/26/95 | 506101 |
| | PB-214 | +0.8091 | +0.1266 10/26/95 | 506101 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CONTIN. SURFACE WATER QC-TN
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------------------|-------------------------------------|
| 3133 TRM 529.3 | 1.5 MILES UPSTREAM | GROSS ALPHA | |
| | | +0.8000 | +0.7000 01/10/95 500207 |
| | | +0.8000 | +0.6500 02/07/95 500741 |
| | | +0.5000 | +0.6500 03/07/95 501252 |
| | | GROSS BETA | |
| | | +1.8000 | +1.1000 01/10/95 500207 |
| | | +2.8000 | +1.0500 02/07/95 500741 |
| | | +2.5000 | +1.1500 03/07/95 501252 |
| | | +1.0000 | +1.1000 04/04/95 501805 |
| | | +7.1000 | +1.3000 05/02/95 502389 |
| | | +2.9000 | +1.1500 05/30/95 502997 |
| | | +1.6000 | +1.1000 06/27/95 503609 |
| | | +1.3000 | +1.1000 07/25/95 504132 |
| | | +2.4000 | +1.1500 08/22/95 504670 |
| | | +2.0000 | +1.1000 09/19/95 505214 |
| | | +2.8000 | +1.0500 10/17/95 505772 |
| | | +1.4000 | +1.1000 11/14/95 506396 |
| | | -0.4999 | +1.2000 12/12/95 506920 |
| | | GAMMA SCAN (GELI) | |
| | | NO ACTIVITY DETECTED | 03/07/95 501252 |
| | | NO ACTIVITY DETECTED | 05/02/95 502389 |
| | | NO ACTIVITY DETECTED | 07/25/95 504132 |
| BI-214 | | +11.0000 | +1.9500 01/10/95 500207 |
| | | +28.9000 | +2.4000 02/07/95 500741 |
| | | +84.8000 | +3.7500 04/04/95 501805 |
| | | +35.5000 | +2.8000 05/30/95 502997 |
| | | +18.1000 | +1.9500 06/27/95 503609 |
| | | +20.9000 | +2.4000 08/22/95 504670 |
| | | +34.8000 | +2.4500 09/19/95 505214 |
| | | +13.8000 | +2.1000 10/17/95 505772 |
| | | +30.7000 | +2.3000 11/14/95 506396 |
| | | +18.5000 | +1.9500 12/12/95 506920 |
| PB-214 | | +16.6000 | +2.4500 01/10/95 500207 |
| | | +64.8000 | +3.4500 04/04/95 501805 |
| | | +23.2000 | +2.4500 05/30/95 502997 |
| | | +21.1000 | +1.9000 06/27/95 503609 |
| | | +23.9000 | +2.4000 09/19/95 505214 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CONTIN. SURFACE WATER QC-TN
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR TERM | DATE COLLECTED | LAB NO |
|-----------------------------------|-----------------------|----------------------|-------------------|-------------------|--------|
| 3133 TRM 529.3 | 1.5 MILES UPSTREAM | GAMMA SCAN (GELI) | | | |
| | | PB-214 | | | |
| | | | +15.3000 | +1.8500 10/17/95 | 505772 |
| | | | +25.5000 | +2.7500 11/14/95 | 506396 |
| | SR 89 | | | | |
| | | +0.2100 | +0.4800 03/07/95 | 501252 | |
| | SR 90 | | | | |
| | | +0.1560 | +0.0375 03/07/95 | 501252 | |
| | TRITIUM | | | | |
| | | -36.9999 | +54.5000 01/10/95 | 500207 | |
| | | -2.9999 | +53.0000 02/07/95 | 500741 | |
| | | +5.0000 | +54.5000 03/07/95 | 501252 | |
| 3135 TRM 523.1 | 4.7 MILES DOWNSTREA | GROSS ALPHA | | | |
| | | | +0.8000 | +0.7000 01/10/95 | 500210 |
| | | | +1.1000 | +0.7000 02/07/95 | 500744 |
| | | +0.0000 | +0.6000 03/07/95 | 501255 | |
| | GROSS BETA | | | | |
| | | +3.3000 | +1.6500 01/10/95 | 500210 | |
| | | +3.7000 | +1.1000 02/07/95 | 500744 | |
| | | +2.1000 | +1.1500 03/07/95 | 501255 | |
| | | +0.9000 | +1.1000 04/04/95 | 501808 | |
| | | +3.8000 | +1.2000 05/02/95 | 502392 | |
| | | +1.8000 | +1.1000 05/30/95 | 503000 | |
| | | +2.0000 | +1.1000 07/25/95 | 504135 | |
| | | +3.1000 | +1.1500 08/22/95 | 504673 | |
| | | +4.8000 | +1.2000 09/19/95 | 505217 | |
| | | +4.0000 | +1.2000 11/14/95 | 506399 | |
| | | -0.4999 | +1.2000 12/12/95 | 506923 | |
| | GAMMA SCAN (GELI) | | | | |
| | | NO ACTIVITY DETECTED | 02/07/95 | 500744 | |
| | | NO ACTIVITY DETECTED | 03/07/95 | 501255 | |
| | | NO ACTIVITY DETECTED | 04/04/95 | 501808 | |
| | | NO ACTIVITY DETECTED | 05/02/95 | 502392 | |
| | | NO ACTIVITY DETECTED | 07/25/95 | 504135 | |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN CONTIN. SURFACE WATER QC-TN
 PCI/L - 0.037 BQ/L
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------------------|-------------------------------------|
| 3135 TRM 523.1 | 4.7 MILES DOWNSTREA | GAMMA SCAN (GELI) | |
| | | NO ACTIVITY DETECTED | 12/12/95 506923 |
| | BI-214 | +16.5000 | +1.7500 01/10/95 500210 |
| | | +31.6000 | +2.7500 05/30/95 503000 |
| | | +20.2000 | +2.0500 08/22/95 504673 |
| | | +24.3000 | +2.1000 09/19/95 505217 |
| | | +25.4000 | +3.1500 11/14/95 506399 |
| | PB-214 | +19.2000 | +1.9000 05/30/95 503000 |
| | | +24.7000 | +2.3000 09/19/95 505217 |
| | | +19.6000 | +2.7500 11/14/95 506399 |
| | SR 89 | | |
| | | +0.1000 | +0.4950 03/07/95 501255 |
| | SR 90 | | |
| | | +0.4600 | +0.0500 03/07/95 501255 |
| | TRITIUM | | |
| | | +92.0000 | +55.5000 01/10/95 500210 |
| | | +11.0000 | +53.0000 02/07/95 500744 |
| | | +73.0000 | +55.0000 03/07/95 501255 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CONTIN. SURFACE WATER(Total)
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------------------|-------------------------------------|
| 3133 TRM 529.3 | 1.5 MILES UPSTREAM | GROSS BETA | |
| | | +2.0738 | +0.5771 01/10/95 500206 |
| | | +3.0886 | +0.6308 02/07/95 500740 |
| | | +2.7814 | +0.6166 03/07/95 501251 |
| | | +2.0703 | +0.5763 04/04/95 501804 |
| | | +3.0159 | +0.6237 05/02/95 502388 |
| | | +2.4895 | +0.5968 05/30/95 502996 |
| | | +2.8714 | +0.6361 06/27/95 503608 |
| | | +2.7693 | +0.6228 07/25/95 504131 |
| | | +2.9305 | +0.6566 08/22/95 504669 |
| | | +2.3276 | +0.6111 09/19/95 505213 |
| | | +2.3752 | +0.5900 10/17/95 505771 |
| | | +3.1724 | +0.6319 11/14/95 506395 |
| | | +2.5058 | +0.5907 12/12/95 506919 |
| | | GAMMA SCAN (GELI) | |
| | | NO ACTIVITY DETECTED | 01/10/95 500206 |
| | | NO ACTIVITY DETECTED | 05/02/95 502388 |
| | | NO ACTIVITY DETECTED | 08/22/95 504669 |
| | AC-228 | +0.4029 | +3.4566 02/07/95 500740 |
| | | +3.5871 | +4.2050 04/04/95 501804 |
| | | +9.8619 | +5.0281 10/17/95 505771 |
| | BI-214 | +2.8875 | +2.5369 02/07/95 500740 |
| | | +1.1381 | +6.8148 04/04/95 501804 |
| | | +4.0105 | +10.5690 05/30/95 502996 |
| | | +11.1430 | +3.3962 09/19/95 505213 |
| | | +6.4708 | +2.8985 10/17/95 505771 |
| | | +4.7525 | +3.0320 11/14/95 506395 |
| | | +6.2693 | +2.8414 12/12/95 506919 |
| | K-40 | +35.7080 | +20.3020 03/07/95 501251 |
| | | +8.5426 | +14.4670 05/30/95 502996 |
| | | +1.7287 | +16.4700 06/27/95 503608 |
| | | +8.7631 | +13.2790 09/19/95 505213 |
| | | +17.5260 | +21.2280 10/17/95 505771 |
| | PB-212 | +2.9206 | +1.8199 03/07/95 501251 |
| | | +0.6682 | +1.5400 04/04/95 501804 |
| | | +3.7533 | +2.1911 07/25/95 504131 |
| | | +1.8034 | +1.9393 10/17/95 505771 |
| | PB-214 | +3.7111 | +2.5891 02/07/95 500740 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CONTIN. SURFACE WATER(Total)
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 3133 TRM 529.3 | 1.5 MILES UPSTREAM | GAMMA SCAN (GELI) | |
| | | PB-214 | |
| | | +0.1608 | +3.0884 07/25/95 504131 |
| | | +8.7539 | +2.7504 09/19/95 505213 |
| | | +5.9050 | +3.1219 10/17/95 505771 |
| | | +0.9446 | +2.5497 11/14/95 506395 |
| | | +1.3608 | +2.3186 12/12/95 506919 |
| | TL-208 | +0.7325 | +0.9624 09/19/95 505213 |
| | | +0.8616 | +1.3489 10/17/95 505771 |
| | SR 89 | | |
| | | +1.3200 | +1.2000 03/07/95 501264 |
| | | -0.3269 | +1.0200 05/30/95 503008 |
| | | +0.7500 | +1.1200 08/22/95 504681 |
| | | +2.8300 | +1.5700 12/12/95 506931 |
| | SR 90 | | |
| | | +0.1070 | +0.6240 03/07/95 501264 |
| | | +0.6320 | +0.5360 05/30/95 503008 |
| | | +0.0644 | +0.6420 08/22/95 504681 |
| | | -0.6379 | +0.6020 12/12/95 506931 |
| | TRITIUM | | |
| | | +135.0500 | +79.2000 03/07/95 501264 |
| | | +214.1300 | +82.7400 05/30/95 503008 |
| | | +163.1500 | +74.6300 08/22/95 504681 |
| | | -19.1099 | +71.2900 12/12/95 506931 |
| 3134 TRM 517.9 | 9.9 MILES DOWNSTREA | GROSS BETA | |
| | | +2.9107 | +0.6180 01/10/95 500208 |
| | | +3.1247 | +0.6300 02/07/95 500742 |
| | | +2.5733 | +0.6071 03/07/95 501253 |
| | | +2.4187 | +0.5999 04/04/95 501806 |
| | | +2.7488 | +0.6091 05/02/95 502390 |
| | | +6.5974 | +0.8391 05/30/95 502998 |
| | | +3.5584 | +0.7264 06/27/95 503610 |
| | | +3.2584 | +0.6488 07/25/95 504133 |
| | | +3.3593 | +0.6807 08/22/95 504671 |
| | | +2.7463 | +0.8492 09/19/95 505215 |
| | | +3.1378 | +0.6328 10/17/95 505773 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CONTIN. SURFACE WATER(Total)
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------------------|-------------------------------------|
| 3134 TRM 517.9 | 9.9 MILES DOWNSTREA | GROSS BETA | |
| | | GAMMA SCAN (GEL1) | |
| | | +4.2469 | +0.7103 12/19/95 506921 |
| | | NO ACTIVITY DETECTED | 04/04/95 501806 |
| | | NO ACTIVITY DETECTED | 06/27/95 503610 |
| | | NO ACTIVITY DETECTED | 08/22/95 504671 |
| | AC-228 | +0.7028 | +5.3873 03/07/95 501253 |
| | | +2.4542 | +3.2738 12/19/95 506921 |
| | BI-214 | +0.0650 | +5.0347 02/07/95 500742 |
| | | +1.7293 | +3.3802 03/07/95 501253 |
| | | +1.0919 | +2.6868 07/25/95 504133 |
| | | +1.9690 | +2.6370 09/19/95 505215 |
| | | +2.7479 | +3.0951 10/17/95 505773 |
| | | +11.1600 | +10.3630 12/19/95 506921 |
| | K-40 | +17.9190 | +14.0340 01/10/95 500208 |
| | | +1.4743 | +13.7710 12/19/95 506921 |
| | PB-212 | +1.3679 | +3.4346 03/07/95 501253 |
| | | +0.3264 | +1.2352 05/02/95 502390 |
| | | +1.3700 | +1.9465 05/30/95 502998 |
| | | +1.1648 | +1.7604 07/25/95 504133 |
| | PB-214 | +1.6143 | +3.6438 07/25/95 504133 |
| | | +1.9811 | +2.3602 09/19/95 505215 |
| | | +2.0505 | +3.1888 12/19/95 506921 |
| | TL-208 | +0.5422 | +1.2890 07/25/95 504133 |
| | SR 89 | | |
| | | +1.2800 | +1.1600 03/07/95 501265 |
| | | -0.4269 | +1.0300 05/30/95 503009 |
| | | +0.4500 | +1.2200 08/22/95 504682 |
| | | -0.0491 | +1.2500 12/19/95 506932 |
| | SR 90 | | |
| | | -0.1779 | +0.6000 03/07/95 501265 |
| | | +0.3940 | +0.5380 05/30/95 503009 |
| | | +0.3530 | +0.6970 08/22/95 504682 |
| | | +0.2280 | +0.5410 12/19/95 506932 |
| | TRITIUM | | |
| | | +122.1300 | +79.6800 03/07/95 501265 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CONTIN. SURFACE WATER(Total)
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR TERM | DATE COLLECTED | LAB NO |
|-----------------------------------|--------------------------------|----------------------|------------|----------------|--------|
| 3134 TRM 517.9 | 9.9 MILES DOWNSTREA TRITIUM | +181.5100 | +81.1200 | 05/30/95 | 503009 |
| | | +89.1100 | +74.2100 | 08/22/95 | 504682 |
| | | +60.3700 | +72.9600 | 12/19/95 | 506932 |
| 3135 TRM 523.1 | 4.7 MILES DOWNSTREA GROSS BETA | +2.0545 | +0.5720 | 01/10/95 | 500209 |
| | | +3.8807 | +0.6916 | 02/07/95 | 500743 |
| | | +2.9627 | +0.6288 | 03/07/95 | 501254 |
| | | +3.0687 | +0.6345 | 04/04/95 | 501807 |
| | | +1.8342 | +0.5587 | 05/02/95 | 502391 |
| | | +2.0058 | +0.5704 | 05/30/95 | 502999 |
| | | +2.4335 | +0.6039 | 07/25/95 | 504134 |
| | | +2.2160 | +0.6272 | 08/22/95 | 504672 |
| | | +2.1304 | +0.6030 | 09/19/95 | 505216 |
| | | +2.5698 | +0.5961 | 11/14/95 | 506398 |
| | | +1.8135 | +0.5522 | 12/12/95 | 506922 |
| | GAMMA SCAN (GELI) | | | | |
| | | NO ACTIVITY DETECTED | | 01/10/95 | 500209 |
| | | NO ACTIVITY DETECTED | | 03/07/95 | 501254 |
| | | NO ACTIVITY DETECTED | | 05/02/95 | 502391 |
| AC-228 | | +2.0934 | +3.8423 | 04/04/95 | 501807 |
| LI-214 | | +4.7390 | +3.0982 | 02/07/95 | 500743 |
| | | +0.1690 | +1.8177 | 04/04/95 | 501807 |
| | | +2.7403 | +2.6431 | 08/22/95 | 504672 |
| | | +7.0035 | +2.8691 | 09/19/95 | 505216 |
| | | +7.9154 | +3.1892 | 11/14/95 | 506398 |
| | | +3.7401 | +2.6436 | 12/12/95 | 506922 |
| K-40 | | +0.7922 | +15.5450 | 07/25/95 | 504134 |
| | | +4.9151 | +22.4130 | 09/19/95 | 505216 |
| | | +6.6493 | +19.1700 | 12/12/95 | 506922 |
| PB-212 | | +1.6684 | +1.9712 | 04/04/95 | 501807 |
| | | +0.3973 | +1.8712 | 11/14/95 | 506398 |
| PB-214 | | +2.7378 | +2.5625 | 04/04/95 | 501807 |
| | | +4.3153 | +2.4871 | 09/19/95 | 505216 |
| | | +6.1708 | +6.9681 | 11/14/95 | 506398 |
| TL-208 | | +1.3255 | +0.9308 | 04/04/95 | 501807 |
| | | +0.7364 | +1.0257 | 05/30/95 | 502999 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN CONTIN. SURFACE WATER(Total)
 PCI/L - 0.037 Bq/L
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO. |
|-----------------------------------|---------------------------|-----------|--------------------------------------|
| 3135 TRM 523.1 | 4.7 MILES DOWNSTREA SR 89 | +0.7590 | +1.1000 03/07/95 501266 |
| | | +0.7120 | +1.1200 05/30/95 503010 |
| | | +0.7310 | +1.0200 08/22/95 504683 |
| | | -0.5639 | +1.3500 12/12/95 506933 |
| | SR 90 | +0.2930 | +0.5750 03/07/95 501266 |
| | | +0.1560 | +0.5730 05/30/95 503010 |
| | | -0.2399 | +0.5760 08/22/95 504683 |
| | | +0.5750 | +0.5370 12/12/95 506933 |
| | TRITIUM | +115.6600 | +77.5300 03/07/95 501266 |
| | | +5.2400 | +79.8800 05/30/95 503010 |
| | | +137.2400 | +74.8200 08/22/95 504683 |
| | | +125.0200 | +74.7900 12/12/95 506933 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN CONTIN. WELL WATER(Total)
 PCI/L - 0.037 BQ/L
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|------------|-------------------------------------|
| 3121 WBN WELL #1 | ONSITE S | GROSS BETA | |
| | | +9.5396 | +1.3402 03/07/95 501267 |
| | | +6.1461 | +1.2391 05/30/95 503011 |
| | | +10.2940 | +1.3798 08/22/95 504684 |
| | | +4.8137 | +1.1818 12/12/95 506934 |
| | GAMMA SCAN (GEL1) | | |
| | BI-214 | +2.5967 | +2.8064 03/07/95 501267 |
| | | +15.6640 | +10.1730 05/30/95 503011 |
| | | +0.0787 | +3.0238 08/22/95 504684 |
| | | +12.2070 | +3.1359 12/12/95 506934 |
| | K-40 | +7.4386 | +17.1830 05/30/95 503011 |
| | PB-212 | +1.3426 | +1.7868 12/12/95 506934 |
| | PB-214 | +8.2990 | +3.7143 12/12/95 506934 |
| | SR 89 | | |
| | | -0.1239 | +0.8530 03/07/95 501267 |
| | | +1.7900 | +1.2700 05/30/95 503011 |
| | | +1.3400 | +1.0200 08/22/95 504684 |
| | | +1.7500 | +1.1700 12/12/95 506934 |
| | SR 90 | | |
| | | +0.1850 | +0.4510 03/07/95 501267 |
| | | -0.2069 | +0.4930 05/30/95 503011 |
| | | -0.2699 | +0.4780 08/22/95 504684 |
| | | -0.3469 | +0.4540 12/12/95 506934 |
| | TRITIUM | | |
| | | +75.9500 | +75.2500 03/07/95 501267 |
| | | -44.7599 | +77.0700 05/30/95 503011 |
| | | +136.7600 | +74.0700 08/22/95 504684 |
| | | +179.6300 | +73.7000 12/12/95 506934 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CONTINUOUS PUBLIC WATER
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED | LAB NO |
|-----------------------------------|-----------------------|----------------------|------------------------------|--------|
| 2116 RM-2 DAYTON TN | 17.75 MILES NNE | GROSS BETA | | |
| | | +4.8314 | +0.7214 01/24/95 | 500401 |
| | | +2.7624 | +0.6344 02/21/95 | 500948 |
| | | +2.0526 | +0.5924 03/21/95 | 501465 |
| | | +2.7945 | +0.6193 04/18/95 | 502007 |
| | | +2.2036 | +0.6091 05/16/95 | 502623 |
| | | +3.0158 | +0.6406 06/13/95 | 503200 |
| | | +3.2970 | +0.6483 07/11/95 | 503831 |
| | | +2.7006 | +0.6265 08/08/95 | 504369 |
| | | +1.8062 | +0.5843 09/05/95 | 504881 |
| | | +2.2147 | +0.6143 10/03/95 | 505425 |
| | | +2.6901 | +0.6149 10/31/95 | 506028 |
| | | +3.5210 | +0.6467 11/28/95 | 506614 |
| | | +2.5698 | +0.6212 12/26/95 | 507124 |
| | GAMMA SCAN (GELI) | | | |
| | | NO ACTIVITY DETECTED | 03/21/95 | 501465 |
| | | NO ACTIVITY DETECTED | 04/18/95 | 502007 |
| | | NO ACTIVITY DETECTED | 05/16/95 | 502623 |
| | | NO ACTIVITY DETECTED | 06/13/95 | 503200 |
| | | NO ACTIVITY DETECTED | 09/05/95 | 504881 |
| | | NO ACTIVITY DETECTED | 10/03/95 | 505425 |
| AC-228 | | +2.6985 | +4.5018 08/08/95 | 504369 |
| | | +0.1243 | +3.2195 11/28/95 | 506614 |
| BI-214 | | +17.2390 | +4.3922 01/24/95 | 500401 |
| | | +7.2786 | +3.9773 10/31/95 | 506028 |
| | | +20.9880 | +3.4143 11/28/95 | 506614 |
| | | +50.1360 | +5.4780 12/26/95 | 507124 |
| K-40 | | +5.3942 | +13.8110 07/11/95 | 503831 |
| | | +3.8136 | +20.7520 11/28/95 | 506614 |
| | | +3.1521 | +20.4760 12/26/95 | 507124 |
| PB-212 | | +2.1469 | +1.9777 02/21/95 | 500948 |
| PB-214 | | +8.6794 | +3.3027 01/24/95 | 500401 |
| | | +2.2293 | +3.1182 10/31/95 | 506028 |
| | | +8.5695 | +3.4388 11/28/95 | 506614 |
| | | +29.1840 | +4.8111 12/26/95 | 507124 |
| TL-208 | | +0.5367 | +0.9970 11/28/95 | 506614 |
| | | +0.9670 | +1.3865 12/26/95 | 507124 |
| SR 89 | | | | |
| | | +0.2680 | +0.9620 03/21/95 | 501560 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CONTINUOUS PUBLIC WATER
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-------------------------------------|-----------------------|----------------------|-------------------------------------|
| 2116 RM-2 DAYTON TN 17.75 MILES NNE | SR 89 | +0.6120 | +1.2200 06/13/95 503304 |
| | | +0.6830 | +1.0300 09/05/95 504975 |
| | | -0.2499 | +0.8910 12/26/95 507218 |
| | SR 90 | +0.2540 | +0.5580 03/21/95 501560 |
| | | +0.2470 | +0.5740 06/13/95 503304 |
| | | +0.3310 | +0.5880 09/05/95 504975 |
| | | +0.6100 | +0.5160 12/26/95 507218 |
| | TRITIUM | +139.1800 | +77.1700 03/21/95 501560 |
| | | +87.9600 | +82.7900 06/13/95 503304 |
| | | +84.6700 | +74.6800 09/05/95 504975 |
| | | +130.5400 | +73.6700 12/26/95 507218 |
| 2140 CF INDUSTRIES TRM 473.0 | GROSS BETA | +2.2657 | +0.5828 01/17/95 500404 |
| | | +1.7882 | +0.5743 02/15/95 500952 |
| | | +1.2975 | +0.5462 03/14/95 501469 |
| | | +2.6669 | +0.6000 04/18/95 502010 |
| | | +1.0860 | +0.5352 05/16/95 502628 |
| | | +2.8948 | +0.6324 06/12/95 503204 |
| | | +3.1873 | +0.6508 07/10/95 503834 |
| | | +2.3984 | +0.6051 08/07/95 504372 |
| | | +4.3633 | +0.7091 09/07/95 504884 |
| | | +1.5986 | +0.5752 10/02/95 505429 |
| | | +3.0171 | +0.6323 10/30/95 506031 |
| | | +2.8936 | +0.6142 11/30/95 506617 |
| | | +3.4563 | +0.6492 12/27/95 507128 |
| | GAMMA SCAN (GEL1) | NO ACTIVITY DETECTED | 02/15/95 500952 |
| | | NO ACTIVITY DETECTED | 03/14/95 501469 |
| | | NO ACTIVITY DETECTED | 04/18/95 502010 |
| | | NO ACTIVITY DETECTED | 05/16/95 502628 |
| | | NO ACTIVITY DETECTED | 06/12/95 503204 |
| | | NO ACTIVITY DETECTED | 07/10/95 503834 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CONTINUOUS PUBLIC WATER
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------------------|-------------------------------------|
| 2140 CF INDUSTRIES | TRM 473.0 | GAMMA SCAN (GELI) | |
| | | NO ACTIVITY DETECTED | 10/02/95 505429 |
| | BI-214 | +5.4896 | +2.4091 01/17/95 500404 |
| | | +11.2710 | +3.6691 08/07/95 504372 |
| | | +17.3660 | +3.6775 09/07/95 504884 |
| | | +13.6370 | +3.2953 10/30/95 506031 |
| | | +4.0518 | +2.6130 11/30/95 506617 |
| | K-40 | +25.5550 | +16.3470 09/07/95 504884 |
| | | +9.7804 | +14.1870 10/30/95 506031 |
| | PB-212 | +0.2604 | +1.4915 08/07/95 504372 |
| | PB-214 | +5.1159 | +1.9728 01/17/95 500404 |
| | | +9.8184 | +2.7377 08/07/95 504372 |
| | | +2.9635 | +2.1282 09/07/95 504884 |
| | | +6.5788 | +3.1556 10/30/95 506031 |
| | | +0.8410 | +2.1687 11/30/95 506617 |
| | | +10.3580 | +4.8626 12/27/95 507128 |
| | SR 89 | | |
| | | +2.6700 | +1.0800 03/14/95 501561 |
| | | -0.2609 | +1.1800 06/12/95 503305 |
| | | +0.2000 | +0.9390 09/07/95 504976 |
| | | -0.6899 | +0.9660 12/27/95 507219 |
| | SR 90 | | |
| | | -0.9859 | +0.5480 03/14/95 501561 |
| | | +0.5070 | +0.5520 06/12/95 503305 |
| | | +0.4370 | +0.5520 09/07/95 504976 |
| | | +1.0400 | +0.5700 12/27/95 507219 |
| | TRITIUM | | |
| | | +215.4200 | +78.3100 03/14/95 501561 |
| | | +324.4900 | +86.5800 06/12/95 503305 |
| | | +196.4600 | +76.0600 09/07/95 504976 |
| | | +128.7400 | +73.1500 12/27/95 507219 |
| 3133 TRM 529.3 | 1.5 MILES UPSTREAM | GROSS BETA | |
| | | +2.0738 | +0.5771 01/10/95 500206 |
| | | +3.0886 | +0.6308 02/07/95 500740 |
| | | +2.7814 | +0.6166 03/07/95 501251 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CONTINUOUS PUBLIC WATER
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR TERM | DATE COLLECTED | LAB NO |
|-----------------------------------|-----------------------|----------------------|---------------|-------------------|--------|
| 3133 TRM 529.3 | 1.5 MILES UPSTREAM | GROSS BETA | | | |
| | | +2.0703 | +0.5763 | 04/04/95 | 501804 |
| | | +3.0159 | +0.6237 | 05/02/95 | 502388 |
| | | +2.4895 | +0.5968 | 05/30/95 | 502996 |
| | | +2.8714 | +0.6361 | 06/27/95 | 503608 |
| | | +2.7693 | +0.6228 | 07/25/95 | 504131 |
| | | +2.9305 | +0.6566 | 08/22/95 | 504669 |
| | | +2.3276 | +0.6111 | 09/19/95 | 505213 |
| | | +2.3752 | +0.5900 | 10/17/95 | 505771 |
| | | +3.1724 | +0.6319 | 11/14/95 | 506395 |
| | | +2.5058 | +0.5907 | 12/12/95 | 506919 |
| | GAMMA SCAN (GELI) | | | | |
| | | NO ACTIVITY DETECTED | | 01/10/95 | 500206 |
| | | NO ACTIVITY DETECTED | | 05/02/95 | 502388 |
| | | NO ACTIVITY DETECTED | | 08/22/95 | 504669 |
| | AC-228 | +0.4029 | +3.4566 | 02/07/95 | 500740 |
| | | +3.5871 | +4.2050 | 04/04/95 | 501804 |
| | | +9.8619 | +5.0281 | 10/17/95 | 505771 |
| | B1-214 | +2.8875 | +2.5369 | 02/07/95 | 500740 |
| | | +1.1381 | +6.8148 | 04/04/95 | 501804 |
| | | +4.0105 | +10.5690 | 05/30/95 | 502996 |
| | | +11.1430 | +3.3962 | 09/19/95 | 505213 |
| | | +6.4708 | +2.8985 | 10/17/95 | 505771 |
| | | +4.7525 | +3.0320 | 11/14/95 | 506395 |
| | | +6.2693 | +2.8414 | 12/12/95 | 506919 |
| | K-40 | +35.7080 | +20.3020 | 03/07/95 | 501251 |
| | | +8.5426 | +14.4670 | 05/30/95 | 502996 |
| | | +1.7287 | +16.4700 | 06/27/95 | 503608 |
| | | +8.7631 | +13.2790 | 09/19/95 | 505213 |
| | | +17.5260 | +21.2280 | 10/17/95 | 505771 |
| | PB-212 | +2.9206 | +1.8199 | 03/07/95 | 501251 |
| | | +0.6682 | +1.5400 | 04/04/95 | 501804 |
| | | +3.7533 | +2.1911 | 07/25/95 | 504131 |
| | | +1.8034 | +1.9393 | 10/17/95 | 505771 |
| | PB-214 | +3.7111 | +2.5891 | 02/07/95 | 500740 |
| | | +0.1608 | +3.0884 | 07/25/95 | 504131 |
| | | +8.7539 | +2.7504 | 09/19/95 | 505213 |
| | | +5.9050 | +3.1219 | 10/17/95 | 505771 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN CONTINUOUS PUBLIC WATER
 PCI/L - 0.037 BQ/L
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-----------|-------------------------------------|
| 3133 TRM 529.3 | 1.5 MILES UPSTREAM | | |
| | GAMMA SCAN (GEL) | | |
| | PB-214 | +0.9446 | +2.5497 11/14/95 506395 |
| | | +1.3608 | +2.3186 12/12/95 506919 |
| | TL-208 | +0.7325 | +0.9624 09/19/95 505213 |
| | | +0.8616 | +1.3489 10/17/95 505771 |
| | SR 89 | | |
| | | +1.3200 | +1.2000 03/07/95 501264 |
| | | -0.3269 | +1.0200 05/30/95 503008 |
| | | +0.7500 | +1.1200 08/22/95 504681 |
| | | +2.8300 | +1.5700 12/12/95 506931 |
| | SR 90 | | |
| | | +0.1070 | +0.6240 03/07/95 501264 |
| | | +0.6320 | +0.5360 05/30/95 503008 |
| | | +0.0644 | +0.6420 08/22/95 504681 |
| | | -0.6379 | +0.6020 12/12/95 506931 |
| | TRITIUM | | |
| | | +135.0500 | +79.2000 03/07/95 501264 |
| | | +214.1300 | +82.7400 05/30/95 503008 |
| | | +163.1500 | +74.6300 08/22/95 504681 |
| | | -19.1099 | +71.2900 12/12/95 506931 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN CORN
 PCI/KG - 0.037 BQ/KG (WET WT)
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------|-------------------------------------|-----------------------|------------------------------------------------------|
| 2116 RM-2 DAYTON TN | 17.75 MILES NNE | GAMMA SCAN (GELI) K-40 | +1917.5000 | +155.7000 07/25/95 502296 |
| 3209 OWEN HENDERSON FARM | 4.8 MILES WSW | GAMMA SCAN (GELI) K-40 PB-212 | +2245.3000 +3.5565 | +184.6500 07/18/95 502364 +3.4727 07/18/95 502364 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN CRAPPIE FLESH
PCI/GM - 0.037 BQ/G (DRY WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 2160 CHICKAMAUGA RES | TRM 471-530 | GAMMA SCAN (GELI) | |
| | BI-214 | +0.0228 | +0.0113 04/28/95 502327 |
| | | +0.0896 | +0.0165 10/09/95 506048 |
| | CS-134 | +0.0251 | +0.0052 10/09/95 506048 |
| | CS-137 | +0.0490 | +0.0070 04/28/95 502327 |
| | | +0.0706 | +0.0081 10/09/95 506048 |
| | K-40 | +15.2610 | +0.7802 04/28/95 502327 |
| | | +12.9690 | +0.6671 10/09/95 506048 |
| | PB-212 | +0.0032 | +0.0053 10/09/95 506048 |
| | PB-214 | +0.0348 | +0.0108 04/28/95 502327 |
| | | +0.0939 | +0.0136 10/09/95 506048 |
| 2161 WATTS BAR RES | TRM 530-602 | GAMMA SCAN (GELI) | |
| | BI-214 | +0.0503 | +0.0133 10/17/95 506052 |
| | CS-137 | +0.0624 | +0.0071 04/28/95 502331 |
| | | +0.0665 | +0.0076 10/17/95 506052 |
| | K-40 | +14.9980 | +0.7878 04/28/95 502331 |
| | | +13.6330 | +0.6481 10/17/95 506052 |
| | PB-214 | +0.0112 | +0.0115 10/17/95 506052 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN GRAB WELL WATER(Total)
PCI/L - 0.037 Bq/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|------------|-------------------------------------|
| 3115 LAYMAN FARM | 1.3 MILES SW | GROSS BETA | |
| | | +1.6764 | +0.5510 03/07/95 501244 |
| | | +0.9623 | +0.5058 05/30/95 502989 |
| | | +1.6799 | +0.5738 08/22/95 504662 |
| | | +1.5041 | +0.5390 12/12/95 506911 |
| | GAMMA SCAN (GELI) | | |
| | BI-214 | +314.0900 | +17.8770 03/07/95 501244 |
| | | +512.7500 | +26.8860 05/30/95 502989 |
| | | +511.2100 | +22.8070 08/22/95 504662 |
| | | +512.2700 | +24.7910 12/12/95 506911 |
| | K-40 | +1.9098 | +24.7040 03/07/95 501244 |
| | | +8.1669 | +23.1680 08/22/95 504662 |
| | PB-212 | +9.3227 | +2.6571 05/30/95 502989 |
| | PB-214 | +318.7900 | +16.6870 03/07/95 501244 |
| | | +530.3600 | +28.8780 05/30/95 502989 |
| | | +508.2900 | +27.4300 08/22/95 504662 |
| | | +520.5200 | +24.4590 12/12/95 506911 |
| | SR 89 | | |
| | | -1.1599 | +1.0500 03/07/95 501244 |
| | | +0.0310 | +1.1000 05/30/95 502989 |
| | | +1.0300 | +1.1400 08/22/95 504662 |
| | | +1.2800 | +1.4000 12/12/95 506911 |
| | SR 90 | | |
| | | +0.8320 | +0.5670 03/07/95 501244 |
| | | +0.0722 | +0.5600 05/30/95 502989 |
| | | -0.3239 | +0.6480 08/22/95 504662 |
| | | -0.0483 | +0.5590 12/12/95 506911 |
| | TRITIUM | | |
| | | +49.0000 | +74.7600 03/07/95 501244 |
| | | +7.4600 | +77.8800 05/30/95 502989 |
| | | -4.8899 | +72.9800 08/22/95 504662 |
| | | +184.0200 | +73.3000 12/12/95 506911 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN GREEN BEANS
 PCI/KG - 0.037 BQ/KG (WET WT)
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------|---------------------------|------------|-------------------------------------|
| 2116 RM-2 DAYTON TN | 17.75 MILES NNE | GAMMA SCAN (GELI) K-40 | +1809.4000 | +154.3800 06/27/95 502301 |
| 3168 2.0 MILES S | | GAMMA SCAN (GELI) K-40 | +1801.9000 | +148.7600 07/11/95 502365 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN MILK
 PCI/L - 0.037 BQ/L
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 2122 SHADDON FARM | 12.0 MILES NNE | IODINE-131 | |
| | | -0.0531 | +0.0732 01/11/95 500163 |
| | | -0.0147 | +0.0759 01/25/95 500402 |
| | | -0.0340 | +0.0754 02/08/95 500697 |
| | | -0.2380 | +0.1385 02/22/95 500949 |
| | | -0.0386 | +0.0855 03/08/95 501207 |
| | | -0.0155 | +0.0800 03/22/95 501467 |
| | | -0.0999 | +0.0752 04/05/95 501761 |
| | | -0.0159 | +0.0821 04/19/95 502008 |
| | | -0.0332 | +0.0736 05/03/95 502317 |
| | | -0.0934 | +0.0703 05/17/95 502626 |
| | | -0.0151 | +0.0780 05/31/95 502952 |
| | | -0.0563 | +0.0778 06/14/95 503202 |
| | | -0.0338 | +0.0750 06/28/95 503565 |
| | | -0.0205 | +0.0618 07/12/95 503832 |
| | | -0.0689 | +0.0678 07/26/95 504087 |
| | | -0.0104 | +0.0331 08/09/95 504370 |
| | | -0.0157 | +0.0811 08/23/95 504625 |
| | | +0.0408 | +0.0708 09/06/95 504882 |
| | | +0.0249 | +0.0899 09/20/95 505169 |
| | | +0.0227 | +0.0822 10/04/95 505427 |
| | | +0.0372 | +0.0527 10/18/95 505727 |
| | | +0.0460 | +0.0932 11/01/95 506029 |
| | | +0.0249 | +0.0901 11/15/95 506352 |
| | | +0.0236 | +0.0853 11/29/95 506615 |
| | | +0.0623 | +0.0751 12/13/95 506874 |
| | | +0.0114 | +0.0425 12/27/95 507126 |
| | | GAMMA SCAN (GELI) | |
| | | AC-228 | |
| | | +7.1044 | +8.3475 04/19/95 502008 |
| | | +0.7504 | +4.6158 05/03/95 502317 |
| | | +2.9785 | +3.5656 07/12/95 503832 |
| | | +6.4425 | +4.9011 09/20/95 505169 |
| | | +2.2732 | +5.8976 11/29/95 506615 |
| | | +2.4196 | +2.9736 01/11/95 500163 |
| | | +59.6650 | +7.5754 01/25/95 500402 |
| | | +155.0100 | +10.6810 02/08/95 500697 |
| | | +96.2090 | +9.2236 03/08/95 501207 |
| | | +30.4800 | +4.2754 03/22/95 501467 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN MILK
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 2122 SHADDON FARM | 12.0 MILES NNE | GAMMA SCAN (GELI) | |
| | | BI-214 | |
| | | +145.2000 | +10.5250 04/05/95 501761 |
| | | +4.8277 | +2.3906 04/19/95 502008 |
| | | +1.0781 | +2.9082 05/03/95 502317 |
| | | +38.2580 | +5.0903 05/17/95 502626 |
| | | +57.2330 | +5.2163 05/31/95 502952 |
| | | +5.4708 | +3.5007 06/14/95 503202 |
| | | +52.7190 | +5.0424 06/28/95 503565 |
| | | +182.0000 | +12.3020 07/12/95 503832 |
| | | +186.4100 | +12.4030 07/26/95 504087 |
| | | +1.0495 | +3.2508 08/09/95 504370 |
| | | +50.9240 | +5.7152 08/23/95 504625 |
| | | +4.8271 | +2.4500 09/06/95 504882 |
| | | +0.2701 | +2.3524 09/20/95 505169 |
| | | +17.8220 | +3.8845 10/04/95 505427 |
| | | +10.1410 | +3.5028 10/18/95 505727 |
| | | +3.0526 | +2.9813 11/01/95 506029 |
| | | +151.0900 | +9.7376 11/15/95 506352 |
| | | +105.4700 | +8.0379 11/29/95 506615 |
| | | +2.4887 | +2.5967 12/13/95 506874 |
| | | +12.9000 | +3.5981 12/27/95 507126 |
| | | +3.4120 | +1.2582 08/09/95 504370 |
| | CS-137 | | |
| | K-40 | | |
| | | +1510.9000 | +96.6240 01/11/95 500163 |
| | | +1196.5000 | +78.9330 01/25/95 500402 |
| | | +1070.3000 | +77.5120 02/08/95 500697 |
| | | +1404.7000 | +95.2880 02/22/95 500949 |
| | | +1095.2000 | +77.9800 03/08/95 501207 |
| | | +1210.0000 | +83.4960 03/22/95 501467 |
| | | +812.9700 | +60.6440 04/05/95 501761 |
| | | +1364.3000 | +89.2690 04/19/95 502008 |
| | | +1460.5000 | +97.8400 05/03/95 502317 |
| | | +1276.8000 | +94.2040 05/17/95 502626 |
| | | +1162.2000 | +172.0900 05/31/95 502952 |
| | | +1301.4000 | +76.5130 06/14/95 503202 |
| | | +1143.6000 | +74.3010 06/28/95 503565 |
| | | +886.7300 | +76.9880 07/12/95 503832 |
| | | +984.6000 | +68.7120 07/26/95 504087 |
| | | +1575.7000 | +121.1600 08/09/95 504370 |
| | | +955.7500 | +82.8730 08/23/95 504625 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN MILK
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 2122 SHADDON FARM | 12.0 MILES NNE | GAMMA SCAN (GELI) | |
| | K-40 | +1334.1000 | +86.6980 09/06/95 504882 |
| | | +1302.0000 | +96.8180 09/20/95 505169 |
| | | +1280.1000 | +97.8520 10/04/95 505427 |
| | | +1316.0000 | +104.6400 10/18/95 505727 |
| | | +1271.6000 | +94.3150 11/01/95 506029 |
| | | +908.3500 | +73.6360 11/15/95 506352 |
| | | +1052.3000 | +79.5530 11/29/95 506615 |
| | | +1280.2000 | +104.6400 12/13/95 506874 |
| | | +1338.1000 | +100.9000 12/27/95 507126 |
| | PB-212 | +2.1022 | +3.1340 01/11/95 500163 |
| | | +0.9191 | +1.9577 02/08/95 500697 |
| | | +3.1834 | +2.5630 02/22/95 500949 |
| | | +0.2651 | +1.9904 03/08/95 501207 |
| | | +2.6650 | +2.4887 03/22/95 501467 |
| | | +1.7177 | +2.0023 04/19/95 502008 |
| | | +0.2687 | +2.0714 05/03/95 502317 |
| | | +0.9704 | +2.0030 05/17/95 502626 |
| | | +1.3821 | +1.9581 05/31/95 502952 |
| | | +0.6594 | +2.3044 06/14/95 503202 |
| | | +1.1171 | +1.6867 06/28/95 503565 |
| | | +0.7598 | +2.2408 08/09/95 504370 |
| | | +1.5059 | +2.7962 09/06/95 504882 |
| | | +0.6818 | +1.8503 10/04/95 505427 |
| | | +2.7844 | +2.3614 11/15/95 506352 |
| | | +1.4097 | +1.9883 11/29/95 506615 |
| | | +0.9251 | +2.6375 12/13/95 506874 |
| | | +1.6673 | +2.7247 12/27/95 507126 |
| | PB-214 | +54.1920 | +4.8161 01/25/95 500402 |
| | | +142.2000 | +12.8570 02/08/95 500697 |
| | | +97.4750 | +7.8634 03/08/95 501207 |
| | | +28.5520 | +3.2849 03/22/95 501467 |
| | | +161.4200 | +11.4380 04/05/95 501761 |
| | | +1.7752 | +2.6186 05/03/95 502317 |
| | | +38.2790 | +4.1040 05/17/95 502626 |
| | | +52.1930 | +5.9292 05/31/95 502952 |
| | | +61.7540 | +6.7022 06/28/95 503565 |
| | | +188.3800 | +12.2790 07/12/95 503832 |
| | | +184.8000 | +12.8640 07/26/95 504087 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN MILK
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-----------------------------|-------------------------------------|
| 2122 SHADDON FARM | 12.0 MILES NNE | GAMMA SCAN (GELI) PB-214 | |
| | | +48.6460 | +6.7334 08/23/95 504625 |
| | | +7.3644 | +3.8092 09/06/95 504882 |
| | | +1.6889 | +2.1536 09/20/95 505169 |
| | | +11.1460 | +4.1173 10/04/95 505427 |
| | | +12.2390 | +3.7582 10/18/95 505727 |
| | | +152.2000 | +10.7310 11/15/95 506352 |
| | | +90.8790 | +7.5075 11/29/95 506615 |
| | | +1.2908 | +2.4478 12/13/95 506874 |
| | TL-208 | +10.3700 | +3.3971 12/27/95 507126 |
| | | +1.6876 | +1.2671 01/11/95 500163 |
| | | +1.7855 | +1.3218 04/19/95 502008 |
| | | +0.2963 | +1.1038 05/03/95 502317 |
| | | +0.8200 | +0.9540 05/17/95 502626 |
| | | +0.4073 | +1.1655 07/12/95 503832 |
| | | +1.9351 | +1.8887 09/06/95 504882 |
| | | +3.5176 | +1.7443 09/20/95 505169 |
| | | +2.0630 | +1.6460 10/18/95 505727 |
| | | +4.3188 | +1.8790 11/29/95 506615 |
| | | +0.3400 | +0.9838 12/13/95 506874 |
| | SR 89 | | |
| | | -0.0527 | +0.8890 03/08/95 501207 |
| | | +0.3610 | +0.8490 05/31/95 502952 |
| | | +1.9500 | +1.0100 08/23/95 504625 |
| | | +0.7300 | +0.8530 12/13/95 506874 |
| | SR 90 | | |
| | | +2.1100 | +0.6140 03/08/95 501207 |
| | | +1.1800 | +0.5680 05/31/95 502952 |
| | | +0.2550 | +0.6490 08/23/95 504625 |
| | | +0.6140 | +0.5690 12/13/95 506874 |
| 2202 BILDERBACK FARM | 43.0 MILES NE | IODINE-131 | |
| | | -0.0105 | +0.0334 01/11/95 500166 |
| | | +0.0407 | +0.0527 01/25/95 500413 |
| | | +0.0073 | +0.0468 02/07/95 500701 |
| | | -0.0109 | +0.0347 02/22/95 500961 |
| | | -0.0167 | +0.0394 03/07/95 501210 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN MILK
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|------------|-------------------------------------|
| 2202 BILDERBACK FARM | 43.0 MILES NE | IODINE-131 | |
| | | -0.0148 | +0.0471 03/21/95 501478 |
| | | -0.0245 | +0.0737 04/04/95 501764 |
| | | +0.0123 | +0.0462 04/18/95 502020 |
| | | +0.0345 | +0.0489 05/03/95 502335 |
| | | +0.0371 | +0.0526 05/16/95 502638 |
| | | +0.0121 | +0.0453 05/30/95 502956 |
| | | -0.0139 | +0.0443 06/27/95 503568 |
| | | +0.0001 | +0.0715 07/11/95 503843 |
| | | +0.0071 | +0.0454 07/25/95 504091 |
| | | -0.0114 | +0.0362 08/08/95 504381 |
| | | +0.0356 | +0.0505 08/22/95 504628 |
| | | +0.0070 | +0.0449 09/05/95 504894 |
| | | +0.0331 | +0.0553 09/19/95 505173 |
| | | -0.0122 | +0.0389 10/03/95 505438 |
| | | +0.0690 | +0.0986 10/17/95 505731 |
| | | +0.0395 | +0.0560 10/31/95 506055 |
| | | +0.0487 | +0.0987 11/14/95 506355 |
| | | +0.0387 | +0.0549 11/28/95 506626 |
| | | +0.0116 | +0.0432 12/12/95 506877 |
| | | -0.0118 | +0.0375 12/26/95 507137 |
| | GAMMA SCAN (GELI) | | |
| | AC-228 | +5.8941 | +4.2102 04/18/95 502020 |
| | BI-214 | +4.4354 | +10.4340 01/11/95 500166 |
| | | +0.4333 | +2.6173 01/25/95 500413 |
| | | +8.8783 | +4.6207 02/07/95 500701 |
| | | +1.5955 | +2.3073 02/22/95 500961 |
| | | +34.6240 | +5.8706 04/04/95 501764 |
| | | +6.6985 | +9.4483 05/16/95 502638 |
| | | +0.6126 | +7.6489 07/11/95 503843 |
| | | +8.2838 | +8.4593 08/08/95 504381 |
| | | +2.0067 | +3.5507 08/22/95 504628 |
| | | +1.6656 | +8.3848 09/19/95 505173 |
| | | +11.4110 | +12.4910 10/03/95 505438 |
| | | +9.4886 | +4.7968 10/17/95 505731 |
| | | +4.1656 | +2.5144 11/14/95 506355 |
| | | +4.5112 | +2.9084 11/28/95 506626 |
| | | +5.6329 | +3.2389 12/12/95 506877 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN MILK
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 2202 BILDERBACK FARM | 43.0 MILES NE | GAMMA SCAN (GELI) | |
| | BI-214 | +21.0970 | +3.4439 12/26/95 507137 |
| | K-40 | +1334.2000 | +89.4500 01/11/95 500166 |
| | | +1319.3000 | +97.8820 01/25/95 500413 |
| | | +1516.2000 | +127.5800 02/07/95 500701 |
| | | +1392.9000 | +98.0880 02/22/95 500961 |
| | | +1257.3000 | +84.4330 03/07/95 501210 |
| | | +1359.8000 | +85.0180 03/21/95 501478 |
| | | +1391.6000 | +97.9950 04/04/95 501764 |
| | | +1271.3000 | +85.5180 04/18/95 502020 |
| | | +1263.2000 | +74.1530 05/03/95 502335 |
| | | +1250.0000 | +82.5470 05/16/95 502638 |
| | | +1347.7000 | +98.0940 05/30/95 502956 |
| | | +1370.8000 | +93.2760 06/27/95 503568 |
| | | +1532.0000 | +104.2200 07/11/95 503843 |
| | | +1346.9000 | +99.1170 07/25/95 504091 |
| | | +1374.0000 | +90.6610 08/08/95 504381 |
| | | +1462.0000 | +100.5100 08/22/95 504628 |
| | | +1344.6000 | +94.5730 09/05/95 504894 |
| | | +1444.4000 | +101.6200 09/19/95 505173 |
| | | +1346.0000 | +85.6390 10/03/95 505438 |
| | | +1393.1000 | +106.5100 10/17/95 505731 |
| | | +1297.3000 | +115.9700 10/31/95 506055 |
| | | +1382.6000 | +89.7990 11/14/95 506355 |
| | | +1350.6000 | +97.9990 11/28/95 506626 |
| | | +1357.5000 | +81.8320 12/12/95 506877 |
| | | +1333.2000 | +96.7090 12/26/95 507137 |
| | PB-212 | +1.5182 | +1.4060 02/22/95 500961 |
| | | +5.8657 | +2.8237 07/11/95 503843 |
| | | +1.0474 | +2.6396 08/08/95 504381 |
| | PB-214 | +0.6194 | +3.4561 01/25/95 500413 |
| | | +25.0680 | +5.5692 04/04/95 501764 |
| | | +3.5200 | +3.0054 09/05/95 504894 |
| | | +1.5575 | +3.1339 10/03/95 505438 |
| | | +12.2820 | +4.0640 11/14/95 506355 |
| | | +4.9661 | +3.2117 11/28/95 506626 |
| | | +17.2400 | +5.7108 12/26/95 507137 |
| | TL-208 | +0.2099 | +1.5918 06/27/95 503568 |
| | | +0.5829 | +0.8795 07/11/95 503843 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN MILK
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|---------------|-----------------------|----------|-------------------------------------|
| 2202 BILDERBACK FARM | 43.0 MILES NE | SR 89 | -0.2659 | +0.8490 03/07/95 501210 |
| | | | -0.3449 | +0.8810 05/30/95 502956 |
| | | | +0.4730 | +0.9240 08/22/95 504628 |
| | | | +1.2300 | +1.0700 12/12/95 506877 |
| | | SR 90 | +1.2700 | +0.5650 03/07/95 501210 |
| | | | +1.1400 | +0.5780 05/30/95 502956 |
| | | | +0.5470 | +0.5950 08/22/95 504628 |
| | | | +0.4130 | +0.6870 12/12/95 506877 |
| | | | | |
| | | | | |
| | | | | |
| 2203 CRUMLEY FARM | 16.0 MILES NE | IODINE-131 | -0.0161 | +0.0380 01/11/95 500167 |
| | | | -0.0723 | +0.0712 01/25/95 500414 |
| | | | -0.0542 | +0.0749 02/08/95 500702 |
| | | | +0.0151 | +0.0966 02/22/95 500962 |
| | | | +0.0308 | +0.0514 03/08/95 501211 |
| | | | -0.0168 | +0.0397 03/22/95 501479 |
| | | | -0.0113 | +0.0359 04/05/95 501766 |
| | | | +0.0076 | +0.0490 04/19/95 502021 |
| | | | -0.0165 | +0.0390 05/03/95 502336 |
| | | | +0.0001 | +0.0737 05/17/95 502639 |
| | | | +0.0425 | +0.0737 05/31/95 502957 |
| | | | +0.0117 | +0.0436 06/14/95 503214 |
| | | | -0.0524 | +0.0723 06/28/95 503569 |
| | | | +0.0121 | +0.0451 07/12/95 503844 |
| | | | -0.0355 | +0.0788 07/26/95 504092 |
| | | | +0.0306 | +0.0511 08/09/95 504382 |
| | | | +0.0237 | +0.0858 08/23/95 504629 |
| | | | -0.0151 | +0.0781 09/06/95 504895 |
| | | | -0.0609 | +0.0841 09/20/95 505174 |
| | | | +0.0218 | +0.0724 10/04/95 505439 |
| | | | +0.0635 | +0.0600 10/18/95 505732 |
| | | | -0.0189 | +0.0446 11/01/95 506056 |
| | | | +0.0001 | +0.0724 11/15/95 506356 |
| | | | +0.0071 | +0.0457 11/29/95 506627 |
| | | | +0.0418 | +0.0846 12/13/95 506879 |
| | | | +0.0312 | +0.0521 12/27/95 507138 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN MILK
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 2203 CRUMLEY FARM | 16.0 MILES NE | GAMMA SCAN (GELI) | |
| | | BI-214 | |
| | | +5.4938 | +3.5736 01/25/95 500414 |
| | | +1.0157 | +2.7784 05/31/95 502957 |
| | | +4.3689 | +4.2107 06/14/95 503214 |
| | | +10.2720 | +5.7853 09/06/95 504895 |
| | | +3.3632 | +4.7300 10/04/95 505439 |
| | | +16.8540 | +4.1996 10/18/95 505732 |
| | | +8.3071 | +4.7104 11/15/95 506356 |
| | | +16.5170 | +4.9524 11/29/95 506627 |
| | K-40 | +1306.2000 | +114.0500 01/11/95 500167 |
| | | +1315.4000 | +101.5200 01/25/95 500414 |
| | | +1391.7000 | +122.1900 02/08/95 500702 |
| | | +1260.1000 | +87.6620 02/22/95 500962 |
| | | +1342.2000 | +93.9190 03/08/95 501211 |
| | | +1407.7000 | +99.8630 03/22/95 501479 |
| | | +1294.7000 | +85.8170 04/05/95 501766 |
| | | +1309.8000 | +93.6780 04/19/95 502021 |
| | | +1171.3000 | +89.4430 05/03/95 502336 |
| | | +1202.0000 | +103.8000 05/17/95 502639 |
| | | +1376.8000 | +93.7260 05/31/95 502957 |
| | | +1395.5000 | +99.5560 06/14/95 503214 |
| | | +1436.1000 | +96.0340 06/28/95 503569 |
| | | +1354.0000 | +107.6800 07/12/95 503844 |
| | | +1359.1000 | +95.3890 07/26/95 504092 |
| | | +1463.5000 | +140.7200 08/09/95 504382 |
| | | +1503.2000 | +120.1900 08/23/95 504629 |
| | | +1515.8000 | +116.7500 09/06/95 504895 |
| | | +1648.4000 | +116.4600 09/20/95 505174 |
| | | +1363.9000 | +94.2320 10/04/95 505439 |
| | | +1502.2000 | +94.9000 10/18/95 505732 |
| | | +1401.7000 | +107.4500 11/01/95 506056 |
| | | +1440.8000 | +98.3240 11/15/95 506356 |
| | | +1498.0000 | +108.5200 11/29/95 506627 |
| | | +1420.6000 | +92.1380 12/13/95 506879 |
| | | +1348.6000 | +114.3400 12/27/95 507138 |
| | PB-212 | +3.5216 | +2.1516 02/22/95 500962 |
| | PB-214 | +2.2557 | +4.1475 09/06/95 504895 |
| | | +13.7460 | +3.4530 10/18/95 505732 |
| | TL-208 | +0.1658 | +1.4487 05/31/95 502957 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN MILK
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO | |
|-----------------------------------|-----------------------|----------|-------------------------------------|--|
| 2203 CRUMLEY FARM 16.0 MILES NE | SR 89 | +0.1230 | +0.9390 03/08/95 501211 | |
| | | +0.7800 | +1.0600 05/31/95 502957 | |
| | | +0.8480 | +1.1400 08/23/95 504629 | |
| | | +1.0900 | +1.0100 12/13/95 506879 | |
| | SR 90 | +1.3400 | +0.6220 03/08/95 501211 | |
| | | +0.7080 | +0.6960 05/31/95 502957 | |
| | | +1.0900 | +0.7380 08/23/95 504629 | |
| | | +1.0300 | +0.6610 12/13/95 506879 | |
| | IODINE-131 | +0.0073 | +0.0470 01/10/95 500200 | |
| | | -0.0570 | +0.0786 01/24/95 500444 | |
| | | +0.0074 | +0.0473 02/07/95 500734 | |
| | | -0.0646 | +0.0650 02/21/95 500992 | |
| | | +0.0450 | +0.0780 03/07/95 501245 | |
| | | +0.0078 | +0.0502 03/21/95 501511 | |
| | | +0.0254 | +0.0842 04/04/95 501798 | |
| | | -0.0137 | +0.0437 04/18/95 502051 | |
| | | +0.0113 | +0.0424 05/02/95 502382 | |
| | | +0.0382 | +0.0541 05/16/95 502678 | |
| 3115 LAYMAN FARM 1.3 MILES SW | | +0.0355 | +0.0503 05/30/95 502990 | |
| | | -0.0115 | +0.0367 06/13/95 503253 | |
| | | -0.0649 | +0.0577 06/27/95 503602 | |
| | | +0.0136 | +0.0507 07/11/95 503875 | |
| | | +0.0073 | +0.0466 07/25/95 504124 | |
| | | +0.0349 | +0.0495 08/08/95 504412 | |
| | | +0.0043 | +0.0904 08/22/95 504663 | |
| | | +0.0230 | +0.0831 09/05/95 504927 | |
| | | +0.0279 | +0.1010 09/19/95 505206 | |
| | | -0.0171 | +0.0881 10/03/95 505469 | |
| | | +0.0131 | +0.0490 10/17/95 505765 | |
| | | +0.0085 | +0.0543 10/31/95 506094 | |
| | | -0.0199 | +0.0471 11/14/95 506388 | |
| | | +0.0368 | +0.0522 11/14/95 506389 | |
| | | -0.0171 | +0.0403 11/28/95 506658 | |
| | | +0.0076 | +0.0486 12/12/95 506913 | |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN MILK
 PCI/L - 0.037 BQ/L
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|------------|-------------------------------------|
| 3115 LAYMAN FARM | 1.3 MILES SW | IODINE-131 | |
| | | +0.0302 | +0.0505 12/26/95 507170 |
| | GAMMA SCAN (GELI) | | |
| | BI-214 | +106.8100 | +8.4689 01/24/95 500444 |
| | | +0.8537 | +2.9877 04/04/95 501798 |
| | | +1.3743 | +3.1252 05/30/95 502990 |
| | | +3.5962 | +2.9194 06/13/95 503253 |
| | | +0.8293 | +2.2778 09/05/95 504927 |
| | | +10.2710 | +3.5676 10/03/95 505469 |
| | | +1.6241 | +3.0172 10/17/95 505765 |
| | | +128.8900 | +10.1440 11/14/95 506388 |
| | | +44.6110 | +5.6899 11/14/95 506389 |
| | | +7.2322 | +3.0286 11/28/95 506658 |
| | | +38.0730 | +5.3968 12/12/95 506913 |
| | | +1.0378 | +2.9527 12/26/95 507170 |
| | K-40 | +1437.0000 | +107.1100 01/10/95 500200 |
| | | +984.6900 | +80.2000 01/24/95 500444 |
| | | +1426.7000 | +93.3850 02/07/95 500734 |
| | | +1245.7000 | +97.8010 02/21/95 500992 |
| | | +1387.8000 | +92.8630 03/07/95 501245 |
| | | +1426.1000 | +94.7300 03/21/95 501511 |
| | | +1391.9000 | +92.5710 04/04/95 501798 |
| | | +1369.1000 | +85.4280 04/18/95 502051 |
| | | +1397.1000 | +434.2600 05/02/95 502382 |
| | | +1357.0000 | +88.2680 05/16/95 502678 |
| | | +1430.2000 | +96.3690 05/30/95 502990 |
| | | +1225.7000 | +91.8800 06/13/95 503253 |
| | | +1269.8000 | +198.0800 06/27/95 503602 |
| | | +1429.2000 | +82.0890 07/11/95 503875 |
| | | +1530.6000 | +98.8250 07/25/95 504124 |
| | | +1226.5000 | +77.7860 08/08/95 504412 |
| | | +1165.6000 | +85.0280 08/22/95 504663 |
| | | +1275.6000 | +81.8070 09/05/95 504927 |
| | | +1448.4000 | +91.9120 09/19/95 505206 |
| | | +1417.2000 | +94.7110 10/03/95 505469 |
| | | +1428.6000 | +95.4750 10/17/95 505765 |
| | | +1585.9000 | +104.9400 10/31/95 506094 |
| | | +1016.4000 | +68.8520 11/14/95 506388 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN MILK
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|---------------------------|------------|-------------------------------------|
| 3115 LAYMAN FARM 1.3 MILES SW | GAMMA SCAN (GELI) K-40 | +1110.5000 | +78.6430 11/14/95 506389 |
| | | +1309.5000 | +89.4290 11/28/95 506658 |
| | | +1060.3000 | +77.4460 12/12/95 506913 |
| | | +1266.4000 | +80.3590 12/26/95 507170 |
| | PB-212 | +0.9499 | +2.0368 01/24/95 500444 |
| | | +0.3240 | +1.7140 02/21/95 500992 |
| | | +1.9182 | +2.7127 04/18/95 502051 |
| | | +0.9144 | +1.6492 07/25/95 504124 |
| | PB-214 | +3.0280 | +2.1052 11/14/95 506389 |
| | | +93.4400 | +6.3101 01/24/95 500444 |
| | | +0.1854 | +1.5037 02/21/95 500992 |
| | | +4.9726 | +3.3265 10/03/95 505469 |
| | TL-208 | +3.5659 | +2.7510 10/17/95 505765 |
| | | +136.4700 | +9.1377 11/14/95 506388 |
| | | +35.6820 | +4.6232 11/14/95 506389 |
| | | +36.3090 | +3.8134 12/12/95 506913 |
| | SR 89 | +0.2354 | +1.6305 03/21/95 501511 |
| | | +1.4512 | +1.3845 04/04/95 501798 |
| | SR 90 | +0.4940 | +0.8680 03/07/95 501245 |
| | | -1.0399 | +1.0300 05/30/95 502990 |
| | | +0.0244 | +0.9030 08/22/95 504663 |
| 3116 MULLINS FARM 3.7 M. ESE | IODINE-131 | +1.3800 | +0.5820 03/07/95 501245 |
| | | +3.3400 | +0.7160 05/30/95 502990 |
| | | +1.7600 | +0.6120 08/22/95 504663 |
| | | -0.0114 | +0.0362 01/11/95 500203 |
| | | +0.0829 | +0.0780 01/25/95 500445 |
| | | +0.0325 | +0.0461 02/07/95 500737 |
| | | +0.0071 | +0.0452 02/21/95 500993 |
| | | +0.0116 | +0.0436 03/07/95 501248 |
| | | -0.0128 | +0.0408 03/21/95 501512 |
| | | +0.0120 | +0.0448 04/04/95 501801 |
| | | +0.0077 | +0.0497 04/18/95 502052 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN MILK
 PCI/L - 0.037 BQ/L
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|------------|-----------------------|------------|-------------------------------------|
| 3116 MULLINS FARM | 3.7 M. ESE | IODINE-131 | -0.0163 | +0.0386 05/02/95 502385 |
| | | | +0.0001 | +0.0769 05/16/95 502679 |
| | | | -0.0359 | +0.0796 05/30/95 502993 |
| | | | -0.0567 | +0.0783 06/13/95 503254 |
| | | | -0.0113 | +0.0360 06/27/95 503605 |
| | | | +0.0001 | +0.0661 07/11/95 503876 |
| | | | +0.0069 | +0.0441 07/25/95 504128 |
| | | | -0.0171 | +0.0404 08/08/95 504413 |
| | | | +0.0235 | +0.0778 08/22/95 504666 |
| | | | +0.0213 | +0.0708 09/05/95 504928 |
| | | | -0.0677 | +0.0601 09/19/95 505209 |
| | | | +0.0348 | +0.0581 10/03/95 505470 |
| | | | +0.0608 | +0.0634 10/17/95 505768 |
| | | | -0.0125 | +0.0398 10/31/95 506095 |
| | | | +0.0240 | +0.0796 11/14/95 506392 |
| | | | +0.0440 | +0.0764 11/28/95 506659 |
| | | | -0.0223 | +0.0674 12/12/95 506916 |
| | | | +0.0325 | +0.0542 12/26/95 507171 |
| | | GAMMA SCAN (GELI) | | |
| | | AC-228 | +4.7147 | +4.9838 07/25/95 504128 |
| | | | +4.9597 | +4.0082 12/12/95 506916 |
| | | BI-214 | +5.8043 | +2.6788 01/25/95 500445 |
| | | | +1.4184 | +2.1929 06/13/95 503254 |
| | | | +0.5869 | +2.5502 07/25/95 504128 |
| | | | +0.6685 | +3.1840 08/22/95 504666 |
| | | | +0.2680 | +2.5840 09/05/95 504928 |
| | | | +1.7137 | +2.8389 10/03/95 505470 |
| | | | +2.0323 | +2.1948 10/17/95 505768 |
| | | | +6.0913 | +3.0842 10/31/95 506095 |
| | | | +9.7662 | +4.1802 11/14/95 506392 |
| | | | +5.6042 | +3.2773 11/28/95 506659 |
| | | | +1.4688 | +2.4795 12/26/95 507171 |
| | | | +2.7912 | +1.0285 10/31/95 506095 |
| | | CS-137 | +1410.6000 | +103.7600 01/11/95 500203 |
| | | K-40 | +1535.8000 | +89.0570 01/25/95 500445 |
| | | | +1526.5000 | +114.5100 02/07/95 500737 |
| | | | +1477.5000 | +100.0700 02/21/95 500993 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN MILK
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|---------------------------|-------------------------------------|
| 3116 MULLINS FARM | 3.7 M. ESE | GAMMA SCAN (GELI) K-40 | |
| | | +1345.0000 | +95.8260 03/07/95 501248 |
| | | +1395.2000 | +113.2300 03/21/95 501512 |
| | | +1581.2000 | +106.5600 04/04/95 501801 |
| | | +1430.1000 | +88.9990 04/18/95 502052 |
| | | +1328.9000 | +94.6810 05/02/95 502385 |
| | | +1470.2000 | +85.2070 05/16/95 502679 |
| | | +1341.4000 | +95.9050 05/30/95 502993 |
| | | +1447.5000 | +209.9600 06/13/95 503254 |
| | | +1433.3000 | +98.1650 06/27/95 503605 |
| | | +1226.1000 | +86.8280 07/11/95 503876 |
| | | +1364.2000 | +88.0860 07/25/95 504128 |
| | | +1393.6000 | +100.6900 08/08/95 504413 |
| | | +1567.2000 | +103.4400 08/22/95 504666 |
| | | +1356.2000 | +94.2070 09/05/95 504928 |
| | | +1348.6000 | +90.7570 09/19/95 505209 |
| | | +1380.9000 | +98.0460 10/03/95 505470 |
| | | +1385.0000 | +86.4380 10/17/95 505768 |
| | | +1432.5000 | +90.6780 10/31/95 506095 |
| | | +1451.6000 | +90.1440 11/14/95 506392 |
| | | +1314.9000 | +87.2270 11/28/95 506659 |
| | | +1476.3000 | +102.6800 12/12/95 506916 |
| | | +1426.8000 | +107.6700 12/26/95 507171 |
| | PB-212 | +3.3643 | +2.4046 10/31/95 506095 |
| | PB-214 | +2.1515 | +2.1221 06/13/95 503254 |
| | | +2.2281 | +2.9086 10/31/95 506095 |
| | | +8.6048 | +3.5089 11/14/95 506392 |
| | | +1.9360 | +2.8257 11/28/95 506659 |
| | | +2.2931 | +3.5226 12/26/95 507171 |
| | TL-208 | +0.4688 | +0.9690 08/22/95 504666 |
| | | +2.3039 | +1.2464 09/19/95 505209 |
| | SR 89 | | |
| | | +0.5370 | +0.8470 03/07/95 501248 |
| | | +0.8080 | +1.0000 05/30/95 502993 |
| | | +0.2950 | +0.9550 08/22/95 504666 |
| | | +1.5400 | +1.0600 12/12/95 506916 |
| | SR 90 | | |
| | | +1.2500 | +0.5660 03/07/95 501248 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN MILK
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR TERM | DATE COLLECTED | LAB NO |
|-----------------------------------|-----------------------|------------|---------------|-------------------|--------|
| 3116 MULLINS FARM | 3.7 M. ESE | SR 90 | | | |
| | | +1.4900 | +0.6630 | 05/30/95 | 502993 |
| | | +1.5600 | +0.6380 | 08/22/95 | 504666 |
| | | +0.7240 | +0.6940 | 12/12/95 | 506916 |
| 3119 NORTON FARM | 4.1 MILES ESE | IODINE-131 | | | |
| | | +0.0069 | +0.0444 | 01/11/95 | 500204 |
| | | -0.0107 | +0.0341 | 01/25/95 | 500446 |
| | | +0.0070 | +0.0448 | 02/07/95 | 500738 |
| | | +0.0717 | +0.0921 | 02/21/95 | 500994 |
| | | -0.0162 | +0.0384 | 03/07/95 | 501249 |
| | | +0.0076 | +0.0485 | 03/21/95 | 501513 |
| | | -0.0164 | +0.0844 | 04/04/95 | 501802 |
| | | +0.0326 | +0.0545 | 04/18/95 | 502054 |
| | | -0.0212 | +0.0638 | 05/02/95 | 502386 |
| | | +0.0119 | +0.0445 | 05/16/95 | 502680 |
| | | +0.0001 | +0.0713 | 05/30/95 | 502994 |
| | | +0.0001 | +0.0703 | 06/13/95 | 503255 |
| | | -0.0207 | +0.0625 | 06/27/95 | 503606 |
| | | -0.0111 | +0.0355 | 07/11/95 | 503877 |
| | | -0.0209 | +0.0630 | 07/25/95 | 504129 |
| | | +0.0001 | +0.0652 | 08/08/95 | 504414 |
| | | -0.0128 | +0.0409 | 08/22/95 | 504667 |
| | | -0.0191 | +0.0451 | 09/19/95 | 505211 |
| | | +0.0074 | +0.0473 | 10/03/95 | 505472 |
| | | +0.1128 | +0.1041 | 10/17/95 | 505769 |
| | | +0.0349 | +0.0584 | 10/31/95 | 506096 |
| | | +0.0372 | +0.0527 | 11/14/95 | 506393 |
| | | +0.0349 | +0.0495 | 11/28/95 | 506660 |
| | | -0.0677 | +0.0602 | 12/12/95 | 506917 |
| | | +0.0206 | +0.0683 | 12/26/95 | 507172 |
| | GAMMA SCAN (GELI) | | | | |
| | BI-214 | +7.2665 | +5.7606 | 01/25/95 | 500446 |
| | | +0.4699 | +3.7717 | 02/21/95 | 500994 |
| | | +66.3480 | +8.0235 | 05/02/95 | 502386 |
| | | +5.1746 | +3.3689 | 06/27/95 | 503606 |
| | | +1.9453 | +2.9698 | 07/11/95 | 503877 |
| | | +1.4372 | +2.3444 | 10/17/95 | 505769 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN MILK
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 3119 NORTON FARM | 4.1 MILES ESE | GAMMA SCAN (GELI) | |
| | BI-214 | +1.6374 | +3.0959 10/31/95 506096 |
| | | +1.3353 | +2.4775 11/28/95 506660 |
| | K-40 | +1449.5000 | +97.7930 01/11/95 500204 |
| | | +1513.5000 | +106.3700 01/25/95 500446 |
| | | +1370.3000 | +126.3200 02/07/95 500738 |
| | | +1599.8000 | +92.6570 02/21/95 500994 |
| | | +1346.7000 | +369.7600 03/07/95 501249 |
| | | +1493.9000 | +114.1200 03/21/95 501513 |
| | | +1434.9000 | +104.0300 04/04/95 501802 |
| | | +1445.5000 | +119.8600 04/18/95 502054 |
| | | +1103.5000 | +85.2060 05/02/95 502386 |
| | | +1222.4000 | +97.3260 05/16/95 502680 |
| | | +1386.9000 | +82.7520 05/30/95 502994 |
| | | +1397.7000 | +92.4340 06/13/95 503255 |
| | | +1408.0000 | +99.5500 06/27/95 503606 |
| | | +1339.9000 | +93.8410 07/11/95 503877 |
| | | +1332.2000 | +84.6760 07/25/95 504129 |
| | | +1383.6000 | +102.3500 08/08/95 504414 |
| | | +1480.3000 | +100.3400 08/22/95 504667 |
| | | +1500.2000 | +106.1900 09/05/95 504929 |
| | | +1482.1000 | +104.5500 09/19/95 505211 |
| | | +1426.4000 | +99.9800 10/03/95 505472 |
| | | +1843.6000 | +112.2600 10/17/95 505769 |
| | | +1312.4000 | +87.8700 10/31/95 506096 |
| | | +1451.9000 | +96.9430 11/14/95 506393 |
| | | +1325.5000 | +93.7710 11/28/95 506660 |
| | | +1317.4000 | +162.5600 12/12/95 506917 |
| | | +1016.5000 | +71.3070 12/26/95 507172 |
| | PB-212 | +0.8775 | +1.3413 03/07/95 501249 |
| | | +2.3776 | +2.1165 05/16/95 502680 |
| | | +1.5212 | +2.2970 06/27/95 503606 |
| | | +0.4901 | +2.0110 07/11/95 503877 |
| | | +0.1633 | +1.9295 10/03/95 505472 |
| | | +0.3555 | +1.5327 10/17/95 505769 |
| | | +2.3071 | +2.1013 10/31/95 506096 |
| | | +0.7934 | +1.4736 12/26/95 507172 |
| | PB-214 | +0.4324 | +3.4568 01/25/95 500446 |
| | | +50.1810 | +6.8593 05/02/95 502386 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN MILK
 PCI/L - 0.037 BQ/L
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO | |
|-----------------------------------|---------------|---------------------------------------|----------|-------------------------------------|-----------------|
| 3119 NORTON FARM | 4.1 MILES ESE | GAMMA SCAN (GELI) PB-214 TL-208 | +6.4805 | +2.9502 | 10/17/95 505769 |
| | | | +0.6805 | +1.5705 | 02/21/95 500994 |
| | | | +1.6803 | +1.4684 | 07/11/95 503877 |
| | | SR 89 | | | |
| | | | -0.0437 | +0.9650 | 03/07/95 501249 |
| | | | -0.7829 | +1.3300 | 05/30/95 502994 |
| | | | +0.3590 | +1.1600 | 08/22/95 504667 |
| | | | +1.6000 | +1.1000 | 12/12/95 506917 |
| | | SR 90 | | | |
| | | | +1.3600 | +0.6360 | 03/07/95 501249 |
| | | | +2.4500 | +0.8930 | 05/30/95 502994 |
| | | | +1.4500 | +0.7550 | 08/22/95 504667 |
| | | | +1.1900 | +0.7230 | 12/12/95 506917 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN MILK QC-TN
PCI/L - 0.037 BQ/L
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 3115 LAYMAN FARM | 1.3 MILES SW | GAMMA SCAN (GELI) | |
| | | BA-140 | |
| | | +0.2000 | +2.0500 01/10/95 500201 |
| | | -0.8999 | +2.3500 02/07/95 500735 |
| | | +0.9000 | +2.0000 03/07/95 501246 |
| | | -2.9999 | +2.4500 04/04/95 501799 |
| | | +0.8000 | +2.1000 05/02/95 502383 |
| | | +2.2000 | +2.5000 05/30/95 502991 |
| | | -0.0999 | +2.1000 06/27/95 503603 |
| | | +3.9000 | +2.4000 07/25/95 504125 |
| | | +0.6000 | +2.0500 08/22/95 504664 |
| | | +1.1000 | +2.0500 09/19/95 505207 |
| | | -1.4999 | +2.1500 10/17/95 505766 |
| | | +2.9000 | +2.1500 11/14/95 506390 |
| | | -1.8999 | +2.0000 12/12/95 506914 |
| | CS-137 | +1.3000 | +0.5500 01/10/95 500201 |
| | | +2.0000 | +0.5000 02/07/95 500735 |
| | | +1.8000 | +0.5500 03/07/95 501246 |
| | | +0.1000 | +0.5500 04/04/95 501799 |
| | | +0.7000 | +0.5500 05/02/95 502383 |
| | | +0.8000 | +0.5500 05/30/95 502991 |
| | | +0.9000 | +0.5500 06/27/95 503603 |
| | | +1.2000 | +0.5000 07/25/95 504125 |
| | | +0.5000 | +0.5500 08/22/95 504664 |
| | | +0.7000 | +0.5000 09/19/95 505207 |
| | | +0.4000 | +0.5500 10/17/95 505766 |
| | | +0.9000 | +0.5500 11/14/95 506390 |
| | | +0.6000 | +0.5000 12/12/95 506914 |
| | I-131 | -0.1999 | +0.6500 01/10/95 500201 |
| | | +0.0000 | +0.8500 02/07/95 500735 |
| | | +0.0000 | +0.6500 03/07/95 501246 |
| | | +0.2000 | +0.8500 04/04/95 501799 |
| | | +0.5000 | +0.7000 05/02/95 502383 |
| | | -1.5999 | +0.9000 05/30/95 502991 |
| | | +0.5000 | +0.6500 06/27/95 503603 |
| | | -0.4999 | +0.8000 07/25/95 504125 |
| | | -1.1999 | +0.6500 08/22/95 504664 |
| | | -0.1999 | +0.6500 09/19/95 505207 |
| | | +0.1000 | +0.6500 10/17/95 505766 |
| | | +0.2000 | +0.6500 11/14/95 506390 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN MILK QC-TN
 PC1/L - 0.037 BQ/L
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|--------------|------------------------------------|------------|-------------------------------------|
| 3115 LAYMAN FARM | 1.3 MILES SW | GAMMA SCAN (GELI) I-131 K-40 | +0.1000 | +0.7000 12/12/95 506914 |
| | | | +1520.0000 | +22.5000 01/10/95 500201 |
| | | | +1581.0000 | +23.0000 02/07/95 500735 |
| | | | +1465.0000 | +22.0000 03/07/95 501246 |
| | | | +1625.0000 | +23.0000 04/04/95 501799 |
| | | | +1568.0000 | +23.0000 05/02/95 502383 |
| | | | +1582.0000 | +23.0000 05/30/95 502991 |
| | | | +1600.0000 | +23.0000 06/27/95 503603 |
| | | | +1312.0000 | +21.0000 07/25/95 504125 |
| | | | +1678.0000 | +23.5000 08/22/95 504664 |
| | | | +1542.0000 | +22.5000 09/19/95 505207 |
| | | | +1555.0000 | +22.5000 10/17/95 505766 |
| | | | +1563.0000 | +22.5000 11/14/95 506390 |
| | | | +1295.0000 | +21.0000 12/12/95 506914 |
| | | SR 89 | +0.7000 | +0.6000 03/07/95 501246 |
| | | | +0.6000 | +0.5000 05/30/95 502991 |
| | | | -0.2499 | +0.4300 08/22/95 504664 |
| | | | +0.5000 | +0.5500 12/12/95 506914 |
| | | SR 90 | -0.2699 | +0.0800 03/07/95 501246 |
| | | | +1.8300 | +0.1100 05/30/95 502991 |
| | | | +1.1400 | +0.1100 08/22/95 504664 |
| | | | +0.8400 | +0.0700 12/12/95 506914 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN POND SEDIMENT
PCI/GM - 0.037 BQ/G (DRY WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 3301 LV-1 | LOW VOL WASTE POND | GAMMA SCAN (GELI) | |
| | AC-228 | +0.7496 | +0.0594 06/29/95 502410 |
| | BE-7 | +0.2706 | +0.0423 06/29/95 502410 |
| | BI-212 | +0.6767 | +0.0869 06/29/95 502410 |
| | BI-214 | +0.5033 | +0.0268 06/29/95 502410 |
| | CS-137 | +0.0393 | +0.0051 06/29/95 502410 |
| | K-40 | +8.7262 | +0.4280 06/29/95 502410 |
| | PB-212 | +0.6883 | +0.0823 06/29/95 502410 |
| | PB-214 | +0.5482 | +0.0414 06/29/95 502410 |
| | RA-224 | +0.7167 | +0.1299 06/29/95 502410 |
| | TL-208 | +0.2162 | +0.0161 06/29/95 502410 |
| 3302 LV-2 | LOW VOL WASTE POND | GAMMA SCAN (GELI) | |
| | AC-228 | +1.4438 | +0.1020 06/29/95 502411 |
| | BE-7 | +0.8229 | +0.0914 06/29/95 502411 |
| | BI-212 | +1.5639 | +0.1828 06/29/95 502411 |
| | BI-214 | +0.9515 | +0.0568 06/29/95 502411 |
| | CS-137 | +0.1586 | +0.0154 06/29/95 502411 |
| | K-40 | +17.3020 | +0.8258 06/29/95 502411 |
| | PB-212 | +1.4499 | +0.0659 06/29/95 502411 |
| | PB-214 | +1.0891 | +0.0511 06/29/95 502411 |
| | RA-224 | +1.7370 | +0.1787 06/29/95 502411 |
| | TL-208 | +0.4452 | +0.0273 06/29/95 502411 |
| 3303 LV-3 | LOW VOL WASTE POND | GAMMA SCAN (GELI) | |
| | AC-228 | +1.6244 | +0.1186 06/29/95 502413 |
| | BE-7 | +0.6518 | +0.0966 06/29/95 502413 |
| | BI-212 | +2.0647 | +0.2242 06/29/95 502413 |
| | BI-214 | +1.0372 | +0.0669 06/29/95 502413 |
| | CS-137 | +0.2019 | +0.0197 06/29/95 502413 |
| | K-40 | +17.1830 | +1.1055 06/29/95 502413 |
| | PB-212 | +1.6004 | +0.0877 06/29/95 502413 |
| | PB-214 | +1.0618 | +0.0639 06/29/95 502413 |
| | RA-224 | +1.8879 | +0.2395 06/29/95 502413 |
| | TL-208 | +0.5595 | +0.0333 06/29/95 502413 |
| 3304 LV-4 | LOW VOL WASTE POND | GAMMA SCAN (GELI) | |
| | AC-228 | +0.9147 | +0.0666 06/29/95 502414 |
| | BE-7 | +0.3082 | +0.0542 06/29/95 502414 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN POND SEDIMENT
PCI/GM - 0.037 BQ/G (DRY WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 3304 LV-4 | LOW VOL WASTE POND | GAMMA SCAN (GELI) | |
| | BI-212 | +0.8213 | +0.0870 06/29/95 502414 |
| | BI-214 | +0.7039 | +0.0442 06/29/95 502414 |
| | CS-137 | +0.0440 | +0.0051 06/29/95 502414 |
| | K-40 | +11.1330 | +0.5262 06/29/95 502414 |
| | PB-212 | +0.8631 | +0.0476 06/29/95 502414 |
| | PB-214 | +0.7114 | +0.0457 06/29/95 502414 |
| | RA-224 | +1.0030 | +0.1645 06/29/95 502414 |
| | TL-208 | +0.2724 | +0.0162 06/29/95 502414 |
| 3305 YP-5 | YARD POND | GAMMA SCAN (GELI) | |
| | AC-228 | +1.2179 | +0.0858 06/29/95 502415 |
| | BI-212 | +1.2424 | +0.1464 06/29/95 502415 |
| | BI-214 | +0.8200 | +0.0489 06/29/95 502415 |
| | CS-137 | +0.2127 | +0.0159 06/29/95 502415 |
| | K-40 | +14.2630 | +0.6939 06/29/95 502415 |
| | PB-212 | +1.1150 | +0.0549 06/29/95 502415 |
| | PB-214 | +0.9066 | +0.0474 06/29/95 502415 |
| | RA-224 | +1.2259 | +0.1624 06/29/95 502415 |
| | TL-208 | +0.4178 | +0.0246 06/29/95 502415 |
| 3306 YP-6 | YARD POND | GAMMA SCAN (GELI) | |
| | AC-228 | +0.9890 | +0.0656 06/29/95 502416 |
| | BE-7 | +0.2270 | +0.0412 06/29/95 502416 |
| | BI-212 | +0.9009 | +0.1174 06/29/95 502416 |
| | BI-214 | +0.7430 | +0.0426 06/29/95 502416 |
| | CS-137 | +0.1092 | +0.0099 06/29/95 502416 |
| | K-40 | +12.2690 | +0.5975 06/29/95 502416 |
| | PB-212 | +0.9764 | +0.0628 06/29/95 502416 |
| | PB-214 | +0.8284 | +0.0459 06/29/95 502416 |
| | TL-208 | +0.3128 | +0.0185 06/29/95 502416 |
| 3307 YP-7 | YARD POND | GAMMA SCAN (GELI) | |
| | AC-228 | +1.0122 | +0.0634 06/29/95 502417 |
| | BE-7 | +0.1979 | +0.0420 06/29/95 502417 |
| | BI-212 | +0.9495 | +0.0939 06/29/95 502417 |
| | BI-214 | +0.7444 | +0.0399 06/29/95 502417 |
| | CS-137 | +0.1796 | +0.0115 06/29/95 502417 |
| | K-40 | +11.9830 | +0.5820 06/29/95 502417 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN POND SEDIMENT
PCI/GM - 0.037 BQ/G (DRY WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR TERM | DATE COLLECTED | LAB NO |
|-----------------------------------|-----------------------|-------------------|---------------|-------------------|--------|
| 3307 YP-7 | YARD POND | GAMMA SCAN (GELI) | | | |
| | | PB-212 | +0.9469 | +0.0517 06/29/95 | 502417 |
| | | PB-214 | +0.7650 | +0.0428 06/29/95 | 502417 |
| | | RA-224 | +0.9692 | +0.2150 06/29/95 | 502417 |
| | | TL-208 | +0.3258 | +0.0194 06/29/95 | 502417 |
| 3308 YP-8 | YARD POND | GAMMA SCAN (GELI) | | | |
| | | AC-228 | +1.0390 | +0.0794 06/29/95 | 502418 |
| | | BE-7 | +0.2393 | +0.0480 06/29/95 | 502418 |
| | | BI-212 | +1.2152 | +0.1778 06/29/95 | 502418 |
| | | BI-214 | +0.7022 | +0.0785 06/29/95 | 502418 |
| | | CS-137 | +0.0992 | +0.0106 06/29/95 | 502418 |
| | | K-40 | +14.5810 | +0.7240 06/29/95 | 502418 |
| | | PB-212 | +0.9790 | +0.0554 06/29/95 | 502418 |
| | | PB-214 | +0.7960 | +0.0500 06/29/95 | 502418 |
| | | TL-208 | +0.3172 | +0.0228 06/29/95 | 502418 |
| 3309 YP-9 | YARD POND | GAMMA SCAN (GELI) | | | |
| | | AC-228 | +1.0394 | +0.0644 06/29/95 | 502419 |
| | | BE-7 | +0.3132 | +0.0480 06/29/95 | 502419 |
| | | BI-212 | +1.1751 | +0.1133 06/29/95 | 502419 |
| | | BI-214 | +0.7699 | +0.0412 06/29/95 | 502419 |
| | | CS-137 | +0.0798 | +0.0073 06/29/95 | 502419 |
| | | K-40 | +14.4580 | +0.7055 06/29/95 | 502419 |
| | | PB-212 | +1.0746 | +0.0517 06/29/95 | 502419 |
| | | PB-214 | +0.8121 | +0.0427 06/29/95 | 502419 |
| | | RA-224 | +1.2237 | +0.1412 06/29/95 | 502419 |
| | | TL-208 | +0.3548 | +0.0201 06/29/95 | 502419 |
| 3310 YP-10 | YARD POND | GAMMA SCAN (GELI) | | | |
| | | AC-228 | +0.9781 | +0.0666 06/29/95 | 502420 |
| | | BE-7 | +0.4604 | +0.0561 06/29/95 | 502420 |
| | | BI-212 | +1.0058 | +0.0864 06/29/95 | 502420 |
| | | BI-214 | +0.7581 | +0.0468 06/29/95 | 502420 |
| | | CS-137 | +0.0739 | +0.0078 06/29/95 | 502420 |
| | | K-40 | +12.7510 | +0.6284 06/29/95 | 502420 |
| | | PB-212 | +1.0084 | +0.0512 06/29/95 | 502420 |
| | | PB-214 | +0.8275 | +0.0419 06/29/95 | 502420 |
| | | RA-224 | +1.0558 | +0.1501 06/29/95 | 502420 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN POND SEDIMENT
PCI/GM - 0.037 BQ/G (DRY WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3310 YP-10 YARD POND | GAMMA SCAN (GELI) TL-208 | +0.3413 | +0.0197 06/29/95 502420 |
| 3311 YP-11 YARD POND | GAMMA SCAN (GELI) AC-228 BE-7 BI-212 BI-214 CS-137 K-40 PB-212 PB-214 RA-224 TL-208 | +1.1003 +0.3897 +1.0181 +0.7524 +0.2472 +13.0790 +1.0617 +0.7823 +1.1328 +0.3525 | +0.0787 06/29/95 502421 +0.0956 06/29/95 502421 +0.1338 06/29/95 502421 +0.0471 06/29/95 502421 +0.0195 06/29/95 502421 +0.7011 06/29/95 502421 +0.0583 06/29/95 502421 +0.0453 06/29/95 502421 +0.1894 06/29/95 502421 +0.0251 06/29/95 502421 |
| 3312 YP-12 YARD POND | GAMMA SCAN (GELI) AC-228 BE-7 BI-212 BI-214 CS-137 K-40 PB-212 PB-214 RA-224 TL-208 | +1.2204 +0.6475 +1.3073 +0.7929 +0.2370 +14.6050 +1.1301 +0.9165 +1.1965 +0.4116 | +0.0699 06/29/95 502422 +0.0613 06/29/95 502422 +0.1203 06/29/95 502422 +0.0453 06/29/95 502422 +0.0163 06/29/95 502422 +0.6814 06/29/95 502422 +0.0517 06/29/95 502422 +0.0416 06/29/95 502422 +0.1508 06/29/95 502422 +0.0288 06/29/95 502422 |
| 3313 YP-13 YARD POND | GAMMA SCAN (GELI) AC-228 BE-7 BI-212 BI-214 K-40 PB-212 PB-214 TL-208 | +1.6259 +0.3391 +1.8394 +1.0232 +12.2340 +1.5155 +1.1111 +0.5029 | +0.1013 06/29/95 502424 +0.0672 06/29/95 502424 +0.1788 06/29/95 502424 +0.0543 06/29/95 502424 +0.5921 06/29/95 502424 +0.0910 06/29/95 502424 +0.0541 06/29/95 502424 +0.0263 06/29/95 502424 |
| 3314 YP-14 YARD POND | GAMMA SCAN (GELI) AC-228 | +1.8887 | +0.1329 06/29/95 502425 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN POND SEDIMENT
PCI/GM - 0.037 BQ/G (DRY WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | |
|-------------------------------------------|-----------------------|----------|------------------|------------------|
| | | | TERM | COLLECTED LAB NO |
| 3314 YP-14 YARD POND | GAMMA SCAN (GELI) | | | |
| | BE-7 | +0.3393 | +0.0683 06/29/95 | 502425 |
| | BI-212 | +1.9227 | +0.1774 06/29/95 | 502425 |
| | BI-214 | +1.1330 | +0.0605 06/29/95 | 502425 |
| | K-40 | +14.1300 | +0.7503 06/29/95 | 502425 |
| | PB-212 | +1.7424 | +0.0889 06/29/95 | 502425 |
| | PB-214 | +1.1847 | +0.0575 06/29/95 | 502425 |
| | RA-224 | +1.8607 | +0.2533 06/29/95 | 502425 |
| | TL-208 | +0.6062 | +0.0304 06/29/95 | 502425 |
| 3315 YP-15 YARD POND | GAMMA SCAN (GELI) | | | |
| | AC-228 | +1.4095 | +0.1151 06/29/95 | 502426 |
| | BE-7 | +0.3249 | +0.0645 06/29/95 | 502426 |
| | BI-212 | +1.1857 | +0.1724 06/29/95 | 502426 |
| | BI-214 | +0.8837 | +0.0561 06/29/95 | 502426 |
| | CS-137 | +0.3844 | +0.0290 06/29/95 | 502426 |
| | K-40 | +17.8580 | +1.4869 06/29/95 | 502426 |
| | PB-212 | +1.2546 | +0.0735 06/29/95 | 502426 |
| | PB-214 | +0.9909 | +0.0618 06/29/95 | 502426 |
| | TL-208 | +0.4195 | +0.0265 06/29/95 | 502426 |
| 3316 YP-16 YARD POND | GAMMA SCAN (GELI) | | | |
| | AC-228 | +1.3184 | +0.1080 06/29/95 | 502427 |
| | BI-212 | +1.2093 | +0.1245 06/29/95 | 502427 |
| | BI-214 | +0.7965 | +0.0417 06/29/95 | 502427 |
| | CS-137 | +0.0480 | +0.0074 06/29/95 | 502427 |
| | K-40 | +11.7940 | +0.6180 06/29/95 | 502427 |
| | PB-212 | +1.3429 | +0.0721 06/29/95 | 502427 |
| | PB-214 | +0.9011 | +0.0522 06/29/95 | 502427 |
| | RA-224 | +1.3291 | +0.2248 06/29/95 | 502427 |
| | TL-208 | +0.4199 | +0.0231 06/29/95 | 502427 |
| 3317 YP-17 YARD POND | GAMMA SCAN (GELI) | | | |
| | AC-228 | +1.4211 | +0.0787 06/29/95 | 502428 |
| | BE-7 | +0.1671 | +0.0556 06/29/95 | 502428 |
| | BI-212 | +1.3837 | +0.1251 06/29/95 | 502428 |
| | BI-214 | +0.8160 | +0.0446 06/29/95 | 502428 |
| | CS-137 | +0.0588 | +0.0084 06/29/95 | 502428 |
| | K-40 | +11.0430 | +0.5447 06/29/95 | 502428 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN POND SEDIMENT
 PCI/GM - 0.037 BQ/G (DRY WEIGHT)
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | |
|-------------------------------------------|-----------------------|----------|------------------|------------------|
| | | | TERM | COLLECTED LAB NO |
| 3317 YP-17 YARD POND | GAMMA SCAN (GELI) | | | |
| | PB-212 | +1.3104 | +0.0640 06/29/95 | 502428 |
| | PB-214 | +0.9075 | +0.0538 06/29/95 | 502428 |
| | RA-224 | +1.3801 | +0.1819 06/29/95 | 502428 |
| | TL-208 | +0.4312 | +0.0228 06/29/95 | 502428 |
| 3318 YP-18 YARD POND | GAMMA SCAN (GELI) | | | |
| | AC-228 | +1.0948 | +0.0776 06/29/95 | 502429 |
| | BI-212 | +1.0785 | +0.1603 06/29/95 | 502429 |
| | BI-214 | +0.6969 | +0.0429 06/29/95 | 502429 |
| | CS-137 | +0.0437 | +0.0080 06/29/95 | 502429 |
| | K-40 | +9.6503 | +0.4981 06/29/95 | 502429 |
| | PB-212 | +0.9712 | +0.0485 06/29/95 | 502429 |
| | PB-214 | +0.7556 | +0.0519 06/29/95 | 502429 |
| | RA-224 | +0.9480 | +0.1485 06/29/95 | 502429 |
| | TL-208 | +0.3250 | +0.0217 06/29/95 | 502429 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN POTATOES
 PCI/KG - 0.037 BQ/KG (WET WT)
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------|---------------------------|------------|-------------------------------------|
| 2116 RM-2 DAYTON TN | 17.75 MILES NNE | GAMMA SCAN (GELI) K-40 | +3379.1000 | +247.2000 06/27/95 502295 |
| 3209 OWEN HENDERSON FARM | 4.8 MILES WSW | GAMMA SCAN (GELI) K-40 | +3818.3000 | +272.7100 07/05/95 502363 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN POTATOES QC-TN
PCI/KG - 0.037 BQ/KG (WET WT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|----------------------------------------|---------------------------|------------|-------------------------------------|
| 3209 OWEN HENDERSON FARM 4.8 MILES WSW | GAMMA SCAN (GELI) K-40 | +5207.0000 | +82.5000 07/05/95 504031 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN SEDIMENT
PCI/GM - 0.037 BQ/G (DRY WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|--------------------------------------|----------|-------------------------------------|
| 2155 TRM 496.50 | GAMMA SCAN (GELI) | | |
| | AC-228 | +1.2575 | +0.0865 04/26/95 502322 |
| | | +1.4925 | +0.0954 10/25/95 506042 |
| | BE-7 | +0.2797 | +0.0660 04/26/95 502322 |
| | | +1.0249 | +0.1163 10/25/95 506042 |
| | BI-212 | +1.1585 | +0.1817 04/26/95 502322 |
| | | +1.5520 | +0.1568 10/25/95 506042 |
| | BI-214 | +0.8248 | +0.0494 04/26/95 502322 |
| | | +1.0386 | +0.0532 10/25/95 506042 |
| | CO-60 | +0.0190 | +0.0053 10/25/95 506042 |
| | CS-137 | +0.7651 | +0.0527 04/26/95 502322 |
| | | +0.8084 | +0.0403 10/25/95 506042 |
| | K-40 | +13.4640 | +0.7108 04/26/95 502322 |
| | | +13.3820 | +0.6487 10/25/95 506042 |
| | PB-212 | +1.1619 | +0.0630 04/26/95 502322 |
| | | +1.3405 | +0.0659 10/25/95 506042 |
| | PB-214 | +0.8457 | +0.0429 04/26/95 502322 |
| | | +1.1401 | +0.0491 10/25/95 506042 |
| | RA-224 | +1.3127 | +0.1883 10/25/95 506042 |
| | RA-226 | +0.8248 | +0.0494 04/26/95 502322 |
| | | +1.0386 | +0.0532 10/25/95 506042 |
| | TL-208 | +0.3941 | +0.0232 04/26/95 502322 |
| | | +0.4418 | +0.0253 10/25/95 506042 |
| 3140 TRM 532.1 | 4.3 MILES UPSTREAM GAMMA SCAN (GELI) | | |
| | AC-228 | +1.5019 | +0.0945 04/20/95 502393 |
| | | +1.3839 | +0.0928 10/26/95 506097 |
| | BE-7 | +1.0820 | +0.1521 04/20/95 502393 |
| | | +0.4181 | +0.0853 10/26/95 506097 |
| | BI-212 | +1.5607 | +0.1710 04/20/95 502393 |
| | | +1.4728 | +0.1722 10/26/95 506097 |
| | BI-214 | +0.9525 | +0.0683 04/20/95 502393 |
| | | +1.0021 | +0.0526 10/26/95 506097 |
| | CO-60 | +0.0307 | +0.0075 04/20/95 502393 |
| | CS-137 | +1.6812 | +0.0831 04/20/95 502393 |
| | | +1.6027 | +0.0721 10/26/95 506097 |
| | K-40 | +16.1350 | +0.8660 04/20/95 502393 |
| | | +13.7590 | +0.6626 10/26/95 506097 |
| | PB-212 | +1.3397 | +0.0594 04/20/95 502393 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN SEDIMENT
PCI/GM - 0.037 BQ/G (DRY WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 3140 TRM 532.1 | 4.3 MILES UPSTREAM | GAMMA SCAN (GELI) | |
| | PB-212 | +1.4154 | +0.0818 10/26/95 506097 |
| | PB-214 | +1.0558 | +0.0628 04/20/95 502393 |
| | | +1.0948 | +0.0695 10/26/95 506097 |
| | RA-224 | +1.5082 | +0.1768 04/20/95 502393 |
| | RA-226 | +0.9525 | +0.0683 04/20/95 502393 |
| | | +1.0021 | +0.0526 10/26/95 506097 |
| | TL-208 | +0.4606 | +0.0273 04/20/95 502393 |
| | | +0.4961 | +0.0283 10/26/95 506097 |
| 3141 TRM 527.4 | 0.4 MILES DOWNSTREA | GAMMA SCAN (GELI) | |
| | AC-228 | +1.8458 | +0.1146 04/27/95 502394 |
| | | +0.9050 | +0.0734 10/26/95 506098 |
| | BE-7 | +0.1544 | +0.0473 04/27/95 502394 |
| | BI-212 | +1.8274 | +0.2030 04/27/95 502394 |
| | | +1.0055 | +0.1141 10/26/95 506098 |
| | BI-214 | +1.2078 | +0.0730 04/27/95 502394 |
| | | +0.6900 | +0.0416 10/26/95 506098 |
| | CS-137 | +0.0490 | +0.0077 04/27/95 502394 |
| | | +0.0412 | +0.0053 10/26/95 506098 |
| | K-40 | +13.2570 | +0.6291 04/27/95 502394 |
| | | +13.7270 | +0.6589 10/26/95 506098 |
| | PB-212 | +1.6749 | +0.2347 04/27/95 502394 |
| | | +1.0058 | +0.0485 10/26/95 506098 |
| | PB-214 | +1.3485 | +0.0566 04/27/95 502394 |
| | | +0.7793 | +0.0357 10/26/95 506098 |
| | RA-224 | +1.8764 | +0.3270 04/27/95 502394 |
| | | +1.1828 | +0.1588 10/26/95 506098 |
| | RA-226 | +1.2078 | +0.0730 04/27/95 502394 |
| | | +0.6900 | +0.0416 10/26/95 506098 |
| | TL-208 | +0.5675 | +0.0283 04/27/95 502394 |
| | | +0.3061 | +0.0179 10/26/95 506098 |
| 3142 TRM 518.0 | | GAMMA SCAN (GELI) | |
| | AC-228 | +1.3633 | +0.0777 04/24/95 502395 |
| | | +1.0939 | +0.0786 10/26/95 506099 |
| | BE-7 | +0.3328 | +0.0677 10/26/95 506099 |
| | BI-212 | +1.2326 | +0.1199 04/24/95 502395 |
| | | +1.2657 | +0.1193 10/26/95 506099 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN SEDIMENT
 PCI/GM - 0.037 BQ/G (DRY WEIGHT)
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | |
|-----------------------------------|-----------------------|----------|------------|------------------|
| | | | TERM | COLLECTED LAB NO |
| 3142 TRM 518.0 | GAMMA SCAN (GELI) | | | |
| | BI-214 | +0.9031 | +0.0532 | 04/24/95 502395 |
| | | +0.8671 | +0.0577 | 10/26/95 506099 |
| | CS-137 | +0.0426 | +0.0092 | 04/24/95 502395 |
| | | +0.2511 | +0.0181 | 10/26/95 506099 |
| | K-40 | +14.5580 | +0.6344 | 04/24/95 502395 |
| | | +12.1220 | +0.5772 | 10/26/95 506099 |
| | PB-212 | +1.2394 | +0.0622 | 04/24/95 502395 |
| | | +1.1478 | +0.0502 | 10/26/95 506099 |
| | PB-214 | +1.0424 | +0.0575 | 04/24/95 502395 |
| | | +0.8956 | +0.0476 | 10/26/95 506099 |
| | RA-224 | +1.3286 | +0.1302 | 10/26/95 506099 |
| | RA-226 | +0.9031 | +0.0532 | 04/24/95 502395 |
| | | +0.8671 | +0.0577 | 10/26/95 506099 |
| | TL-208 | +0.4368 | +0.0253 | 04/24/95 502395 |
| | | +0.3521 | +0.0196 | 10/26/95 506099 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN SHORELINE SEDIMENT
PCI/GM - 0.037 BQ/G (DRY WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------|-------------------------------------|
| 3191 WATTS BAR RESORT TRM 530 | GAMMA SCAN (GELI) | | |
| | AC-228 | +0.8335 | +0.0665 04/19/95 502399 |
| | | +1.0531 | +0.0946 11/29/95 506102 |
| | BI-212 | +0.7110 | +0.0813 04/19/95 502399 |
| | | +1.1466 | +0.1322 11/29/95 506102 |
| | BI-214 | +0.5397 | +0.0294 04/19/95 502399 |
| | | +0.7795 | +0.0410 11/29/95 506102 |
| | CS-137 | +0.0387 | +0.0045 04/19/95 502399 |
| | K-40 | +1.0887 | +0.1151 04/19/95 502399 |
| | | +4.5040 | +0.3108 11/29/95 506102 |
| | PB-212 | +0.7575 | +0.0457 04/19/95 502399 |
| | | +1.1544 | +0.0617 11/29/95 506102 |
| | PB-214 | +0.6253 | +0.0368 04/19/95 502399 |
| | | +0.8388 | +0.0496 11/29/95 506102 |
| | RA-226 | +0.5397 | +0.0294 04/19/95 502399 |
| | | +0.7795 | +0.0410 11/29/95 506102 |
| | TL-208 | +0.2451 | +0.0150 04/19/95 502399 |
| | | +0.3954 | +0.0272 11/29/95 506102 |
| 3193 COTTON PORT MARINA TRM 513 | GAMMA SCAN (GELI) | | |
| | AC-228 | +0.6048 | +0.0447 04/19/95 502400 |
| | | +1.3140 | +0.0825 11/29/95 506103 |
| | BE-7 | +0.1754 | +0.0457 11/29/95 506103 |
| | BI-212 | +0.6936 | +0.1117 04/19/95 502400 |
| | | +1.3311 | +0.1108 11/29/95 506103 |
| | BI-214 | +0.6127 | +0.0383 04/19/95 502400 |
| | | +0.7237 | +0.0407 11/29/95 506103 |
| | CS-137 | +0.0474 | +0.0084 04/19/95 502400 |
| | | +0.1777 | +0.0134 11/29/95 506103 |
| | K-40 | +2.7728 | +0.2355 04/19/95 502400 |
| | | +20.0050 | +0.9561 11/29/95 506103 |
| | PB-212 | +0.5588 | +0.0316 04/19/95 502400 |
| | | +1.3304 | +0.0625 11/29/95 506103 |
| | PB-214 | +0.6999 | +0.0391 04/19/95 502400 |
| | | +0.7902 | +0.0432 11/29/95 506103 |
| | RA-224 | +0.6800 | +0.0999 04/19/95 502400 |
| | | +1.3953 | +0.1698 11/29/95 506103 |
| | RA-226 | +0.6127 | +0.0383 04/19/95 502400 |
| | | +0.7237 | +0.0407 11/29/95 506103 |

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ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN SHORELINE SEDIMENT
PCI/GM - 0.037 BQ/G (DRY WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------------|--------------------|----------------------------------------------------|
| 3193 COTTON PORT MARINA TRM 513 | GAMMA SCAN (GELI) TL-208 | +0.1905 +0.4019 | +0.0155 04/19/95 502400 +0.0232 11/29/95 506103 |

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 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN SHORELINE SEDIMENT QC-TN
 PCI/GM - 0.037 BQ/G (DRY WEIGHT)
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | |
|-----------------------------------|-----------------------|----------|------------------|------------------|
| | | | TERM | COLLECTED LAB NO |
| 3193 COTTON PORT MARINA TRM 513 | GAMMA SCAN (GELI) | | | |
| | AC-228 | +1.4690 | +0.0330 04/19/95 | 502401 |
| | | +1.5340 | +0.0320 11/29/95 | 506104 |
| | BI-212 | +0.9600 | +0.0550 04/19/95 | 502401 |
| | | +1.1200 | +0.0950 11/29/95 | 506104 |
| | BI-214 | +1.0070 | +0.0160 04/19/95 | 502401 |
| | | +0.9760 | +0.0170 11/29/95 | 506104 |
| | CS-137 | +0.3200 | +0.0085 04/19/95 | 502401 |
| | | +0.1870 | +0.0060 11/29/95 | 506104 |
| | K-40 | +17.0300 | +0.1700 04/19/95 | 502401 |
| | | +20.6200 | +0.1800 11/29/95 | 506104 |
| | PB-212 | +1.4000 | +0.0120 04/19/95 | 502401 |
| | | +1.5340 | +0.0115 11/29/95 | 506104 |
| | PB-214 | +1.1610 | +0.0175 04/19/95 | 502401 |
| | | +1.0850 | +0.0150 11/29/95 | 506104 |
| | TL-208 | +0.4350 | +0.0085 04/19/95 | 502401 |
| | | +0.4930 | +0.0090 11/29/95 | 506104 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN SMALLMOUTH BUFFALO FLESH
 PCI/GM - 0.037 BQ/G (DRY WEIGHT)
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO | | |
|-----------------------------------|-------------|-----------------------|----------|-------------------------------------|----------|--------|
| 2160 CHICKAMAUGA RES | TRM 471-530 | GAMMA SCAN (GELI) | | | | |
| | | BI-214 | +0.0563 | +0.0108 | 10/06/95 | 506047 |
| | | CS-137 | +0.0112 | +0.0033 | 10/06/95 | 506047 |
| | | K-40 | +15.5590 | +0.9384 | 04/28/95 | 502325 |
| | | | +6.8877 | +0.4370 | 10/06/95 | 506047 |
| | | PB-214 | +0.0438 | +0.0136 | 10/06/95 | 506047 |
| 2161 WATTS BAR RES | TRM 530-602 | GAMMA SCAN (GELI) | | | | |
| | | BI-214 | +0.0441 | +0.0103 | 10/12/95 | 506051 |
| | | CS-137 | +0.0233 | +0.0061 | 04/28/95 | 502330 |
| | | | +0.0196 | +0.0058 | 10/12/95 | 506051 |
| | | K-40 | +8.9636 | +0.5796 | 04/28/95 | 502330 |
| | | | +9.6441 | +0.5505 | 10/12/95 | 506051 |
| | | PB-214 | +0.0018 | +0.0078 | 04/28/95 | 502330 |
| | | | +0.0401 | +0.0112 | 10/12/95 | 506051 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN SMALLMOUTH BUFFALO WHOLE
 PCI/GM - 0.037 BQ/G (DRY WEIGHT)
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|-------------------|-------------------------------------|
| 2160 CHICKAMAUGA RES | TRM 471-530 | GAMMA SCAN (GELI) | |
| | AC-228 | +0.1295 | +0.0236 04/28/95 502328 |
| | BI-212 | +0.1449 | +0.0416 04/28/95 502328 |
| | BI-214 | +0.0404 | +0.0120 04/28/95 502328 |
| | | +0.0351 | +0.0237 10/09/95 506049 |
| | CS-137 | +0.0108 | +0.0037 10/09/95 506049 |
| | K-40 | +6.0558 | +0.3526 04/28/95 502328 |
| | | +5.5017 | +0.3360 10/09/95 506049 |
| | PB-212 | +0.0828 | +0.0100 04/28/95 502328 |
| | PB-214 | +0.0576 | +0.0090 04/28/95 502328 |
| | | +0.0180 | +0.0070 10/09/95 506049 |
| | TL-208 | +0.0334 | +0.0103 04/28/95 502328 |
| 2161 WATTS BAR RES | TRM 530-602 | GAMMA SCAN (GELI) | |
| | BI-214 | +0.0585 | +0.0110 10/17/95 506053 |
| | CS-137 | +0.0163 | +0.0044 10/17/95 506053 |
| | K-40 | +6.3600 | +0.4063 04/28/95 502332 |
| | | +6.8937 | +0.4098 10/17/95 506053 |
| | PB-212 | +0.0176 | +0.0094 04/28/95 502332 |
| | | +0.0156 | +0.0115 10/17/95 506053 |
| | PB-214 | +0.0311 | +0.0108 10/17/95 506053 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN SOIL
 PCI/GM - 0.037 BQ/G (DRY WEIGHT)
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-------------------------------------|-----------------------|----------|-------------------------------------|
| 2116 RM-2 DAYTON TN 17.75 MILES NNE | GAMMA SCAN (GEL1) | | |
| | AC-228 | +0.7406 | +0.0522 05/16/95 502624 |
| | | +0.7672 | +0.0588 06/13/95 503201 |
| | BE-7 | +0.2290 | +0.0443 05/16/95 502624 |
| | | +0.4109 | +0.0532 06/13/95 503201 |
| | BI-212 | +0.7688 | +0.0881 05/16/95 502624 |
| | | +0.8839 | +0.0982 06/13/95 503201 |
| | BI-214 | +0.7098 | +0.0401 05/16/95 502624 |
| | | +0.7285 | +0.0356 06/13/95 503201 |
| | CS-137 | +0.1422 | +0.0112 05/16/95 502624 |
| | | +0.1565 | +0.0124 06/13/95 503201 |
| | K-40 | +4.0183 | +0.2573 05/16/95 502624 |
| | | +4.0765 | +0.2401 06/13/95 503201 |
| | PB-212 | +0.7778 | +0.0450 05/16/95 502624 |
| | | +0.8151 | +0.0490 06/13/95 503201 |
| | PB-214 | +0.7763 | +0.0427 05/16/95 502624 |
| | | +0.8125 | +0.0437 06/13/95 503201 |
| | RA-224 | +0.8469 | +0.1248 05/16/95 502624 |
| | | +0.8283 | +0.1637 06/13/95 503201 |
| | RA-226 | +0.7098 | +0.0401 05/16/95 502624 |
| | | +0.7285 | +0.0356 06/13/95 503201 |
| | TL-208 | +0.2535 | +0.0144 05/16/95 502624 |
| | | +0.2628 | +0.0147 06/13/95 503201 |
| | SR 89 | | |
| | | +0.6600 | +0.3230 05/16/95 502624 |
| | | +0.1520 | +0.3470 06/13/95 503201 |
| | SR 90 | | |
| | | -0.2419 | +0.1380 05/16/95 502624 |
| | | -0.0140 | +0.1230 06/13/95 503201 |
| 3101 LM1 ENV DATA STA 0.5 MILES SSW | GAMMA SCAN (GEL1) | | |
| | AC-228 | +1.3824 | +0.0930 06/13/95 503234 |
| | BI-212 | +1.3503 | +0.1586 06/13/95 503234 |
| | BI-214 | +0.9205 | +0.0579 06/13/95 503234 |
| | CS-137 | +0.1120 | +0.0133 06/13/95 503234 |
| | K-40 | +13.5420 | +0.8337 06/13/95 503234 |
| | PB-212 | +1.2006 | +0.0545 06/13/95 503234 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN SOIL
PCI/GM - 0.037 BQ/G (DRY WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED | LAB NO |
|-----------------------------------|---------------|-----------------------|----------|------------------------------|--------|
| 3101 LM1 ENV DATA STA | 0.5 MILES SSW | GAMMA SCAN (GELI) | | | |
| | | PB-214 | +0.9615 | +0.0641 06/13/95 | 503234 |
| | | RA-224 | +1.0670 | +0.1283 06/13/95 | 503234 |
| | | RA-226 | +0.9205 | +0.0579 06/13/95 | 503234 |
| | | TL-208 | +0.4101 | +0.0266 06/13/95 | 503234 |
| | | SR 89 | | | |
| | | | | | |
| | | | | | |
| | | SR 90 | | | |
| | | | | | |
| 3102 LM2 N. WBSP GATE | 0.5 MILES N | GAMMA SCAN (GELI) | | | |
| | | AC-228 | +1.3423 | +0.0891 06/13/95 | 503238 |
| | | BE-7 | +0.2147 | +0.0503 06/13/95 | 503238 |
| | | BI-212 | +1.4888 | +0.1398 06/13/95 | 503238 |
| | | BI-214 | +0.8650 | +0.0471 06/13/95 | 503238 |
| | | CS-137 | +0.7274 | +0.0344 06/13/95 | 503238 |
| | | K-40 | +21.0830 | +0.9216 06/13/95 | 503238 |
| | | PB-212 | +1.2624 | +0.0606 06/13/95 | 503238 |
| | | PB-214 | +0.9389 | +0.0450 06/13/95 | 503238 |
| | | RA-224 | +1.3176 | +0.1856 06/13/95 | 503238 |
| 3106 PM2 SPRING CITY | 7.0 MILES NW | RA-226 | +0.8650 | +0.0471 06/13/95 | 503238 |
| | | TL-208 | +0.4408 | +0.0232 06/13/95 | 503238 |
| | | SR 89 | | | |
| | | | | | |
| | | | | | |
| | | SR 90 | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | GAMMA SCAN (GELI) | | | |
| | | AC-228 | +0.8399 | +0.0557 06/13/95 | 503242 |
| | | BI-212 | +0.9201 | +0.1350 06/13/95 | 503242 |
| | | BI-214 | +0.6095 | +0.0347 06/13/95 | 503242 |
| | | CS-137 | +1.1705 | +0.2123 06/13/95 | 503242 |
| | | K-40 | +8.9924 | +0.5570 06/13/95 | 503242 |
| | | PB-212 | +0.8338 | +0.0397 06/13/95 | 503242 |
| | | PB-214 | +0.6738 | +0.0387 06/13/95 | 503242 |
| | | | | | |
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TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN SOIL
PCI/GM - 0.037 BQ/G (DRY WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|----------------------------------------|-----------------------|----------|-------------------------------------|
| 3106 PM2 SPRING CITY 7.0 MILES NW | GAMMA SCAN (GELI) | | |
| | RA-224 | +0.8789 | +0.1098 06/13/95 503242 |
| | RA-226 | +0.6095 | +0.0347 06/13/95 503242 |
| | TL-208 | +0.2797 | +0.0188 06/13/95 503242 |
| | SR 89 | | |
| | | +0.4340 | +0.3840 06/13/95 503242 |
| | SR 90 | | |
| | | -0.0486 | +0.1370 06/13/95 503242 |
| 3107 PM3 CEDINE BIBLE CAMP 11.5 M. NNE | GAMMA SCAN (GELI) | | |
| | AC-228 | +0.9285 | +0.0676 06/13/95 503245 |
| | BI-212 | +1.0021 | +0.1078 06/13/95 503245 |
| | BI-214 | +0.8683 | +0.0444 06/13/95 503245 |
| | CS-137 | +0.1962 | +0.0156 06/13/95 503245 |
| | K-40 | +4.5106 | +0.3035 06/13/95 503245 |
| | PB-212 | +0.9310 | +0.0550 06/13/95 503245 |
| | PB-214 | +0.8935 | +0.0415 06/13/95 503245 |
| | RA-224 | +1.0347 | +0.1740 06/13/95 503245 |
| | RA-226 | +0.8683 | +0.0444 06/13/95 503245 |
| | TL-208 | +0.3275 | +0.0182 06/13/95 503245 |
| | SR 89 | | |
| | | +0.2340 | +0.3540 06/13/95 503245 |
| | SR 90 | | |
| | | +0.0420 | +0.1280 06/13/95 503245 |
| 3108 PM-4 TEN MILE 7.8 M. NE/ENE | GAMMA SCAN (GELI) | | |
| | AC-228 | +1.1331 | +0.0739 06/14/95 503249 |
| | BE-7 | +0.1208 | +0.0336 06/14/95 503249 |
| | BI-212 | +1.1198 | +0.1182 06/14/95 503249 |
| | BI-214 | +0.7576 | +0.0398 06/14/95 503249 |
| | CS-137 | +0.0484 | +0.0070 06/14/95 503249 |
| | K-40 | +11.5800 | +0.5774 06/14/95 503249 |
| | PB-212 | +1.0818 | +0.0646 06/14/95 503249 |
| | PB-214 | +0.8160 | +0.0439 06/14/95 503249 |
| | RA-226 | +0.7576 | +0.0398 06/14/95 503249 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN SOIL
PCI/GM - 0.037 BQ/G (DRY WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------------|----------|-------------------------------------|
| 3108 PM-4 TEN MILE 7.8 M. NE/ENE | GAMMA SCAN (GELI) TL-208 | +0.3745 | +0.0215 06/14/95 503249 |
| | SR 89 | | |
| | SR 90 | +0.2570 | +0.3160 06/14/95 503249 |
| 3109 PM5 DECATUR 6.25 MILES S | | -0.0655 | +0.1140 06/14/95 503249 |
| | GAMMA SCAN (GELI) AC-228 | +1.2181 | +0.0806 06/14/95 503252 |
| | BI-212 | +1.2148 | +0.1219 06/14/95 503252 |
| | BI-214 | +0.8642 | +0.0480 06/14/95 503252 |
| | CS-137 | +1.0435 | +0.0453 06/14/95 503252 |
| | K-40 | +6.5415 | +0.3676 06/14/95 503252 |
| | PB-212 | +1.1672 | +0.0574 06/14/95 503252 |
| | PB-214 | +0.9280 | +0.0467 06/14/95 503252 |
| | RA-224 | +1.1234 | +0.1918 06/14/95 503252 |
| | RA-226 | +0.8642 | +0.0480 06/14/95 503252 |
| | TL-208 | +0.4037 | +0.0226 06/14/95 503252 |
| | SR 89 | | |
| | SR 90 | +0.2990 | +0.3580 06/14/95 503252 |
| 3203 LM-3 WB 2.1 MILES NNE | | -0.0119 | +0.1290 06/14/95 503252 |
| | GAMMA SCAN (GELI) AC-228 | +0.9770 | +0.0751 06/13/95 503258 |
| | BI-212 | +1.0200 | +0.1021 06/13/95 503258 |
| | BI-214 | +0.9081 | +0.0461 06/13/95 503258 |
| | CS-137 | +0.5443 | +0.0303 06/13/95 503258 |
| | K-40 | +3.5602 | +0.2656 06/13/95 503258 |
| | PB-212 | +0.9217 | +0.0533 06/13/95 503258 |
| | PB-214 | +1.0301 | +0.0517 06/13/95 503258 |
| | RA-226 | +0.9081 | +0.0461 06/13/95 503258 |
| | TL-208 | +0.3052 | +0.0167 06/13/95 503258 |
| | SR 89 | | |
| | | -0.2049 | +0.4100 06/13/95 503258 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN SOIL
PCI/GM - 0.037 BQ/G (DRY WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|----------|-------------------------------------|
| 3203 LM-3 WB 2.1 MILES NNE | SR 90 | +0.1760 | +0.1500 06/13/95 503258 |
| 3204 LM-4 WB 0.9 MILES SE | GAMMA SCAN (GELI) | | |
| | AC-228 | +1.3602 | +0.0889 06/13/95 503261 |
| | BI-212 | +1.2871 | +0.1421 06/13/95 503261 |
| | BI-214 | +0.8119 | +0.0461 06/13/95 503261 |
| | CS-137 | +0.0601 | +0.0081 06/13/95 503261 |
| | K-40 | +26.7700 | +1.1725 06/13/95 503261 |
| | PB-212 | +1.2032 | +0.0550 06/13/95 503261 |
| | PB-214 | +0.9365 | +0.0375 06/13/95 503261 |
| | RA-224 | +1.1667 | +0.1409 06/13/95 503261 |
| | RA-226 | +0.8119 | +0.0461 06/13/95 503261 |
| | TL-208 | +0.4034 | +0.0212 06/13/95 503261 |
| | SR 89 | | |
| | | +0.1350 | +0.4490 06/13/95 503261 |
| | SR 90 | | |
| | | +0.2080 | +0.1640 06/13/95 503261 |
| 3205 RM-3 WB 15 MILES NNW | GAMMA SCAN (GELI) | | |
| | AC-228 | +0.5884 | +0.0397 06/13/95 503264 |
| | BI-212 | +0.5668 | +0.0660 06/13/95 503264 |
| | BI-214 | +0.5227 | +0.0319 06/13/95 503264 |
| | CS-137 | +0.5751 | +0.0287 06/13/95 503264 |
| | K-40 | +4.5159 | +0.2803 06/13/95 503264 |
| | PB-212 | +0.5627 | +0.0326 06/13/95 503264 |
| | PB-214 | +0.5906 | +0.0333 06/13/95 503264 |
| | RA-226 | +0.5227 | +0.0319 06/13/95 503264 |
| | TL-208 | +0.1821 | +0.0125 06/13/95 503264 |
| | SR 89 | | |
| | | +0.0619 | +0.4820 06/13/95 503264 |
| | SR 90 | | |
| | | +0.1850 | +0.1730 06/13/95 503264 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN SOIL QC-TN
 PCI/GM - 0.037 BQ/G (DRY WEIGHT)
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | |
|------------------------------------------|-----------------------|----------|------------|------------------|
| | | | TERM | COLLECTED LAB NO |
| 2116 RM-2 DAYTON TN 17.75 MILES NNE | GAMMA SCAN (GELI) | | | |
| | AC-228 | +1.0670 | +0.0275 | 05/16/95 502625 |
| | BI-214 | +0.9150 | +0.0150 | 05/16/95 502625 |
| | CS-137 | +0.2600 | +0.0075 | 05/16/95 502625 |
| | K-40 | +6.2500 | +0.1200 | 05/16/95 502625 |
| | PB-212 | +1.0890 | +0.0110 | 05/16/95 502625 |
| | PB-214 | +1.0700 | +0.0145 | 05/16/95 502625 |
| | TL-208 | +0.3450 | +0.0075 | 05/16/95 502625 |
| | SR 89 | | | |
| | | +0.1300 | +0.4050 | 05/16/95 502625 |
| | SR 90 | | | |
| | | -0.0979 | +0.0250 | 05/16/95 502625 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN TOMATOES
 PCI/KG - 0.037 BQ/KG (WET WT)
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO | |
|-----------------------------------|-----------------|-------------------------------------|-----------------------|----------------------------------------|------------------|
| 2116 RM-2 DAYTON TN | 17.75 MILES NNE | GAMMA SCAN (GELI) K-40 | +2042.1000 | +177.4000 08/22/95 | 502297 |
| 3116 MULLINS FARM | 3.7 M. ESE | GAMMA SCAN (GELI) K-40 PB-212 | +2867.1000 +1.4908 | +223.7300 08/23/95 +5.7497 08/23/95 | 502366 502366 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN WET VEGETATION
PCI/KG - 0.037 BQ/KG (WET WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|------------|-------------------------------------|
| 2122 SHADDON FARM | 12.0 MILES NNE | IODINE-131 | |
| | | -1.0799 | +2.3900 01/11/95 500164 |
| | | -2.9999 | +2.9500 02/08/95 500699 |
| | | -0.5799 | +2.9900 03/08/95 501208 |
| | | +1.5200 | +2.6300 04/05/95 501762 |
| | | -2.3599 | +2.3200 05/03/95 502318 |
| | | +0.3300 | +1.2200 05/31/95 502953 |
| | | -0.7799 | +2.3400 06/28/95 503566 |
| | | +0.3700 | +1.4000 07/26/95 504089 |
| | | +0.6700 | +2.2200 08/23/95 504626 |
| | | +0.9000 | +3.2600 09/20/95 505170 |
| | | +1.3000 | +1.8400 10/18/95 505729 |
| | | +1.6200 | +3.2800 11/15/95 506353 |
| | | -0.8199 | +2.4500 12/13/95 506875 |
| | GAMMA SCAN (GELI) | | |
| | AC-228 | +1.0695 | +9.0584 05/31/95 502953 |
| | BE-7 | +1017.4000 | +70.1360 01/11/95 500164 |
| | | +1617.5000 | +116.4300 02/08/95 500699 |
| | | +749.5100 | +53.4010 03/08/95 501208 |
| | | +191.2600 | +26.2560 04/05/95 501762 |
| | | +278.6700 | +29.3590 05/03/95 502318 |
| | | +267.7700 | +27.8340 05/31/95 502953 |
| | | +789.3900 | +66.3710 06/28/95 503566 |
| | | +337.0100 | +37.9630 07/26/95 504089 |
| | | +332.6100 | +40.7690 08/23/95 504626 |
| | | +300.5200 | +29.4660 09/20/95 505170 |
| | | +739.4100 | +50.5830 10/18/95 505729 |
| | | +1731.1000 | +158.7100 11/15/95 506353 |
| | | +2334.7000 | +139.6100 12/13/95 506875 |
| | BI-214 | +28.2920 | +5.5303 01/11/95 500164 |
| | | +10.3540 | +5.3389 02/08/95 500699 |
| | | +6.3039 | +6.5652 04/05/95 501762 |
| | | +9.8224 | +4.7950 05/31/95 502953 |
| | | +23.0210 | +8.2787 07/26/95 504089 |
| | | +4.7359 | +4.1057 09/20/95 505170 |
| | | +18.7790 | +5.1596 10/18/95 505729 |
| | | +32.4410 | +7.6308 11/15/95 506353 |
| | | +39.0430 | +11.2030 12/13/95 506875 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN WET VEGETATION
PC1/KG - 0.037 BQ/KG (WET WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE | |
|-----------------------------------|---------------------------------------------|------------|------------|------------------|
| | | | TERM | COLLECTED LAB NO |
| 2122 SHADDON FARM | 12.0 MILES NNE GAMMA SCAN (GELI) K-40 | +4335.3000 | +289.4300 | 01/11/95 500164 |
| | | +7455.3000 | +437.5100 | 02/08/95 500699 |
| | | +4934.1000 | +283.7300 | 03/08/95 501208 |
| | | +7490.5000 | +440.8400 | 04/05/95 501762 |
| | | +5386.1000 | +297.4000 | 05/03/95 502318 |
| | | +6145.3000 | +338.6200 | 05/31/95 502953 |
| | | +5434.0000 | +306.3500 | 06/28/95 503566 |
| | | +4652.2000 | +373.6100 | 07/26/95 504089 |
| | | +4909.7000 | +286.0700 | 08/23/95 504626 |
| | | +4696.9000 | +304.6300 | 09/20/95 505170 |
| | | +5049.4000 | +259.0300 | 10/18/95 505729 |
| | | +5938.0000 | +323.9500 | 11/15/95 506353 |
| | | +7097.2000 | +412.7900 | 12/13/95 506875 |
| | PB-212 | +4.6900 | +3.0433 | 01/11/95 500164 |
| | | +10.9000 | +5.3857 | 02/08/95 500699 |
| | | +7.2894 | +3.3051 | 04/05/95 501762 |
| | | +2.2581 | +2.8428 | 05/31/95 502953 |
| | | +8.2615 | +2.7955 | 09/20/95 505170 |
| | | +0.1265 | +3.3680 | 11/15/95 506353 |
| | PB-214 | +9.0923 | +6.0914 | 12/13/95 506875 |
| | | +19.7450 | +3.0585 | 01/11/95 500164 |
| | | +2.2908 | +3.4444 | 05/31/95 502953 |
| | | +35.6850 | +8.4515 | 07/26/95 504089 |
| | | +9.1890 | +4.6978 | 09/20/95 505170 |
| | | +10.5210 | +2.9259 | 10/18/95 505729 |
| | TL-208 | +22.5170 | +6.2850 | 11/15/95 506353 |
| | | +35.4740 | +8.9199 | 12/13/95 506875 |
| | | +4.9766 | +2.6701 | 04/05/95 501762 |
| | | +2.8000 | +2.0854 | 05/31/95 502953 |
| | | +1.8389 | +1.8259 | 09/20/95 505170 |
| | SR 89 | | | |
| | | +1.1300 | +3.8700 | 03/08/95 501208 |
| | | +4.7300 | +8.0900 | 05/31/95 502953 |
| | | +5.4200 | +6.2700 | 08/23/95 504626 |
| | SR 90 | -10.7699 | +10.6700 | 11/15/95 506353 |
| | | +5.4700 | +2.2500 | 03/08/95 501208 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN WET VEGETATION
PCI/KG - 0.037 BQ/KG (WET WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|-----------------------------------|-----------------------|------------|-------------------------------------|
| 2122 SHADDON FARM | 12.0 MILES NNE | SR 90 | |
| | | +20.6900 | +4.6700 05/31/95 502953 |
| | | +8.3400 | +2.5400 08/23/95 504626 |
| | | +24.3200 | +4.5200 11/15/95 506353 |
| 3115 LAYMAN FARM | 1.3 MILES SW | IODINE-131 | |
| | | +2.2200 | +2.0900 01/10/95 500202 |
| | | +2.0000 | +1.8900 02/07/95 500736 |
| | | +1.2300 | +2.0500 03/07/95 501247 |
| | | +0.2400 | +1.5400 04/04/95 501800 |
| | | +1.0000 | +1.4200 05/02/95 502384 |
| | | -1.5399 | +2.1800 05/30/95 502992 |
| | | -0.5099 | +2.6000 06/27/95 503604 |
| | | +1.6900 | +2.9300 07/25/95 504126 |
| | | -0.7599 | +1.7800 08/22/95 504665 |
| | | +0.2700 | +1.7300 09/19/95 505208 |
| | | -0.6899 | +2.1800 10/17/95 505767 |
| | | -0.7299 | +1.7200 11/14/95 506391 |
| | | +2.1800 | +2.2700 12/12/95 506915 |
| | GAMMA SCAN (GELI) | | |
| | AC-228 | +21.9030 | +10.9740 05/02/95 502384 |
| | BE-7 | +2041.8000 | +145.5600 01/10/95 500202 |
| | | +3059.3000 | +185.4100 02/07/95 500736 |
| | | +1369.3000 | +92.0240 03/07/95 501247 |
| | | +176.3900 | +27.5800 04/04/95 501800 |
| | | +363.4100 | +43.9600 05/02/95 502384 |
| | | +870.0000 | +68.0230 05/30/95 502992 |
| | | +710.6400 | +67.8720 06/27/95 503604 |
| | | +943.3600 | +75.9340 07/25/95 504126 |
| | | +663.5500 | +56.2900 08/22/95 504665 |
| | | +692.0901 | +57.2920 09/19/95 505208 |
| | | +1013.3000 | +68.6450 10/17/95 505767 |
| | | +1449.1000 | +98.9700 11/14/95 506391 |
| | | +2372.3000 | +155.7400 12/12/95 506915 |
| | BI-214 | +24.7560 | +9.3176 01/10/95 500202 |
| | | +14.2010 | +5.2882 05/30/95 502992 |
| | | +34.4170 | +8.7796 07/25/95 504126 |
| | | +13.8170 | +5.6561 08/22/95 504665 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN WET VEGETATION
PCI/KG - 0.037 BQ/KG (WET WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR TERM | DATE COLLECTED | LAB NO |
|-----------------------------------|-----------------------|-------------------|---------------|---------------------|--------|
| 3115 LAYMAN FARM | 1.3 MILES SW | GAMMA SCAN (GELI) | | | |
| | | BI-214 | +8.2138 | +4.6689 09/19/95 | 505208 |
| | | | +42.5810 | +11.4530 10/17/95 | 505767 |
| | | | +33.1310 | +8.0068 11/14/95 | 506391 |
| | | | +109.5700 | +16.8180 12/12/95 | 506915 |
| | K-40 | | +6714.8000 | +442.3000 01/10/95 | 500202 |
| | | | +6061.7000 | +362.7900 02/07/95 | 500736 |
| | | | +5479.3000 | +317.0800 03/07/95 | 501247 |
| | | | +7382.7000 | +548.7000 04/04/95 | 501800 |
| | | | +5201.8000 | +340.6500 05/02/95 | 502384 |
| | | | +6166.4000 | +321.5400 05/30/95 | 502992 |
| | | | +7118.5000 | +379.4500 06/27/95 | 503604 |
| | | | +7441.6000 | +407.5200 07/25/95 | 504126 |
| | | | +5528.3000 | +1330.3000 08/22/95 | 504665 |
| | | | +6192.6000 | +356.8300 09/19/95 | 505208 |
| | | | +5682.8000 | +297.0600 10/17/95 | 505767 |
| | | | +5644.4000 | +329.6500 11/14/95 | 506391 |
| | | | +7263.1000 | +463.0300 12/12/95 | 506915 |
| | PB-212 | | +0.6644 | +7.0479 02/07/95 | 500736 |
| | | | +5.5396 | +3.2370 08/22/95 | 504665 |
| | PB-214 | | +39.1820 | +14.8740 01/10/95 | 500202 |
| | | | +53.1670 | +10.4700 07/25/95 | 504126 |
| | | | +12.8040 | +5.0166 08/22/95 | 504665 |
| | | | +27.9480 | +7.8916 10/17/95 | 505767 |
| | | | +35.0870 | +6.8080 11/14/95 | 506391 |
| | | | +111.2200 | +16.1670 12/12/95 | 506915 |
| | SR 89 | | | | |
| | | | -0.6369 | +6.3300 03/07/95 | 501247 |
| | | | +8.5800 | +6.8500 05/30/95 | 502992 |
| | | | +3.6300 | +8.1900 08/22/95 | 504665 |
| | | | +2.6500 | +9.5200 11/14/95 | 506391 |
| | SR 90 | | | | |
| | | | +7.1100 | +3.5400 03/07/95 | 501247 |
| | | | +7.1800 | +3.4000 05/30/95 | 502992 |
| | | | +10.8500 | +3.2900 08/22/95 | 504665 |
| | | | +9.7700 | +3.3200 11/14/95 | 506391 |
| 3209 OWEN HENDERSON FARM | 4.8 MILES WSW | IODINE-131 | +0.2700 | +1.7100 01/10/95 | 500218 |

TENNESSEE VALLEY AUTHORITY
ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
RADIOACTIVITY IN WET VEGETATION
PCI/KG - 0.037 BQ/KG (WET WEIGHT)
01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR DATE TERM COLLECTED LAB NO |
|----------------------------------------|-----------------------|----------|--------------------------------------|
| 3209 OWEN HENDERSON FARM 4.8 MILES WSW | IODINE-131 | +2.1800 | +2.2700 02/07/95 500752 |
| | | +1.3300 | +2.2100 03/07/95 501263 |
| | | +1.2200 | +1.7300 04/04/95 501816 |
| | | +1.2800 | +2.1400 05/02/95 502409 |
| | | -0.4299 | +1.3600 05/30/95 503007 |
| | | -0.8399 | +2.5100 06/27/95 503619 |
| | | -0.5699 | +1.3300 07/25/95 504142 |
| | | +1.2900 | +2.1600 08/22/95 504680 |
| | | +1.1400 | +1.9100 09/19/95 505224 |
| | | +0.4500 | +2.8600 10/17/95 505782 |
| | | +1.5500 | +2.5900 11/14/95 506406 |
| | | +1.7700 | +3.5900 12/12/95 506930 |
| | GAMMA SCAN (GELI) | | |
| | | AC-228 | +36.7360 +19.1920 12/12/95 506930 |
| | | BE-7 | +810.7700 +65.1190 01/10/95 500218 |
| | | | +1469.0000 +118.6800 02/07/95 500752 |
| | | | +487.9400 +28.9630 03/07/95 501263 |
| | | | +267.0400 +50.6950 04/04/95 501816 |
| | | | +491.1300 +47.9070 05/02/95 502409 |
| | | | +1536.3000 +164.1000 05/30/95 503007 |
| | | | +1267.7000 +91.4010 06/27/95 503619 |
| | | | +1600.2000 +80.5430 07/25/95 504142 |
| | | | +273.6300 +45.4780 08/22/95 504680 |
| | | | +1104.1000 +89.6740 09/19/95 505224 |
| | | | +2522.4000 +134.9600 10/17/95 505782 |
| | | | +2387.5000 +148.1000 11/14/95 506406 |
| | | | +2031.3000 +144.3400 12/12/95 506930 |
| | | BI-214 | +8.8349 +7.3193 01/10/95 500218 |
| | | | +4.9762 +4.4115 03/07/95 501263 |
| | | | +24.3390 +11.4800 05/30/95 503007 |
| | | | +29.4100 +11.8730 07/25/95 504142 |
| | | | +16.0690 +7.3085 08/22/95 504680 |
| | | | +54.9630 +13.1660 09/19/95 505224 |
| | | | +78.3050 +15.6860 10/17/95 505782 |
| | | | +50.5060 +13.9850 11/14/95 506406 |
| | | | +39.3990 +13.7290 12/12/95 506930 |
| | CS-137 | +10.4440 | +2.6814 06/27/95 503619 |

TENNESSEE VALLEY AUTHORITY
 ENVIRONMENTAL RADIOLOGICAL MONITORING AND INSTRUMENTATION
 WESTERN AREA RADIOLOGICAL LABORATORY

WATTS BAR NUCLEAR PLANT
 RADIOACTIVITY IN WET VEGETATION
 PCI/KG - 0.037 BQ/KG (WET WEIGHT)
 01/01/95 TO 12/31/95

| STATION CODE/LOCATION/DESCRIPTION | ANALYSIS (NUCLIDE) | ACTIVITY | ERROR TERM | DATE COLLECTED | LAB NO |
|----------------------------------------|---------------------------|------------|---------------|-------------------|--------|
| 3209 OWEN HENDERSON FARM 4.8 MILES WSW | GAMMA SCAN (GEL1) K-40 | +5341.1000 | +312.5900 | 01/10/95 | 500218 |
| | | +4847.9000 | +316.4300 | 02/07/95 | 500752 |
| | | +5187.0000 | +298.1900 | 03/07/95 | 501263 |
| | | +6163.7000 | +372.6600 | 04/04/95 | 501816 |
| | | +4821.0000 | +288.7700 | 05/02/95 | 502409 |
| | | +6178.6000 | +377.5000 | 05/30/95 | 503007 |
| | | +8111.3000 | +498.2300 | 06/27/95 | 503619 |
| | | +6997.9000 | +424.0200 | 07/25/95 | 504142 |
| | | +6632.9000 | +396.5300 | 08/22/95 | 504680 |
| | | +7743.2000 | +473.9600 | 09/19/95 | 505224 |
| | | +3952.1000 | +295.7800 | 10/17/95 | 505782 |
| | | +3364.5000 | +272.8600 | 11/14/95 | 506406 |
| | | +8932.6000 | +539.2200 | 12/12/95 | 506930 |
| | PB-212 | +7.5319 | +4.5057 | 04/04/95 | 501816 |
| | | +0.6045 | +4.7264 | 05/02/95 | 502409 |
| | PB-214 | +2.2945 | +7.8582 | 07/25/95 | 504142 |
| | | +5.3582 | +6.8100 | 02/07/95 | 500752 |
| | | +5.2981 | +3.5952 | 03/07/95 | 501263 |
| | | +33.0440 | +8.8365 | 07/25/95 | 504142 |
| | | +20.0970 | +5.6091 | 08/22/95 | 504680 |
| | | +83.7850 | +12.5870 | 09/19/95 | 505224 |
| | | +74.2070 | +13.9440 | 10/17/95 | 505782 |
| | | +33.1740 | +12.8460 | 12/12/95 | 506930 |
| | SR 89 | -4.4099 | +5.6300 | 03/07/95 | 501263 |
| | | +6.6600 | +12.4600 | 05/30/95 | 503007 |
| | | +4.0800 | +13.5300 | 08/22/95 | 504680 |
| | | -11.7199 | +11.7300 | 11/14/95 | 506406 |
| | SR 90 | +12.2400 | +3.3800 | 03/07/95 | 501263 |
| | | +41.5400 | +7.7100 | 05/30/95 | 503007 |
| | | +39.5400 | +6.6900 | 08/22/95 | 504680 |
| | | +26.4800 | +4.8900 | 11/14/95 | 506406 |