Progress Energy

APR 2 1 2003

SERIAL: HNP-03-044

United States Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555

SHEARON HARRIS NUCLEAR POWER PLANT
DOCKET NO. 50-400/LICENSE NO. NPF-63
ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

Ladies and Gentlemen:

In accordance with Technical Specification 6.9.1.3 for the Harris Nuclear Plant, Progress Energy Carolinas, Inc. (also known as Carolina Power & Light Company) is providing the enclosed Annual Radiological Environmental Operating Report for 2002.

If you have questions regarding this information, please contact me at (919) 362-3137.

Sincerely,

John R Caves

J. R. Caves
Supervisor – Licensing/Regulatory Programs
Harris Nuclear Plant

MGW

Enclosure

c: Mr. J. B. Brady (NRC Senior Resident Inspector, HNP)
Mr. C. P. Patel (NRR Project Manager, HNP)
Mr. L. A. Reyes (NRC Regional Administrator, Region II)

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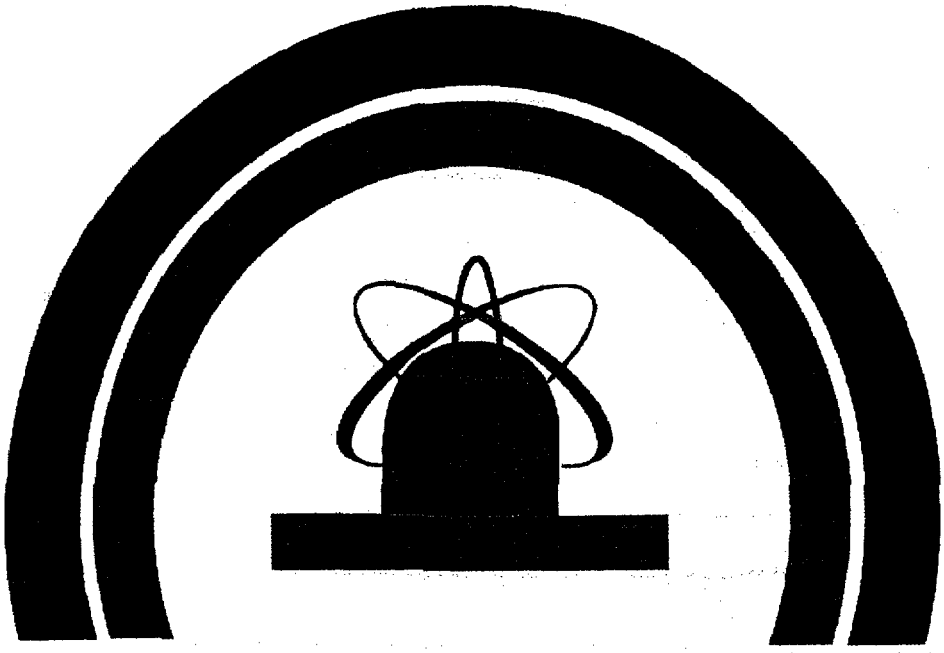
Progress Energy Carolinas, Inc.
Harris Nuclear Plant
P.O. Box 165
New Hill, NC 27562

RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT 2002



HARRIS NUCLEAR PLANT

PROGRESS ENERGY CAROLINAS, INC.

HARRIS ENERGY &
ENVIRONMENTAL CENTER
PROGRESS ENERGY CAROLINAS, INC.
NEW HILL, NORTH CAROLINA

RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT
FOR THE
SHEARON HARRIS NUCLEAR POWER PLANT
JANUARY 1 THROUGH DECEMBER 31, 2002

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EXECUTIVE SUMMARY

The Harris Nuclear Plant (HNP) is operated by Progress Energy Carolinas, Inc. (also known as Carolina Power & Light Company), under a license granted by the Nuclear Regulatory Commission. Provisions of the Nuclear Regulatory Commission's Regulatory Guide 4.8, Harris Nuclear Plant Technical Specifications, and the Harris Nuclear Plant Offsite Dose Calculation Manual (ODCM) establish the requirements of the Radiological Environmental Monitoring Program (REMP). This report provides the results of the Radiological Environmental Monitoring program from January 1, 2002 through December 31, 2002.

The Radiological Environmental Monitoring program was established in 1982. Radiation and radioactivity in various environmental media have been monitored for more than 20 years, including 5 years prior to commencing operation. Monitoring is also provided for control locations, which would not be impacted by operations of the Harris Nuclear Plant. Using these control locations and data collected prior to operation allows comparison of data collected at locations near the Harris Nuclear Plant which could potentially be impacted by its operations. Radiation levels show no significant change from pre-operational radiation levels.

Monitoring results for environmental media are summarized as follows:

- Air-monitoring results are similar or less than the concentrations of radioactivity from pre-operation monitoring. These observations are also consistent with past operational data.

- Milk and broadleaf vegetation monitoring results are similar to all the past years where no I-131 concentrations were detected. Broadleaf vegetation is in lieu of indicator milk samples, due to no milk-producing animal within five miles of the plant.

- Terrestrial vegetation includes various crops collected during a growing season and results indicate no detectable radioactivity.

- Aquatic organism monitoring includes fish and aquatic vegetation. The fish and aquatic vegetation results indicate no detectable radioactivity.

- Surface (and drinking) water results indicate no detectable gamma radionuclides including I-131, which is performed by an I-131 separation analysis.

- Surface water (non-drinking water) results from Harris Lake show the presence of tritium, which is attributed to plant operation, but is well below the EPA reportable non-drinking water limit (30,000 pCi/Liter) and drinking water limit (20,000 pCi/Liter). Refer to the Interpretations and Conclusions section/ Surface Water.

- External radiation dose showed no measurable change from pre-operational data.

The continued operation of the Harris Nuclear Plant has not contributed measurable radiation or the presence of gamma radioactivity, with the exception of Harris Lake bottom sediment, in the environmental monitoring program. The Harris Lake Surface water samples (non-public drinking water) revealed tritium concentrations that are well within the applicable regulatory limits.

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

PURPOSE AND REQUIREMENTS FOR THE RADIOLOGICAL MONITORING PROGRAM

The operation of a nuclear generating station may increase background radiation by a small fraction. It is important to measure these emissions of radioactivity and radiation to assess their impact on the surrounding populations. The purpose of the radiological monitoring program (surveillances) is to measure accumulation of radioactivity in the environments, to determine whether this radioactivity is the result of operation of the Harris Plant, and to assess the potential dose to the off-site population based on the cumulative measurements of radioactivity of plant origin. Radiological monitoring programs provide an additional verification of the radiological controls of nuclear generating stations.

The radiological monitoring program was established in 1982 and has continued to collect samples and evaluate them for over 20 years.

Requirements are established for the radiological monitoring program with the following:

- Technical Specifications
- Off-Site Dose Calculation Manual (ODCM)
- Various procedures

Additional guidance regarding the radiological monitoring program may be found in the following:

- NRC Regulatory Guide 1.109
- NRC Regulatory Guide 4.13
- NRC Regulatory Guide 4.15

General Site Description

The Harris Nuclear Plant consists of a pressurized water reactor with a design rating of 900 MWe (Mega Watts electric). Commercial production was initiated on January 3, 1987. The Harris Nuclear Plant is located in southwest Wake County, North Carolina. The site is along U.S. route 1 approximately sixteen (16) miles southwest of Raleigh, North Carolina and is displayed on the map of central North Carolina (Figure 1). The site is also approximately fifteen (15) miles northeast of Sanford, North Carolina. The nearest community is New Hill, which is north of the site.

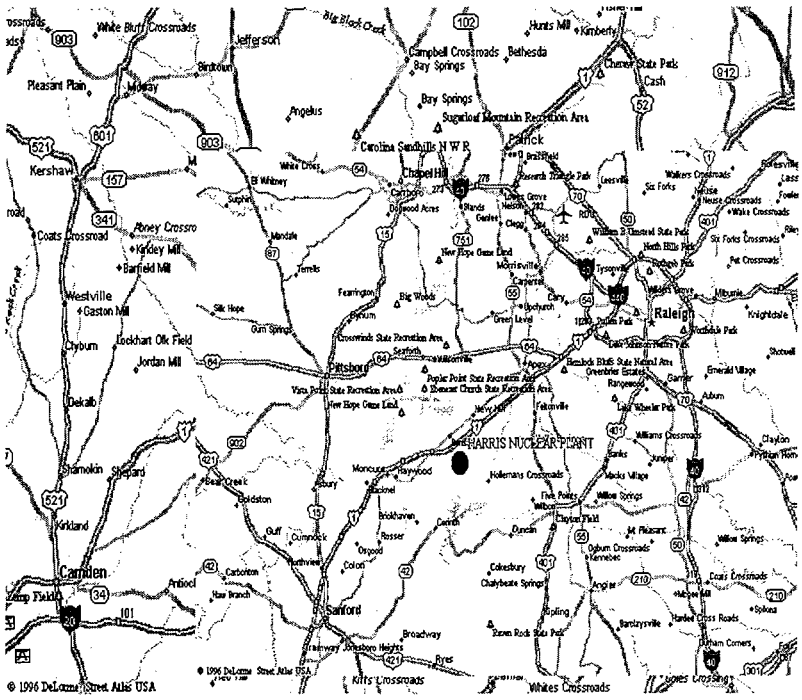

Figure 1: Location of Harris Nuclear Plant

Harris Lake is adjacent to the plant itself and is the source of cooling tower makeup water. The lake was impounded in the construction of Harris Plant. The lake is fed by Buckhorn Creek and is approximately 4,000 acres in area. The main dam is approximately 4.7 miles south of the site. The primary discharges to Harris Lake from the plant are surface runoff, cooling tower blow down, and radiological waste process systems.

Fishing, boating, and swimming are popular activities on Harris Lake and other nearby lakes. Progress Energy Carolinas, Inc. encourages the recreational use of the lake, Harris Lake County Park, and the adjoining lands through a variety of agreements with state and local government. One of these agreements is the game lands agreement encouraging hunting.

Within a five mile radius most of the land is wooded with only a few residences and limited agricultural activity. There are no non-company industrial structures or residences on the plant site. The chief use of the land is for production of timber and pulp fiber.

Within a ten mile radius the area is considered rural with significant populations in Apex, Holly Springs, and Fuquay-Varina. Currently these communities are experiencing significant growth.

Within a fifty-mile radius much of the land is used in agricultural production. Significant crops include corn, soybeans, and tobacco. Livestock is also an important component with significant production in cattle, hogs, poultry, and dairy products.

Consumption of drinking water, food crops, and fish are sample media that are examples of ingestion pathways for exposure.

RADIOLOGICAL MONITORING PROGRAM QUALITY ASSURANCE

A required component of the REMP is the Quality Assurance Program. The standards for the quality assurance program are established in the NRC Regulatory Guide 4.15, "Quality Assurance for Radiological Monitoring Programs." The purpose of the quality assurance program is "(1) to identify deficiencies in the sampling and measurement processes to those responsible for these operations so that corrective action can be taken, and (2) to obtain some measure of confidence in the results of the monitoring programs in order to assure the regulatory agencies and the public that the results are valid."(NRC Regulatory Guide 4.15 B Pg. 4.15-2) This provides the opportunity to implement corrective actions that address possible deficiencies. Examples of the activities of the quality assurance program include:

- regular review of sample collection and records
- regular review of laboratory procedures and methods
- participation in the Analytics, Inc. Environmental Cross-Check Program, which provides an independent assessment of the quality of laboratory results
- the use of known concentrations of radioactivity in test samples by the laboratory to ensure consistent quality results on an ongoing basis

RADIOLOGICAL MONITORING PROGRAM GENERAL DESCRIPTION

Although the contribution to background radiation is small, Progress Energy Carolinas, Inc. has established this program to measure the exposure pathways to man. An exposure pathway describes the source of the radiological exposure. The primary forms of radiological emissions from the plant are airborne and liquid discharge. The following pathways are monitored: external dose, ingestion of radioactive materials, and the inhalation of radioactive material. Specific methods and different environmental media are required to assess each pathway. Below in Table 1 is a list of the media used to assess each of these pathways.

Table 1

Media Used to Assess Exposure Pathways to Man

Pathway of Exposure to Man	Media Sampled
External Dose	Thermoluminescent Dosimetry (TLD) Shoreline Sediment
Ingestion	Aquatic Vegetation Drinking Water Food Crops Fish Ground Water Milk Broadleaf Vegetation (when Milk samples are unavailable) Surface Water
Inhalation	Air Samples (Particulate & Radioiodine)

Sampling Locations

Sampling locations are chosen based upon meteorological factors, preoperational monitoring, and results of the land use surveys. A number of locations are selected as controls. Control stations are selected because they are unaffected by the operation of the plant. Sample locations may be seen in Figures 2a, 2b, and 3. A description of each sample location may be found in Table 2.

Radiological Environmental Sampling Locations

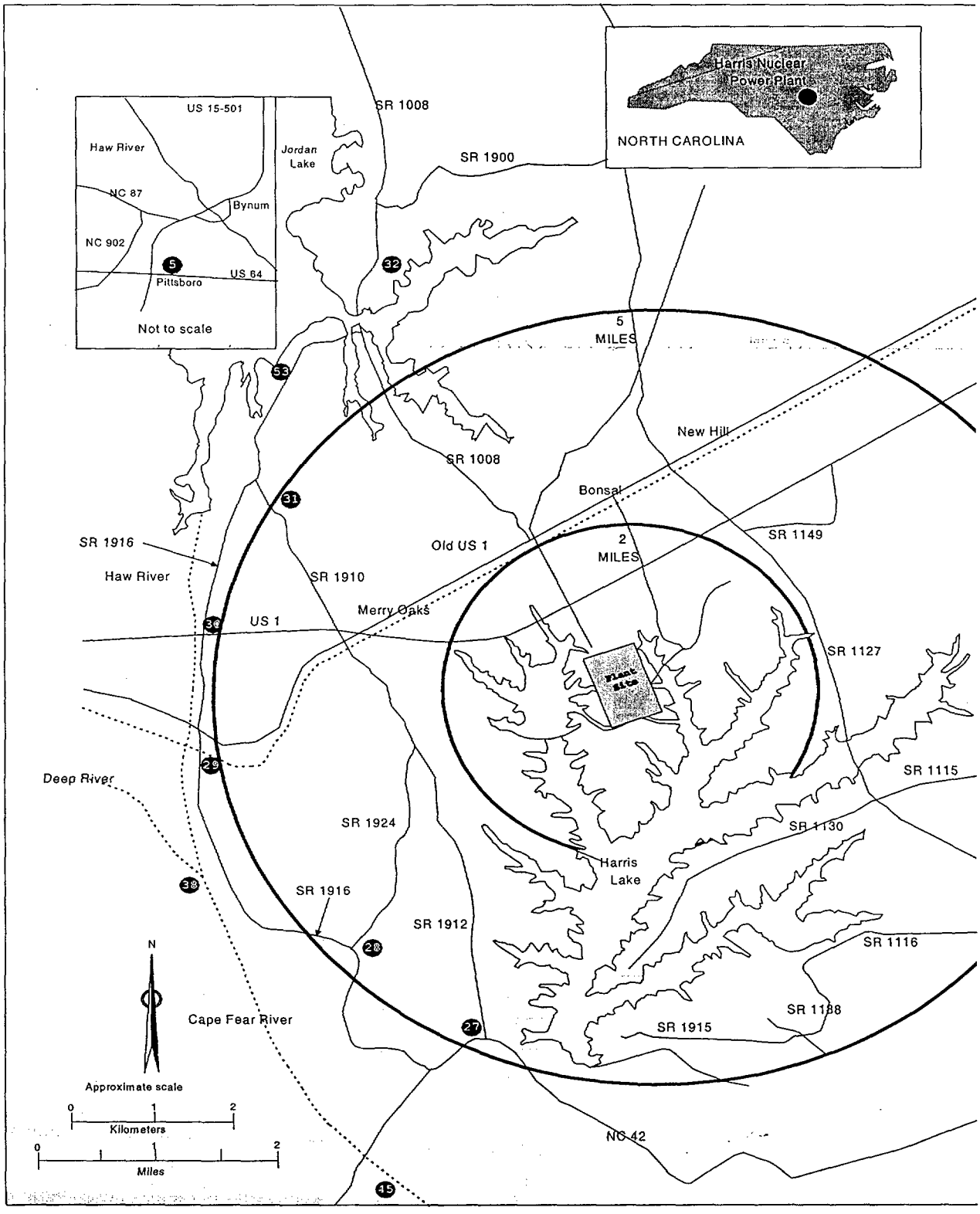

Figure 2a: Radiological Environmental Sampling Locations (Distant from Plant)

Radiological Environmental Sampling Locations

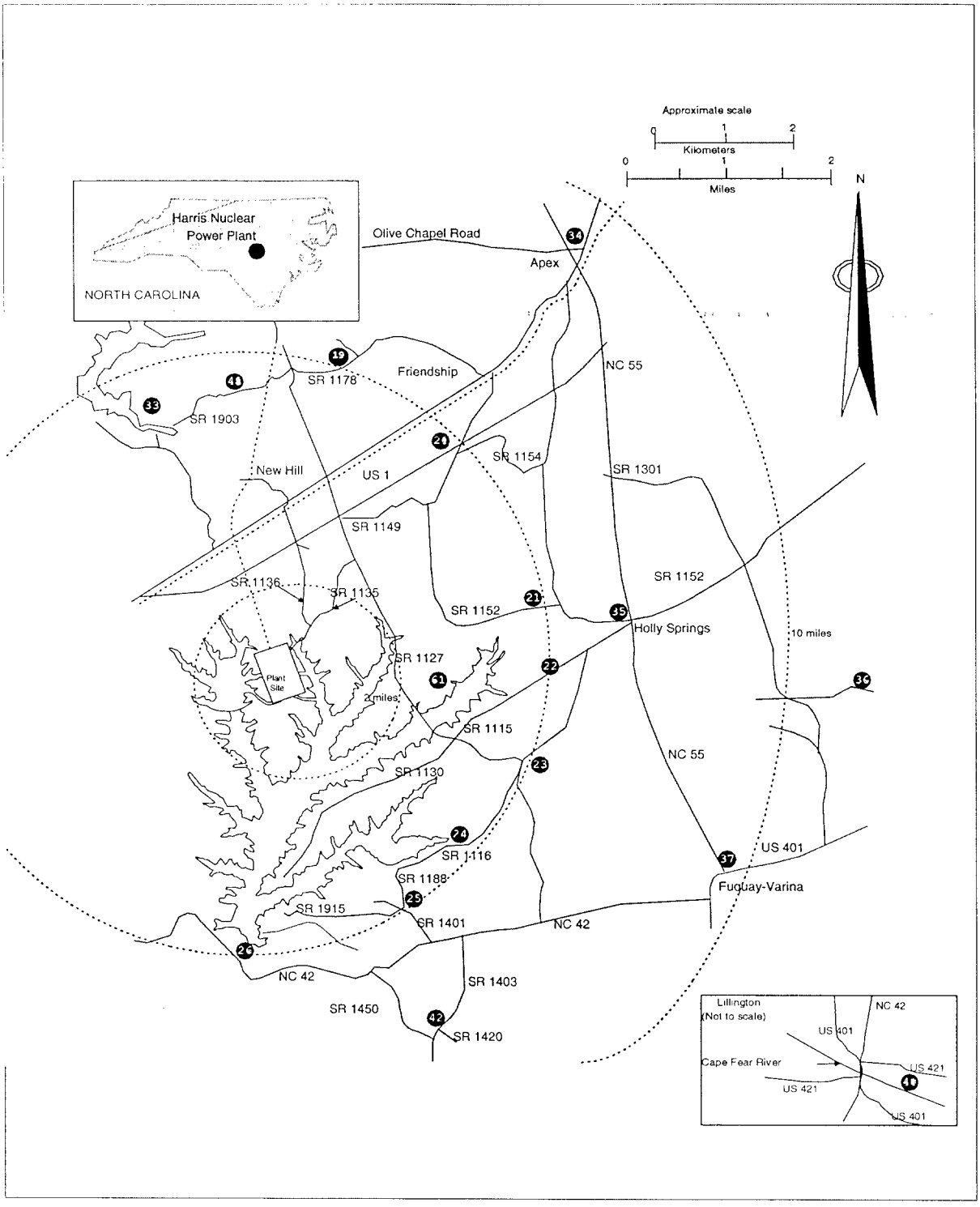

Figure 2b: Radiological Environmental Sampling Locations (Distant from Plant)

Radiological Environmental Sampling Locations

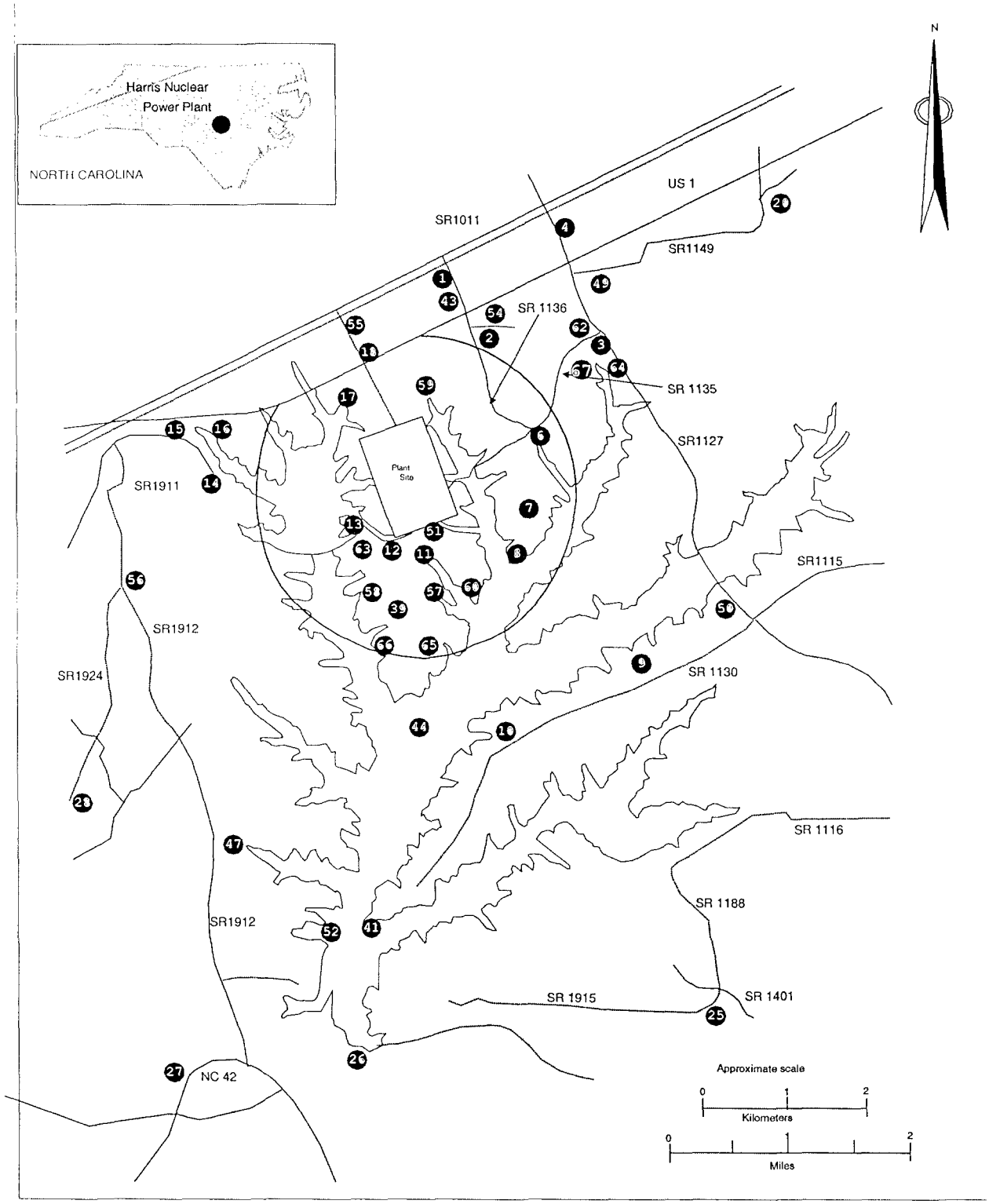

Figure 3: Radiological Environmental Sampling Locations (Nearest Plant)

Table 2

Radiological Environmental Sampling Locations Legend

STATION NUMBER	SAMPLE TYPE	REFER TO FIGURE	STATION NUMBER	SAMPLE TYPE	REFER TO FIGURE
1	AP, AC, TL	3	34	TL	2b
2	AP, AC, TL	3	35	TL	2b
3	TL	3	36	TL	2b
4	AP, AC, TL	3	37	TL	2b
5	AP, AC, MK, FC, TL	2a *	38	SW, DW	2a
6	TL	3	39	GW	3
7	TL	3	40	SW, DW	2b *
8	TL	3	41	SS, AV	3
9	TL	3	42	MK	2b
10	TL	3	43	DELETED	3
11	TL	3	44	FH	3
12	TL	3	45	FH	2a
13	TL	3	47	AP, AC	3
14	TL	3	48	TL	2b
15	TL	3	49	TL	3
16	TL	3	50	TL	3
17	TL	3	51	DW	3
18	TL	3	52	SD	3
19	TL	2b	53	TL	2a
20	TL	2b, 3	54	FC	3
21	TL	2b	55	FC	3
22	TL	2b	56	TL	3
23	TL	2b	57	GW	3
24	TL	2b	58	GW	3
25	TL	2b, 3	59	GW	3
26	AP, AC, AV, SS, SW, TL	2b, 3	60	GW	3
27	TL	2a, 3	61	AV	2b
28	TL	2a, 3	62	FC	3
29	TL	2a	63	TL	3
30	TL	2a	64	FC	3
31	TL	2a	65	BL	3
32	TL	2a	66	BL	3
33	TL	2b	67	TL	3

AC	Air Cartridge	DW	Drinking Water	MK	Milk	TL	TLD
AP	Air Particulate	FC	Food Crop	SD	Bottom Sediment		
AV	Aquatic Vegetation	FH	Fish	SS	Shoreline Sediment		
BL	Broad Leaf Veg.	GW	Groundwater	SW	Surface Water		

* Approximate location

Table 2 (Continued)

Harris Nuclear Plant

Radiological Environmental Monitoring Sampling Locations

Sample Type	Location & Description	Frequency	Sample Size	Analysis
Air Cartridge (AC)	1--2.6 miles N 2--1.4 miles NNE 4--3.1 miles NNE 5--13.4 miles WNW--Pittsboro* 26--4.7 miles S 47--3.4 miles SSW	As required by dust loading, but at least once per 7 days	28,000 ft^3 (800 m^3)	Iodine
Air Particulate (AP)	1--2.6 miles N 2--1.4 miles NNE 4--3.1 miles NNE 5--13.4 miles WNW--Pittsboro* 26--4.7 miles S 47--3.4 miles SSW	As required by dust loading, but at least once per 7 days	28,000 ft^3 (800 m^3)	Gross Beta (Weekly) Composite Gamma (Quarterly)
Fish (FH)	44--Site varies in Harris Lake 45--Site varies in Cape Fear River above Buckhorn Dam*	Semiannual	1 kg (wet) Free Swimmers & Bottom Feeders	Gamma
Drinking Water (DW)	38--6.2 miles WSW* 40--17.2 miles SSE Lillington 51--Water Treatment Plant (On Site)	2 Week Composite Monthly Composite	8 liters	I-131, Gamma Tritium Gross Beta
Ground Water (GW)	39--0.7 miles SSW 57--0.4 miles SSW 58--0.5 miles WSW 59--0.5 miles NNE 60--0.5 miles ESE	Quarterly	4 liters	Gamma Tritium
Milk (MK)	5--18.2 miles WNW Manco Dairy*	Semimonthly	8 liters	I-131 Gamma
Shoreline Sediment (SS)	26--4.6 miles S 41--3.8 miles S	Semiannual	500 grams	Gamma
Surface Water (SW)	26--4.7 miles S 38--6.2 miles WSW * 40--17.2 miles SSE Lillington	Weekly Monthly Composite	8 liters	I-131, Gamma Tritium Gross Beta
Aquatic Vegetation (AV)	26--4.7 miles S 41--3.8 miles S 61--2.5 miles E	Annually	500 grams	Gamma
Bottom Sediment (SD)	52--3.8 miles S	Semiannual	500 grams	Gamma
Food Crop (FC) or Food Products (FP)	5--18.0 miles NNW--Pittsboro* 54--1.7 miles NNE--Wilkins or Morris 55--2.0 miles NNW--L. L. Goodwin 62--2.3 miles NE--Lee 64--1.8 miles ENE-Michael	3 different kinds of broadleaf vegetation monthly during growing season	500 grams	Gamma
Broadleaf Vegetation (BL)	65—1.36 miles S—Site Boundary 66--1.33 miles SSW—Site Boundary	Monthly	500 grams	Gamma

* Control Stations

Table 2 (Continued)

Harris Nuclear Plant

Radiological Environmental Monitoring Sampling Locations

Sample Type	Location & Description	Frequency	Sample Size	Analysis
Thermoluminescent Dosimetry (TL or TLD)	1 -- 2.6 miles N 2 -- 1.4 miles NNE 3 -- 1.9 miles ENE 4 -- 3.1 miles NNE 5 -- 13.4 miles WNW--Pittsboro* 6 -- 0.8 mile NE 7 -- 0.7 mile E 8 -- 0.6 mile ESE 9 -- 2.2 miles SE 10 -- 2.2 miles SSE 11 -- 0.6 mile S 12 -- 0.9 mile SSW 13 -- 0.7 mile WSW 14 -- 1.5 miles W 15 -- 2.0 miles W 16 -- 1.9 miles WNW 17 -- 1.5 miles NW 18 -- 1.4 miles NNW 19 -- 5.0 miles NNE 20 -- 4.5 miles NE 21 -- 4.8 miles ENE 22 -- 4.3 miles E 23 -- 4.8 miles ESE 24 -- 4.0 miles SE 25 -- 4.7 miles SSE 26 -- 4.7 miles S 27 -- 4.8 miles SW 28 -- 4.8 miles SSW 29 -- 5.7 miles WSW 30 -- 5.6 miles W 31 -- 4.7 miles WNW 32 -- 6.4 miles NNW 33 -- 4.5 miles NNW 34 -- 8.7 miles NE--Apex 35 -- 6.9 miles E--Holly Springs 36 -- 10.9 miles E 37 -- 9.2 miles ESE--Fuquay-Varina 48 -- 4.5 miles N 49 -- 2.5 miles NNE 50 -- 2.6 miles ESE 53 -- 5.8 miles NW 56 -- 3.0 miles WSW 63 -- 0.6 mile SW 67 -- 1.2 miles ENE	Quarterly	Not Applicable	TLD Reading

* Control Stations

SUMMARY OF RADIOLOGICAL MONITORING PROGRAM

This report presents the results of the Radiological Environmental Monitoring Program conducted during 2002 for the Harris Nuclear Plant (HNP) and fulfills the reporting requirements of Technical Specifications 6.9.1.3 and ODCM E.3. The program was conducted in accordance with Operational Requirement 3.12.1 in the Off-Site Dose Calculation Manual (ODCM), and applicable procedures.

Approximately 1100 total samples of 13 different media types from approximately 880 indicator stations were compared to approximately 240 control stations. Control stations are locations that are unaffected by plant operations. In approximately 99 percent of the indicator samples there was no difference from the activities observed in the corresponding control samples.

Radioactivity in environmental samples attributed to plant operations in 2002 is as follows:

Environmental Media	Radionuclide	Location of w/Highest Annual Mean	Activity and Occurrence	Maximum Individual Dose (mrem/yr)
Surface Water	H-3	Harris Lake	4,490 pCi/L (12/12)	No ingestion pathway. No dose calculated.
Fish	H-3	Harris Lake	See above. Assumes H-3 equilibrium between lake water and fish tissue.	0.01 Total Body

The radiological environmental data indicates that HNP operations in 2002 had no significant impact on the environment or public health and safety.

A statistical summary of all the data for 2002 has been compiled and summarized in Table 3.

The plant-derived activity detected within the scope of the Radiological Environmental Monitoring Program can be seen in the Data Summary Table 3 for 2002. No detectable tritium activity was observed at Lillington, N.C., located 17 miles downstream on the Cape Fear River, which is the first public drinking water (ingestion pathway) location below the Harris Lake discharge spillway. No plant-related gamma activity has been detected in fish collected from Harris Lake or in the water samples from Lillington, N.C.

The Harris Lake Bottom Sediment (SD) and the Aquatic Vegetation (AV) pose no radiological dose to the general public via this pathway due to the fact that the SD is not easily accessible and the AV is not an ingestion pathway. These samples are for long-term trends.

Table 3
Harris Nuclear Plant
Radiological Environmental Monitoring Program Data Summary

Shearon Harris Nuclear Power Plant
Wake County, North Carolina

Docket Number: STN 50-400
Calendar Year: 2002

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Typical Lower Limit of Detection (LLD) [1]	All Indicator Locations Mean[2] Range	Location w/Highest Annual Mean		Control Locations Mean[2] Range
				Name, Distance, and Direction	Mean[2] Range	
Air Cartridge (pCi/m^3)	I-131 307[3]	3.0E-2	All less than LLD	N/A	All less than LLD	All less than LLD
Air Particulate (pCi/m^3)	Gross Beta 307[3]	1.0E-3	1.66E-2 (256/260) 3.19E-3 – 4.39E-2	SR 1134 @ Int. SR 1011-Dixie Pipeline 2.6 miles N	1.70E-2 (52/52) 6.55E-3 – 4.39E-2	1.67E-2 (51/52) 8.44E-3 - 3.17E-2
				Spillway on Main Reservoir 4.7 miles S	1.70E-2 (50/51) 3.19E-3 – 3.35E-2	
	Gamma 24	Refer to Table 4	All less than LLD	N/A	All less than LLD	All less than LLD
Drinking Water[4] (pCi/l)	I-131 52	1.0E+0	All less than LLD	N/A	All less than LLD	All less than LLD
	Gross Beta 24	1.0E+0	5.80E+0 (12/12) 3.10E+0 – 1.31E+1	Lillington Cape Fear River 17.2 miles SSE	5.80E+0 (12/12) 3.10E+0 – 1.31E+1	6.03E+0 (12/12) 4.14E+0 – 1.21E+1
	Gamma 24	Refer to Table 4	All less than LLD	N/A	All less than LLD	All less than LLD
	Tritium 24	3.25E+2	All less than LLD	N/A	All less than LLD	All less than LLD

Table 3 (cont.)
Harris Nuclear Plant
Radiological Environmental Monitoring Program Data Summary

Shearon Harris Nuclear Power Plant
Wake County, North Carolina

Docket Number: STN 50-400
Calendar Year: 2002

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Typical Lower Limit of Detection (LLD) [1]	All Indicator Locations Mean[2] Range	Location w/Highest Annual Mean		Control Locations Mean[2] Range
				Name, Distance, and Direction	Mean[2] Range	
Fish Bottom-Feeders (pCi/g, wet)	Gamma 4	Refer to Table 4	All less than LLD	N/A	All less than LLD	All less than LLD
Free-Swimmers (pCi/g, wet)	Gamma 8	Refer to Table 4	All less than LLD	N/A	All less than LLD	All less than LLD
Aquatic Vegetation (pCi/g, wet)	Gamma 3	Refer to Table 4	All less than LLD	N/A	All less than LLD	No control
Food Crop (pCi/g, wet)	Gamma 40[3]	Refer to Table 4	All less than LLD	N/A	All less than LLD	All less than LLD
Broadleaf Vegetation (pCi/g, wet)	Gamma 30[3] Cs-137	3.2E-2	6.86E-2 (1/30) Single Value	Site Boundary 1.33 miles SSW	6.86E-2 (1/10) Single Value	No control
Ground Water (pCi/l)	Gamma 20	Refer to Table 4	All less than LLD	N/A	All less than LLD	No control
	Tritium 20	3.25E+2 (20/20)[6]	9.62E+2 (4/20) 7.25E+2 – 1.16E+3	North Bank ESW Intake 0.5 mile WSW	9.62E+2 (4/4) 7.25E+2 – 1.16E+3	No control

Table 3 (cont.)
Harris Nuclear Plant
Radiological Environmental Monitoring Program Data Summary

Shearon Harris Nuclear Power Plant
Wake County, North Carolina

Docket Number: STN 50-400
Calendar Year: 2002

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Typical Lower Limit of Detection (LLD) [1]	All Indicator Locations Mean[2] Range	Location w/Highest Annual Mean		Control Locations Mean[2] Range
				Name, Distance, and Direction	Mean[2] Range	
Milk (pCi/l)	I-131 24	1.0E+0	N/A	N/A	N/A	All less than LLD
	Gamma 24	Refer to Table 4	N/A	N/A	N/A	All less than LLD
Shoreline Sediments (pCi/g, dry)	Gamma 4	Refer to Table 4	All less than LLD	N/A	All less than LLD	No Control
Bottom Sediment (pCi/g, dry)	Gamma 2 Co-60	3.2 E-2	3.12E+0 (2/2) 2.67E+0 – 3.56E+0	Harris Lake Cooling Tower Mixing Zone 3.8 miles S	3.12E+0 (2/2) 2.67E+0 – 3.56E+0	No Control
	Cs-137	5.4 E-2	3.91E-1 (2/2) 3.62E-1 – 4.21E-1	Harris Lake Cooling Tower Mixing Zone 3.8 miles S	3.91E-1 (2/2) 3.62E-1 – 4.21E-1	No Control
Surface Water[4] (pCi/l)	I-131 52	1.0E+0	All less than LLD	N/A	All less than LLD	All less than LLD
	Gross Beta 36	1.0E+0	4.66E+0 (24/24) 2.33E+0 - 1.31E+1	Lillington Cape Fear River 17.2 miles SSE	5.80E+0 (12/12) 3.10E+0 - 1.31E+1	6.03E+0 (12/12) 4.14E+0 – 1.21E+1
	Gamma 36	Refer to Table 4	All less than LLD	N/A	All less than LLD	All less than LLD

Table 3 (cont.)
Harris Nuclear Plant
Radiological Environmental Monitoring Program Data Summary

Shearon Harris Nuclear Power Plant
Wake County, North Carolina

Docket Number: STN 50-400
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Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Typical Lower Limit of Detection (LLD) [1]	All Indicator Locations Mean[2] Range	Location w/Highest Annual Mean		Control Locations Mean[2] Range
				Name, Distance, and Direction	Mean[2] Range	
Surface Water[4] (pCi/l)	Tritium 36	3.25E+2 (24/36)[6]	All less than LLD	N/A	All less than LLD	All less than LLD
		1.00E+3 (12/36)[6]	4.49E+3 (12/24) 2.80E+3 – 6.91E+3	Harris Lake 4.7 miles S	4.49E+3 (12/12) 2.80E+3 - 6.91E+3	
Direct Radiation (mR/qtr) [5]	TLD 174		1.17E+1 (170/170) 8.60E+0 – 1.65E+1	Fuquay Varina at Old CP&L Office 9.2 miles ESE	1.56E+1 (4/4) 1.49E+1 – 1.65E+1	1.48E+1 (4/4) 1.42E+1 – 1.51E+1

FOOTNOTES TO TABLE 3

1. The Lower Limit of Detection (LLD) is the smallest concentration of radioactive material in a sample that will yield a net count above system background which will be detected with 95 percent probability and with only 5 percent probability of falsely concluding that a blank observation represents a "real" signal. Due to counting statistics and varying volumes, occasionally lower LLDs are achieved.

2. Mean and range are based on detectable measurements only. The fractions of all samples with detectable activities at specific locations are indicated in parentheses.

3. Missing samples are discussed in Missed Samples and Analyses.

4. Although quarterly composite samples are required, monthly composite samples are used to provide more frequent and sensitive analyses.

5. TLD exposure is reported in milliroentgen (mR) per 90-day period (quarter) beginning in 1995. This is the exposure standard used to compare data to the Nuclear Regulatory Commission (NRC).

6. Tritium Lower Limit of Detection (LLD) was lowered to 3.25 E+2 pCi/L in June 1996 for samples that typically demonstrate activity less than the LLD. The LLD was lowered at the request of Progress Energy Carolinas, Inc. in order to maintain comparable LLD and result values with the NC Division of Radiation Protection (NCDRP) laboratory. Other samples that typically exhibit activity greater than the LLD have a tritium Lower Limit of Detection (LLD) of 1.0 E+3 pCi/L.

INTERPRETATIONS AND CONCLUSIONS

Air Monitoring

All 307 air cartridge samples from indicator and control stations had I-131 concentrations less than the typical LLD of 3.0E-2 pCi/m^3. I-131 was detected in air samples for a six-week period following the Chernobyl incident in April 1986. With this exception, no I-131 has been detected in air samples collected from 1987 through 2002, which is the entire operating history of the plant.

For the period of January 1, 2002 to December 31, 2002; the gross beta activity was detectable in all airborne particulate samples, with acceptable runtime, from the five indicator locations. The 256 indicator samples had an average concentration of 1.66E-2 pCi/m^3, a value similar to or less than preoperational data of 2.00E-2 pCi/m^3. Similar gross beta activities were observed at the control location in Pittsboro, which had an average concentration of 1.67E-2 pCi/m^3 in 51 control samples. Figures 4 through 8 provide a graphic representation of the gross beta activity at the indicator locations compared to the control location for the year 2002. On 11/25/02, all the samples (indictors and control) show an elevated activity indicating an increase in natural radiation during this time. Low sample activity at various times during the reporting period is attributed to reduced sample flow. No gamma activity was observed for any air particulates during 2002. These concentrations are typical of the natural environment and are not attributed to plant operations.

No plant-related gamma activity was detected in quarterly composite filter samples from either the indicator or control locations. Typical LLDs for air particulates are contained in Table 4.

Drinking Water

The 26 drinking water samples collected at the Lillington Municipal water supply and the 26 control samples collected from the Cape Fear River above the Buckhorn Dam contained less than detectable I-131 activity (< 1.0 E+0 pCi/L) during 2002. This has been the experience for the preoperational and operational period with the exception of 1986 when the fallout from Chernobyl was detected.

The average annual gross beta concentrations at the indicator and control locations were similar in concentrations of 5.80E+0 pCi/L and 6.03E+0 pCi/L, respectively. The preoperational average was 4.00E+0 pCi/L. These concentrations are attributed to the natural environment and are not attributed to plant operations. Figure 9 provides graphic representation of the gross beta activity during 2002 for Location 40 (Lillington).

Analyses for gamma-emitting radionuclides indicated all concentrations were less than the lower limit of detection for drinking water. Table 4 contains typical LLD values for gamma-emitting radionuclides in drinking water.

Tritium concentrations in the Lillington Municipal Water Supply samples were less than the lower limit of detection (3.25 E+2 pCi/L) (see Footnotes to Table 3, Footnote 6).

Fish

Analyses for gamma-emitting radionuclides in two samples of bottom-feeding species (catfish) and in four samples of free-swimming species (sunfish and largemouth bass) from the indicator location, Harris Lake, revealed no detectable activity for 2002. This is consistent with the data for 1989-2001. During the Chernobyl period, Cs-134, 137 were detected in both control and indicator samples.

Fish are assumed to be in equilibrium with the tritium concentration in the lake. The total body/organ dose to the maximum exposed individual due to tritium was calculated using Regulatory Guide 1.109, Rev.1, October 1977, Equation A-1, to be 0.0099 ~ 0.01 mrem/year.

Equation A-1

$$R_{aipj} = C_{ip}\, U_{ap}\, D_{aipj}$$

where as:

R_{aipj} = total body dose in mrem/yr of H-3

C_{ip} = concentration of nuclide (H-3) in pCi/kg = pCi/L

U_{ap} = maximum exposed individual's consumption (Reg. Guide 1.109 Table E-5)

D_{aipj} = ingestion dose factor for total body/organ of individual in U_{ap} in mrem/pCi (Reg. Guide 1.109 Table E-11, E-12, or E-13)

The Total Body/Organ dose is as follows:

	Child	**Teenager**	**Adult**
Consumption of fish kg/yr	6.9	16	21
Dose (Total Body/Organ) mrem/yr	0.006	0.008	0.01

The total body dose and organ dose, due to tritium in the fish, (ingestion dose factor - Reg. Guide 1.109 Table E-11, E-12, and E-13) for the maximum exposed individuals consuming 6.9 kg fish/yr. for a child, 16 kg fish/yr. for a teenager, and 21 kg fish/yr. for an adult are 0.006, 0.008, and 0.01 mrem/year respectively.

Milk/Broadleaf Vegetation

During 2002, as in all past years with the exception of the Chernobyl period, no I-131 concentrations were detected in control milk samples. Gamma analyses revealed no detectable radioactivity from plant operations. The only detectable gamma activity identified in each milk sample was potassium-40 (K-40). This is a natural occurring nuclide in any organic material. The K-40 concentrations in the milk control samples range from 6.31E+2 pCi/L – 2.15E+3 pCi/L.

In May of 1997, the Maple Knoll Dairy (indicator MK-42 - located in the SSE sector) ceased operations. In lieu of the semimonthly milk samples, per HNP ODCM Table 3.12-1, broadleaf vegetation samples were collected in both the South (S) and SSW sectors.

Broadleaf sampling is conducted since no milk animals are available within a radius of approximately five miles of the plant and is used to simulate dose to an individual via the milk pathway for compliance purposes. Broadleaf vegetation sampling is accomplished by collecting monthly, three different species of samples, when available, at two off site locations (two indicator locations of the highest predicted annual average ground level D/Q). The highest predicted annual average ground level D/Q (ODCM Table A-1 through A-4) was at the site boundary in both the South sector at 1.36 miles (BL-65) and SSW sector at 1.33 miles (BL-66). The gamma analyses on the broadleaf vegetation detected Cs-137 (6.86E-2 pCi/gm wet) in one out of 30 samples (Dogwood, Maple, and Sweetgum) from the indicator locations collected in 2002. Upon comparing the results, it is concluded that the indicator value reflects Cs-137 fallout contamination, since no other plant-related radioactivity was detected in the broadleaf vegetation in 2002.

Surface Water

Surface water samples were collected (weekly) and analyzed (bi-weekly) for I-131. Water samples collected during 2002 contained no detectable I-131 (LLD < 1.0E+0 pCi/L).

Average gross beta concentrations at the indicator and control locations were 4.66E+0 pCi/L and 6.03E+0 pCi/L, respectively in 2002, indicating no adverse influence from plant operations (See Figure 10).

Surface water samples were analyzed for gamma and tritium radioactivity. All concentrations of man-made gamma-emitters were less than their respective lower limits of detection (see Table 4).

The annual average tritium concentration in Harris Lake was 4.49E+3 pCi/L with minimum and maximum values of 2.80E+3 pCi/L and 6.91E+3 pCi/L, respectively (see Figure 11). The average Harris Lake tritium concentration showed an increase in tritium compared to the annual average of 4.31E+3 pCi/L in 2001. The tritium liquid release program is optimized by releasing

liquid effluents during periods of high rainfall to minimize the impact of the tritium concentration in the lake.

Ground Water

Ground water samples are collected on site at HNP for gamma and tritium analysis. The measured concentrations of the gamma analyses were measured below their required Lower Limits of Detection (LLD) as specified in the Harris Plant ODCM (docket No. STN-50-400) in Table 4.12-1 titled "Detection Capabilities For Environmental Sample Analysis Lower Limit of Detection (LLD)" for the year 2002.

The measured tritium concentrations were below the required HNP ODCM Table 4.12-1 LLD for environmental samples. These limits are 2000 picocuries per Liter (pCi/L) for a drinking water pathway and 3000 pCi/L if no drinking water pathway exists. HNP administratively established a ground water tritium analysis LLD of 325 pCi/L, which is well below the requirements specified in the HNP ODCM.

The ground water tritium analysis, for the year 2002, determined that no detectable tritium concentration was present based on the LLD specified in the HNP ODCM. Trace levels of tritium, below the 2000 pCi/L ODCM LLD, but above the HNP administrative LLD (325 pCi/L) were detected in ground water Location 58 (0.5 mile WSW Sector N Bank ESW Intake). See Table 3 on page 15. The ground water wells, located on site at HNP, are all abandoned wells and are not a water supply for drinking or irrigation; therefore, there is no radiological dose via this pathway.

Shoreline Sediment

Shoreline sediment samples were collected semiannually in 2002 from (1) opposite the discharge structure and (2) near the main dam. Gamma analyses of the shoreline sediments detected all natural activity in the samples collected during 2002. No long-term trends are readily observed in these samples.

Bottom Sediment

The 2002 data shows Cobalt (Co)-60 (2.67E+0 – 3.56E+0 pCi/gm dry), and Cesium (Cs)-137 (3.62E-1 - 4.21E-1 pCi/gm dry) activity in the indicator sample, which is sampled semiannually. The bottom sediment sample from Harris Lake poses no radiological dose to the general public via this pathway due to the fact that it is not easily accessible (i.e. bottom sediment is approximately forty to sixty feet under water). These samples are for long-term trends for liquid effluents.

Food Crops

In addition to milk sampling (or broadleaf vegetation sampling), a food product sampling program was maintained. Various crops were collected during growing season(s), which continued year round. The species selected were primarily broad-leaf vegetables which are most sensitive to direct fallout of airborne radioactive particulates. Crops sampled in 2002 included broccoli, cabbage, collards, corn, cucumbers, eggplants, mustard greens, okra, squash, tomatoes, and turnips and greens. Gamma analyses of the food crops detected no plant-related activity in 20 samples from indicator locations and 20 samples from control locations collected in 2002.

Aquatic Vegetation

The 2002 data shows that there were three aquatic vegetation samples collected from Harris Lake, which are sampled annually. The aquatic vegetation samples from Harris Lake pose no radiological dose to the general public by the ingestion pathway. Gamma analyses of the aquatic vegetation detected all natural activity in the samples collected during 2002. No long-term trends are readily observed in these samples.

External Radiation Exposure

Thermoluminescent dosimeters (TLDs) were used to monitor ambient radiation exposures in the plant environs. The average quarterly exposure at the indicator and control locations was 11.7 mR and 14.8 mR respectively. The highest indicator location was 9.2 miles ESE of the plant (Fuquay Varina at the old CP&L office) and its average was 15.6 mR/qtr. The differences among

these locations are attributed to variations in soils, local geology, and are not the result of plant operations.

Comparison of the quarterly TLD exposure within approximately 2 miles (inner ring) of the plant with that at approximately 5 miles (outer ring) is presented in Figure 12. This data illustrates that the quarterly inner ring TLD exposures are slightly less than the quarterly outer ring TLD exposures (differences range from 0.37 mR to 0.69 mR). An additional TLD (#67 at 1.2 miles from HNP in the ENE sector) was added in the third quarter of 2002 to enhance the environmental TLD monitoring program (AR # 65496).

MISSED SURVEILLANCES

Air Cartridge and Air Particulates

Any REMP weekly air samples (Air Cartridge – AC or Air Particulate – AP) that exceed 30 hours of down time in a surveillance period will be reported as a "missed surveillance". However, this sample will still be counted and the data reported; whereas a "missed sample" will have no data reported. There were ten missed surveillances and five missed samples.

Missed Samples:

- AC/AP-5, January 21 – Down time of 155 hrs due to blown fuse – No sample was counted (AR #54431).
- AC/AP-47, January 21 – Down time of 156 hrs due to blown fuse – No sample was counted (AR #54431).
- AC/AP-26, February 11 – Down time of 165 hrs due to blown fuse – No sample was counted (AR #55631).
- AC/AP-4, February 25 – Down time of 145 hrs due to broken vanes – No sample was counted (AR #56387).
- AC/AP-26, April 22 – Down time of 128 hrs due to pump malfunction and blown fuse – No sample was counted (AR #59663).

Missed Surveillances:

- AC/AP-26, January 7 – Down time of 117 hours (hrs) due to blown fuse (AR #53783).
- AC/AP-5, June 10 – Down time of 142 hrs due to pump malfunction, vanes replaced (AR #62497).
- AC/AP-26, June 10 – AR #62497 notes that the air sampler head had been removed from the sampler.
- AC/AC-47, July 1 – Down time of 35 hrs due to blown fuse after a thunderstorm (AR #64219).
- AC/AP-2, July 9 – Down time of 94 hrs due to blown fuse (AR #65037).
- AC/AP-2, July 15 – Down time of 102 hrs due to blown fuse (AR #65805).
- AC/AP-1, December 9 – Down time of 62.5 hrs due to Winter Ice Storm (AR #79133).
- AC/AP-5, December 9 – Down time of 39.4 hrs due to Winter Ice Storm (AR #79133).
- AC/AP-26, December 9 – Down time of 43.3 hrs due to Winter Ice Storm (AR #79133).
- AC/AP-47, December 9 – Down time of 75.1 hrs due to Winter Ice Storm (AR #79133).

Food Crops

Food crops were not available from any garden location for sampling during April. During the remainder of the year, January through December, inadequate food crop samples (3 different kinds from each location) were available from each sample location in 2002. The farmers' and individuals' gardens at each sample location did not plant or produce three (3) different kinds of food crops in 2002, which was mostly due to drought conditions. Condition reports were written to document food crop unavailability (AR # 60121, 62032, 64238, 67282, 73168, 76199, 78611, and 80655).

Milk / Broad leaf Vegetation

If milk sampling cannot be performed, then 3 different kinds of broad leaf vegetation nearest each of two different offsite locations of highest predicted annual average ground level D/Q shall be sampled. Broadleaf vegetation samples were not available for sampling due to seasonal unavailability during January, February, March, April, October, November, and December of 2002 (AR # 60121, 76202, 78613, and 80656).

Surface Water

The water sampler at location 26 during the week of 12/2-9/02 was down for 43.3 hours due to power outages as a result of a Winter Ice Storm. The water sampler resumed collection when electricity was restored (AR # 79134).

TLDs

Zero of a possible 174 TLD samples were missing during 2002.

ANALYTICAL PROCEDURES

Gross Beta

Gross beta radioactivity measurements are made utilizing a Tennelec Low-Background Alpha/Beta Counting System. The LLD for air particulates is approximately 1.0E-3 pCi/m^3 for HNP samples. Air particulate samples are mounted in 2-inch stainless steel planchets and counted directly.

Gross beta activity in drinking and surface waters is determined by evaporating 1 liter of the sample and counting a planchet on a Tennelec Low-Background Alpha/Beta Counting System for 50 minutes. Typical LLD for gross beta is 1.0E+0 pCi/L.

Tritium

Liquid samples requiring tritium analysis are treated with a small amount of sodium hydroxide, potassium permanganate crystals, and then distilled. Five milliliters of the distillate are mixed with thirteen milliliters of liquid scintillation cocktail and counted in a liquid scintillation counter. Samples that typically exhibit activity are counted for 60 minutes to achieve an approximate LLD of 1.0 E+3 pCi/L. Samples, which routinely demonstrate activity less than the lower limit of detection, are counted for 150 minutes with an approximate LLD of 3.25 E+2 pCi/L.

Iodine-131

Iodine-131 airborne concentrations are analyzed by the intrinsic germanium (Ge) spectrometry systems. The cartridges are placed on the detector, and each charcoal cartridge is counted individually with an LLD 3.0 E-2 pCi/m^3.

Iodine-131 in milk and drinking water is determined by an instrumental method. Analysis involves passing 4 liters over an anion exchange resin and direct gamma analysis of the resin with an intrinsic Ge detector. The LLD using the Ge detector is approximately 1.0 E+0 pCi/L using a 25,000-second count time.

Gamma Spectrometry

Gamma samples are analyzed by the intrinsic germanium detectors with thin aluminum windows housed in steel and lead shields. The analyzer system is the Canberra Nuclear 9900 Gamma Spectroscopy System. Table 4 summarizes LLD values derived from instrument sensitivity based upon a blank sample background.

Air particulate filter quarterly composites are placed in a Petri dish and analyzed directly for 2,000 seconds.

Liquid samples, except milk, are boiled down to a small volume, transferred to a Poly Bottle (PB-50 beaker) and analyzed for 7,000 seconds. One-liter milk samples are analyzed in a 1-liter Marinelli beaker for 11,000 seconds.

Shoreline and bottom sediments are dried, weighed, and then analyzed in a 1-liter Marinelli beaker for 1,500 seconds.

Food crop, aquatic vegetation, and broadleaf vegetation samples are weighed as sampled and analyzed in a Marinelli beaker for 7,500 seconds.

Fish samples are cleaned, dressed, (raw, edible portions) and placed in a 1-liter Marinelli beaker for gamma analysis using a count time of 1,500 seconds.

Thermoluminescent Dosimetry

Each area monitoring station includes a TLD packet which is a polyethylene bag containing three calcium sulfate phosphors contained in a Panasonic UD-814 badge. The TLD is light tight and the bag is weather-resistant.

Dosimeters are machine annealed before field placement. Following exposure in the field, each dosimeter is read utilizing a Panasonic TLD reader. This instrument integrates the light photons emitted from traps as the dosimeter is heated. Calibration is calculated using dosimeters irradiated to known doses for each set of dosimeters measured. Prior to the measurement of each

dosimeter, the instrument is checked through use of an internal constant light source as a secondary standard.

The exposure reported is corrected for exposure received in transit and during storage through the use of control dosimeters.

Interlaboratory Comparison Program

The Radiochemistry Laboratory at the Harris Energy & Environmental Center in New Hill, North Carolina, provides radioanalytical services for Progress Energy Carolinas, Inc.'s nuclear plant radiological environmental surveillance programs. In fulfillment of ODCM Operational Requirements, the laboratory is a participant in the Analytics, Inc., Environmental Cross-Check Program and uses its performance in this program as a major determinant of the accuracy and precision of its analytical results.

During 2002, 102 analyses were completed on 17 samples representing seven major environmental media (i.e., water, milk, air filters, air filters composite, soil, air cartridges, and simulated vegetation). Data on the known activities, the uncertainties, and the ratios to the known for the 102 analyses have been received from Analytics, Inc. The results shall be compared to the criteria established in the NRC Inspection Manual (Procedure 84750) for Radioactive Waste Treatment, Effluent, and Environmental monitoring.

One of 102 analyses exceeded the acceptance criteria. Any results that lie outside the ratio criteria will have an evaluation performed to identify any recommended remedial actions and to reduce anomalous errors. Complete documentation of the evaluation (AR#58375) will be available and provided to the NRC upon request.

Lower Limits of Detection

All samples analyzed met the LLD required by the ODCM.

Table 4
Typical Lower Limits of Detection (A Priori)
Gamma Spectrometry

Drinking Water/Surface Water/Ground Water Samples	
Isotope	**LLD (pCi/L)**
Mn-54	5
Co-58	5
Fe-59	11
Co-60	5
Zn-65	12
Zr-Nb-95	6
I-131	1.0*
Cs-134	5
Cs-137	5
Ba-La-140	9
Other Expected Gamma Emitters	3 to 105
Air Particulates (Quarterly Composite)	
Isotope	**LLD (pCi/m^3)**
I-131	0.030
Cs-134	0.001
Cs-137	0.001
Other Expected Gamma Emitters	0.001 to 0.027
Milk	
Isotope	**LLD (pCi/L)**
I-131	1.0*
Cs-134	9
Cs-137	10
Other Expected Gamma Emitters	6 to 194
Sediment	
Isotope	**LLD (pCi/kg dry)**
Cs-134	75
Cs-137	54
Other Expected Gamma Emitters	32 to 882
Fish	
Isotope	**LLD (pCi/kg wet)**
Mn-54	49
Co-58	42
Fe-59	70
Co-60	64
Zn-65	126
Cs-134	66
Cs-137	44
Other Expected Gamma Emitters	36 to 1237

* Instrumental analysis of resin concentrates of samples.

Table 4 (Cont.)
Typical Lower Limits of Detection (A Priori)
Gamma Spectrometry

Food Products and Vegetation	
Isotope	**LLD (pCi/kg wet)**
I-131	35
Cs-134	34
Cs-137	32
Other Expected Gamma Emitters	20 to 507

LAND-USE CENSUS

PURPOSE OF THE LAND-USE CENSUS

The land-use census identifies the pathways (or routes) that radioactive material may reach the general populations near commercial nuclear generating stations. This is accomplished by completing studies each year that identify how the surrounding lands are used by the population. A comprehensive census of the use of the land within a five-mile distance of the plant is completed during the growing season each year. This information is used for dose assessment and to identify changes to the stations sampled and the type of samples. These results ensure that the Radiological Environmental Monitoring Program (REMP) is based upon current data regarding human activity in the vicinity of the plant. Therefore, the purpose of the land-use census is to ensure the monitoring program is current, as well as provide data for the calculation of estimated radiation exposure.

The pathways evaluated are:

- Ingestion Pathway - Results from eating food crops that may have radioactive materials deposited on them, incorporated radioactive materials from the soil or atmosphere. Another pathway is through drinking milk from local cows or goats if these are present and if not then broadleaf vegetation is collected in lieu of milk. The grass used to feed these animals may have incorporated or had deposited on it radioactive materials that can be transferred to the milk.

- Direct Radiation Exposure Pathway- Results from deposition of radioactive materials on the ground or from passage of these radioactive materials in the air.

- Inhalation Pathway- Results from breathing radioactive materials transported in the air.

Methodology

The following must be identified within the five (5) mile radius of the plant for each of the sixteen meteorological sectors (compass direction the winds may blow, for example NNE [North North East]):

- The nearest resident
- The nearest garden of greater that 500 square feet, producing broadleaf vegetables
- The nearest milk animal

The primary method is visual inspection from roadside within the five (5) mile radius. This information is supplemented with data from aerial photographs, information from county extension agents, and farm supply businesses.

2002 Land-Use Census Results

The 2001 and 2002 results of the survey for the nearest resident, garden, milk and meat animals in each sector are compared in Table 5.

The nearest resident in each sector remained the same from 2001 to 2002. No gardens were located within 5 miles of the plant for the S and NW sectors. All the gardens located in 2002 were the same as 2001, except that a garden was found at 1.7 miles in the E sector and the garden in the W sector is at 3.0 miles compared to 3.1 miles in 2001. No meat animals were found in the S, SSW, WNW, and NW sectors in 2002. A meat animal location was located in the E sector at 1.7 miles. The dairy in the SSE sector at 7.0 miles from the plant ceased operation in 1997 and there still remain no milk animals near the plant. Harris Lake County Park was included in the 2002 survey, even though there are not yet permanent residents on site. There are plans in the future for rangers and a campground.

Table 5

Land-Use Census Comparison (2001-2002)
Nearest Pathway (Miles)

SECTOR	RESIDENT		GARDEN		MEAT ANIMAL		MILK ANIMAL	
	2002	2001	2002	2001	2002	2001	2002	2001
N	2.2	2.2	2.2	2.2	2.2	2.2	---	---
NNE	1.9	1.9	1.9	1.9	2.2	2.2	---	---
NE	2.3	2.3	2.3	2.3	2.3	2.3	---	---
ENE	1.6	1.6	1.8	1.8	1.8	1.8	---	---
E	1.7	1.7	1.7*	---	1.7*	---	---	---
ESE	2.6	2.6	2.6	2.6	4.6	4.6	---	---
SE	2.6	2.6	4.1	4.1	2.6	2.6	---	---
SSE	4.2	4.2	4.2	4.2	4.2	4.2	---	---
S	5.3	5.3	---	---	---	---	---	---
SSW	3.8	3.8	3.8	3.8	---	---	---	---
SW	2.9	2.9	2.9	2.9	2.9	2.9	---	---
WSW	4.5	4.5	4.5	4.5	4.6	4.6	---	---
W	3.0	3.0	3.0*	3.1	3.1	3.1	---	---
WNW	2.3	2.3	2.3	2.3	---	---	---	---
NW	2.4	2.4	---	---	---	---	---	---
NNW	1.6	1.6	2.0	2.0	2.0	2.0	---	---

* Represents a change from the previous year.

Sector and distance determined by Global Positioning System.

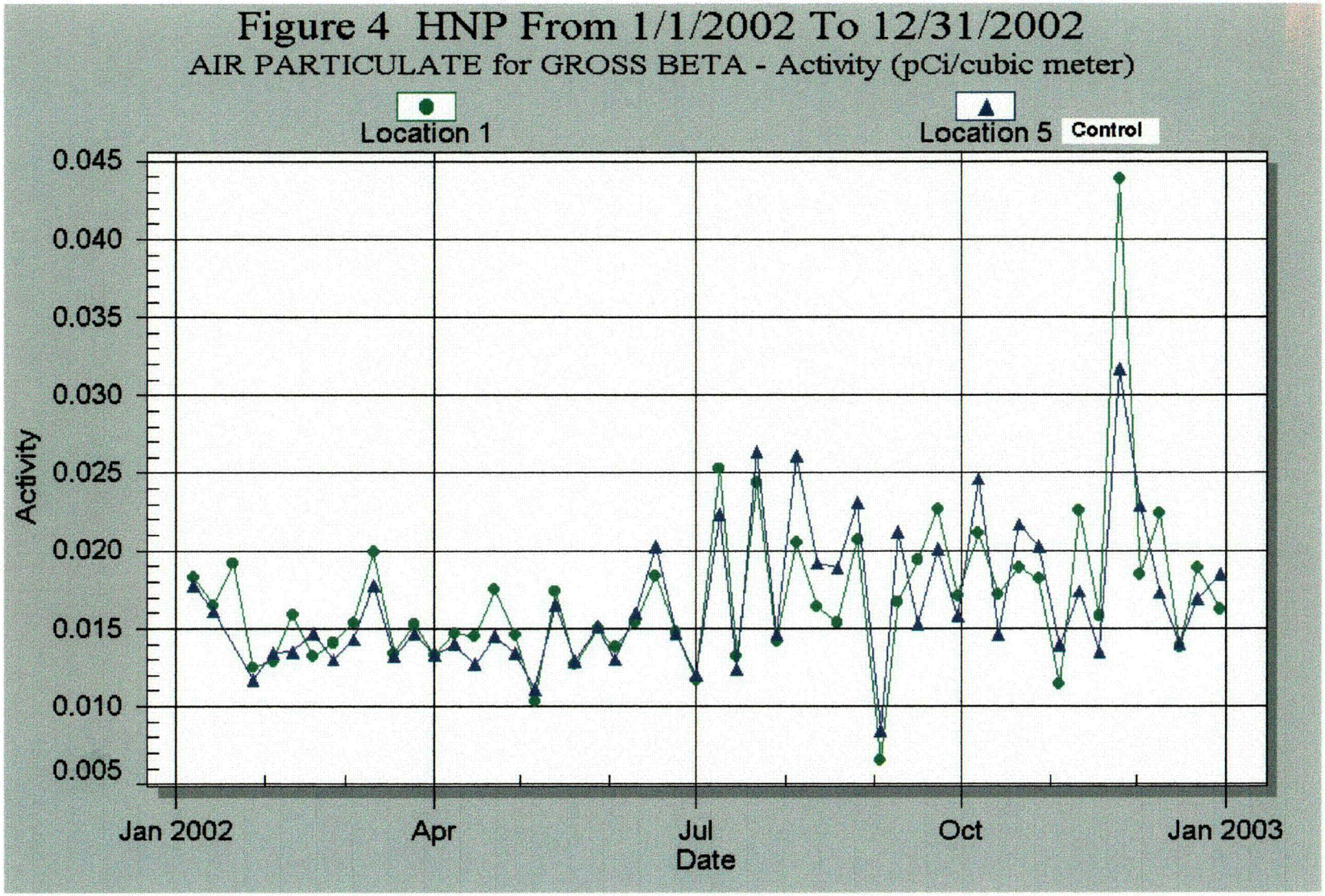


Figure 4 HNP From 1/1/2002 To 12/31/2002
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)
Location 1
Location 5
Control
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
Activity
Jan 2002
Apr
Jul
Oct
Jan 2003
Date

C01

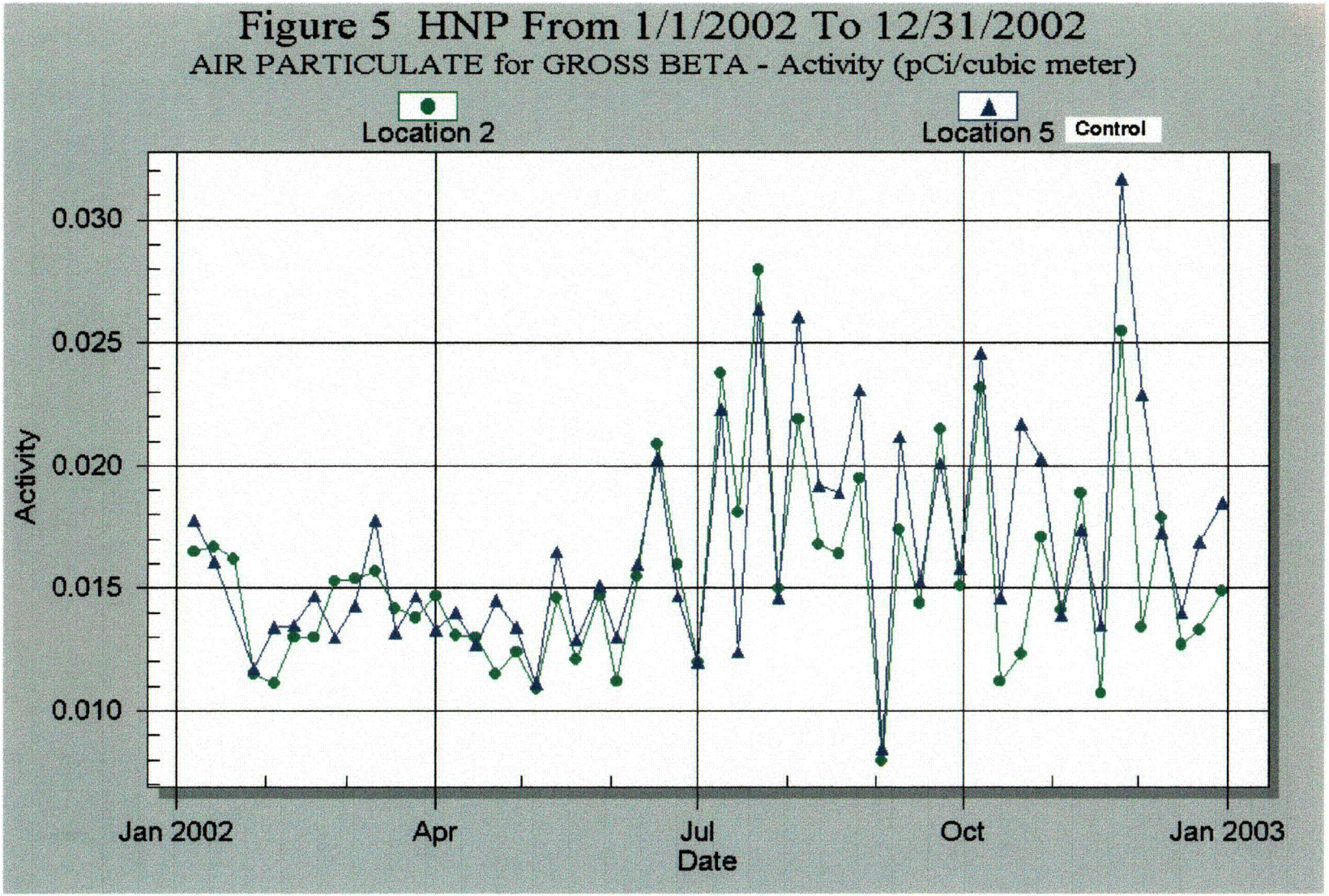


Figure 5 HNP From 1/1/2002 To 12/31/2002
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)
Location 2
Location 5
Control
0.030
0.025
0.020
0.015
0.010
Activity
Jan 2002
Apr
Jul
Oct
Jan 2003
Date

C02

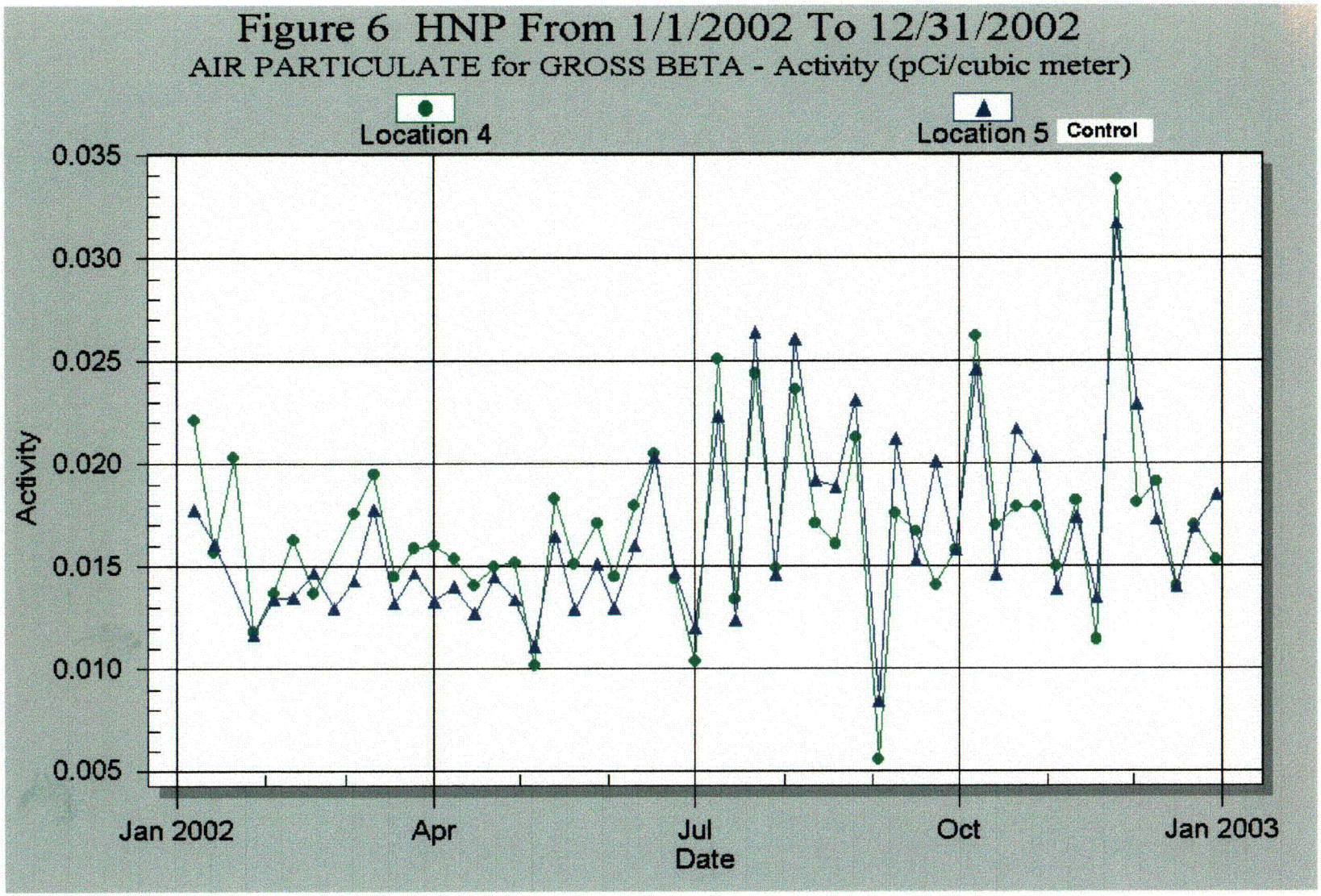
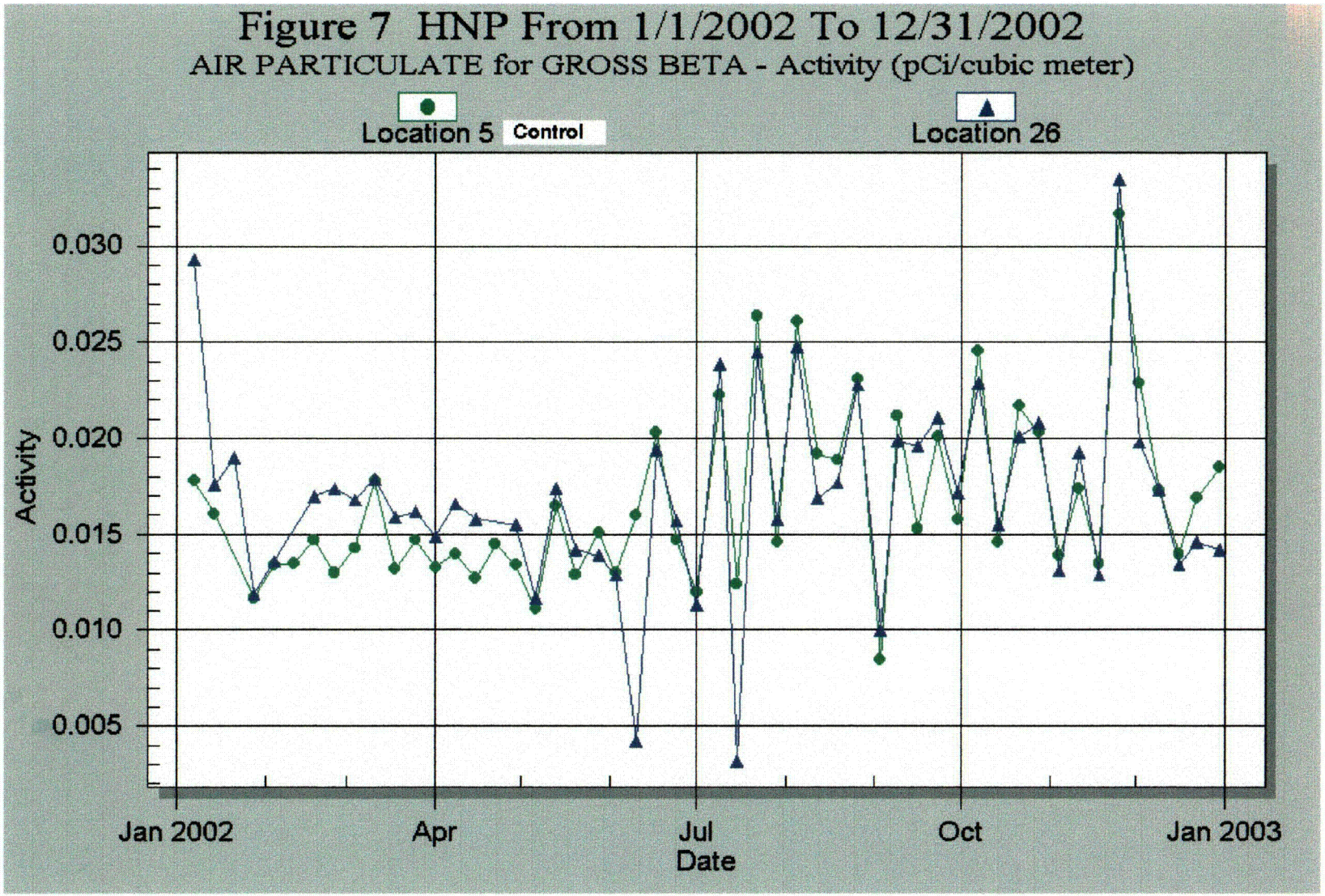


Figure 6 HNP From 1/1/2002 To 12/31/2002
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)
Location 4
Location 5
Control
0.035
0.030
0.025
0.020
0.015
0.010
0.005
Activity
Jan 2002
Apr
Jul
Oct
Jan 2003
Date

C03

Figure 7 HNP From 1/1/2002 To 12/31/2002

AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)



C04

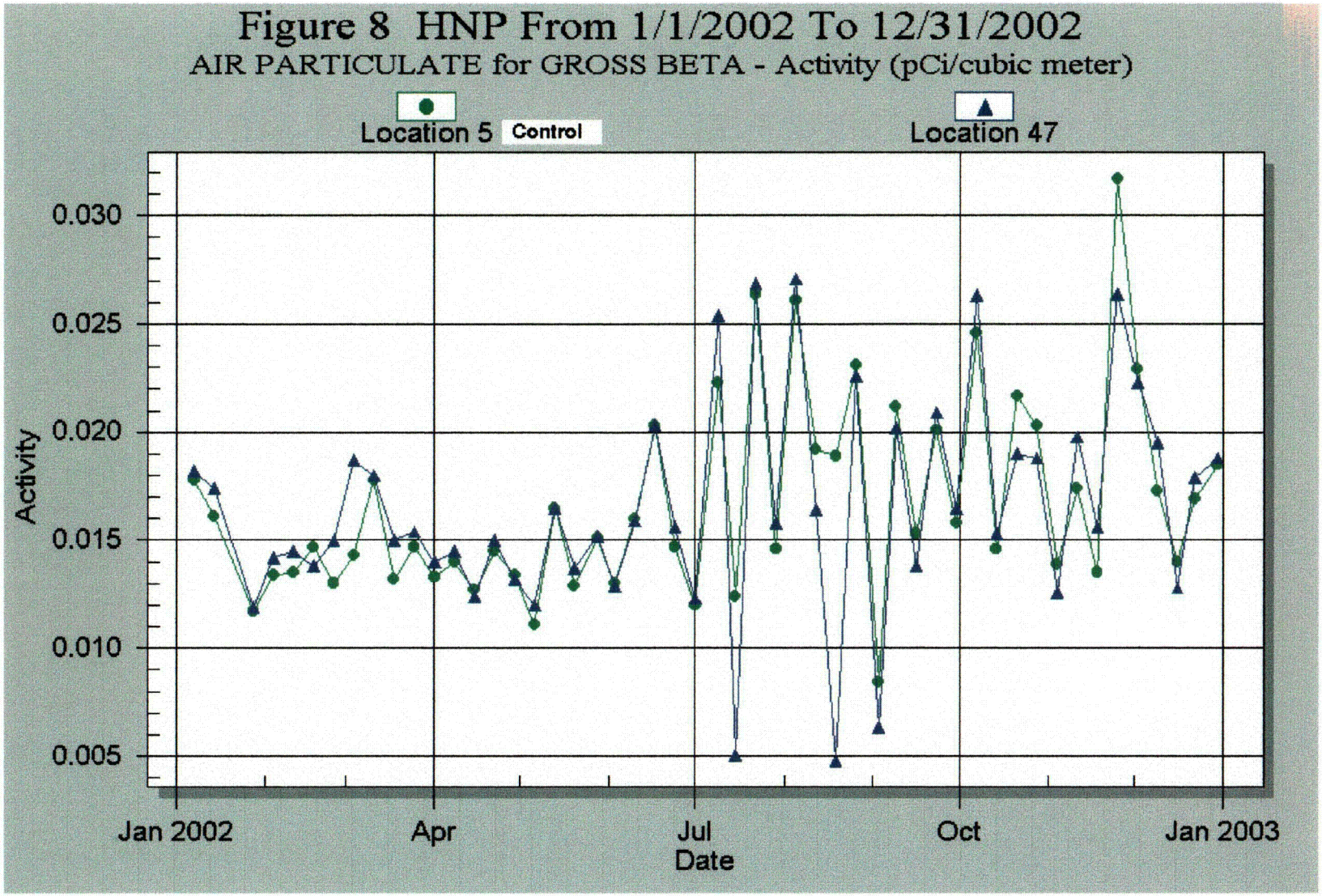


Figure 8 HNP From 1/1/2002 To 12/31/2002
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)
Location 5 Control
Location 47
0.030
0.025
0.020
0.015
0.010
0.005
Activity
Jan 2002
Apr
Jul
Oct
Jan 2003
Date

C05

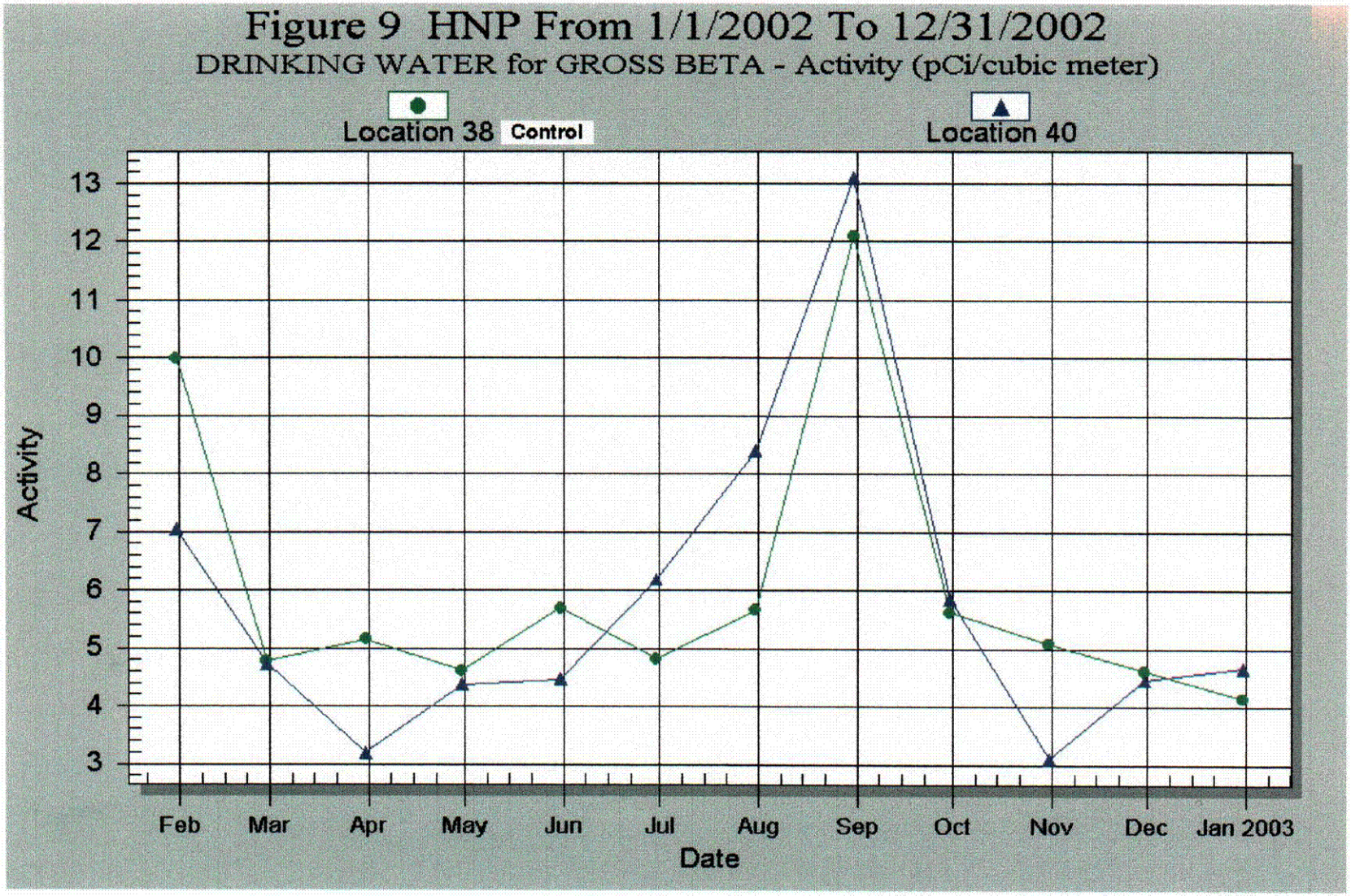


Figure 9 HNP From 1/1/2002 To 12/31/2002
DRINKING WATER for GROSS BETA - Activity (pCi/cubic meter)
Location 38 Control
Location 40
Activity
13
12
11
10
9
8
7
6
5
4
3
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan 2003
Date

C06

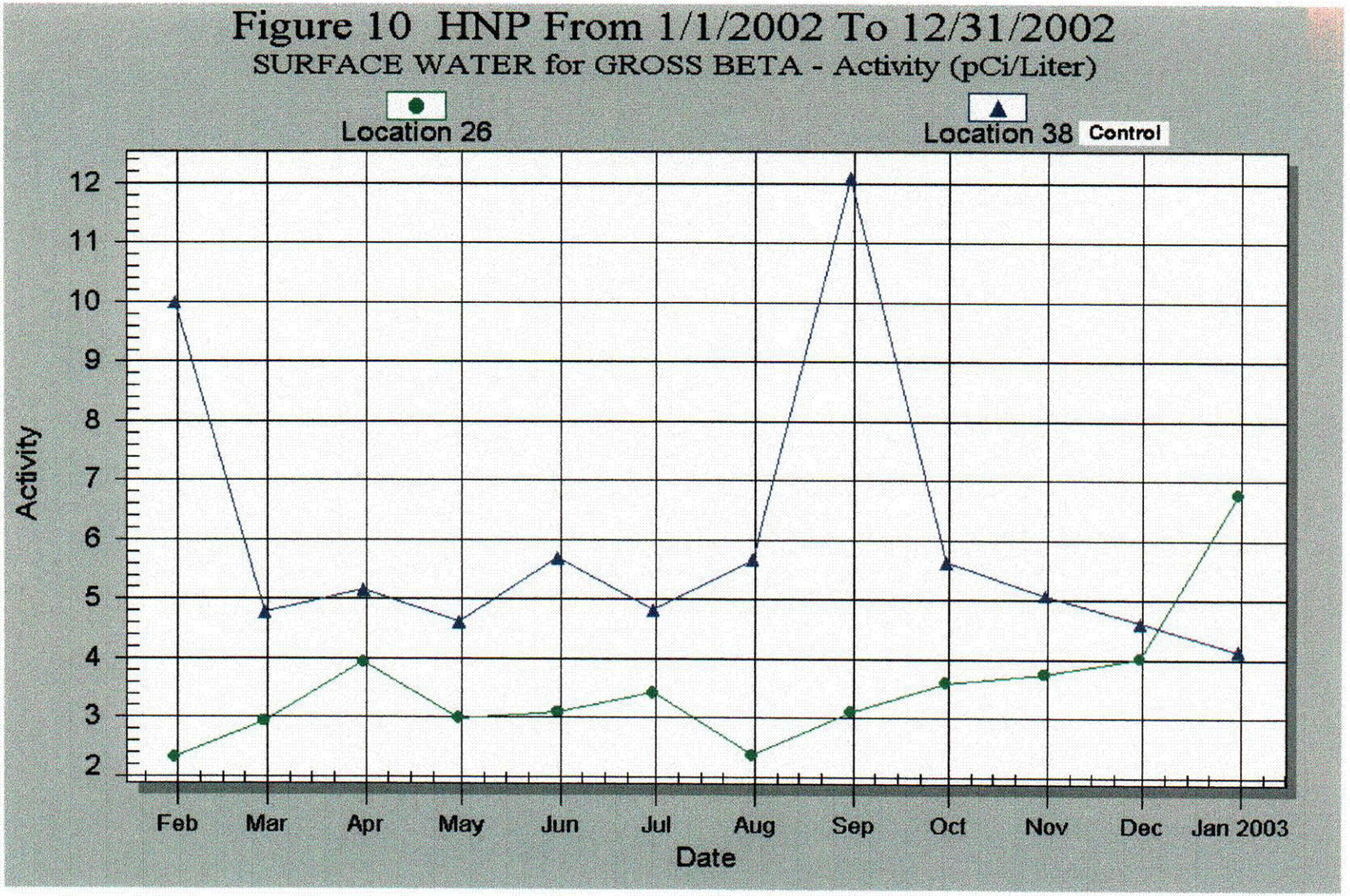
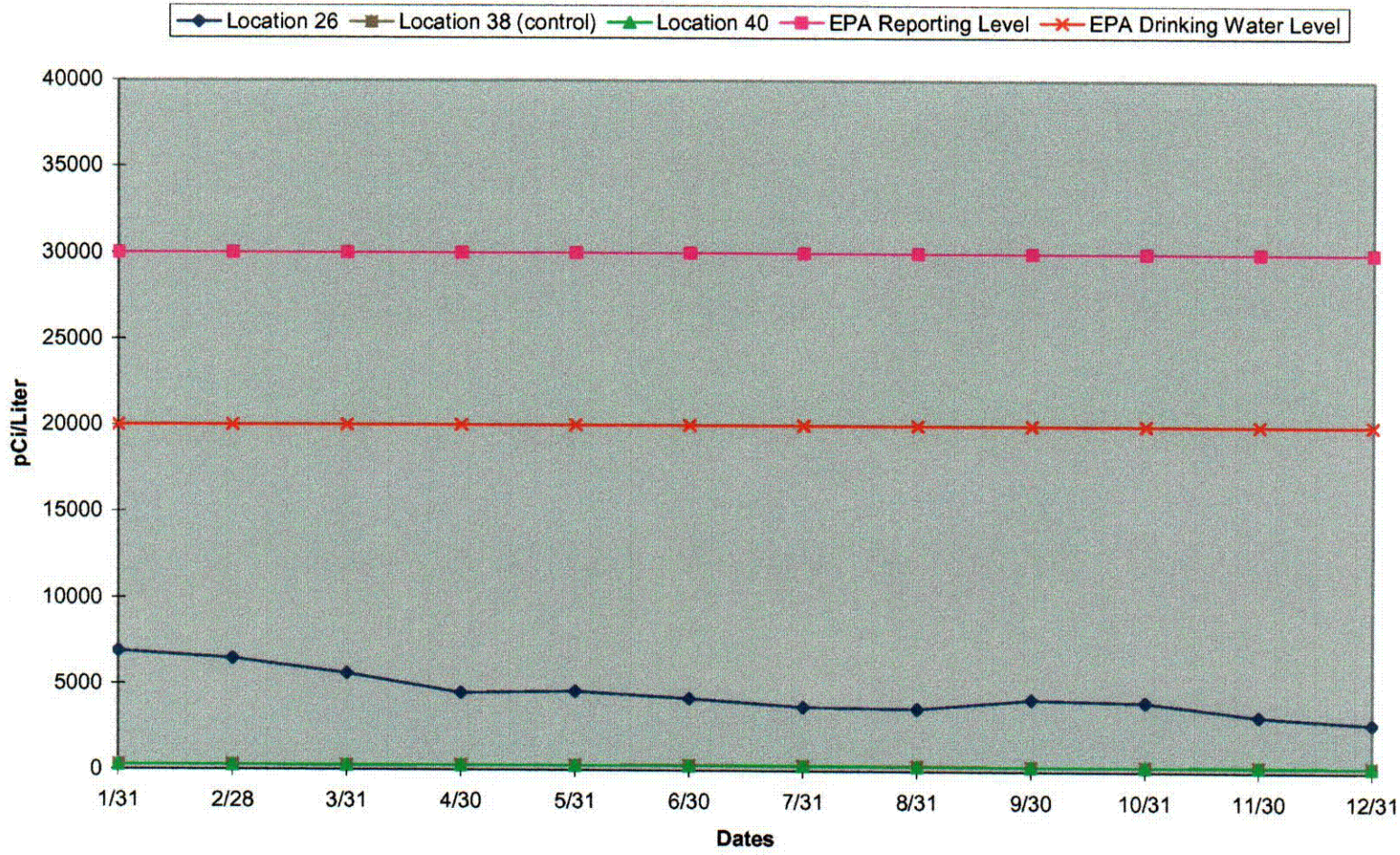


Figure 10 HNP From 1/1/2002 To 12/31/2002
SURFACE WATER for GROSS BETA - Activity (pCi/Liter)
Location 26
Location 38 Control
Activity
12
11
10
9
8
7
6
5
4
3
2
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan 2003
Date

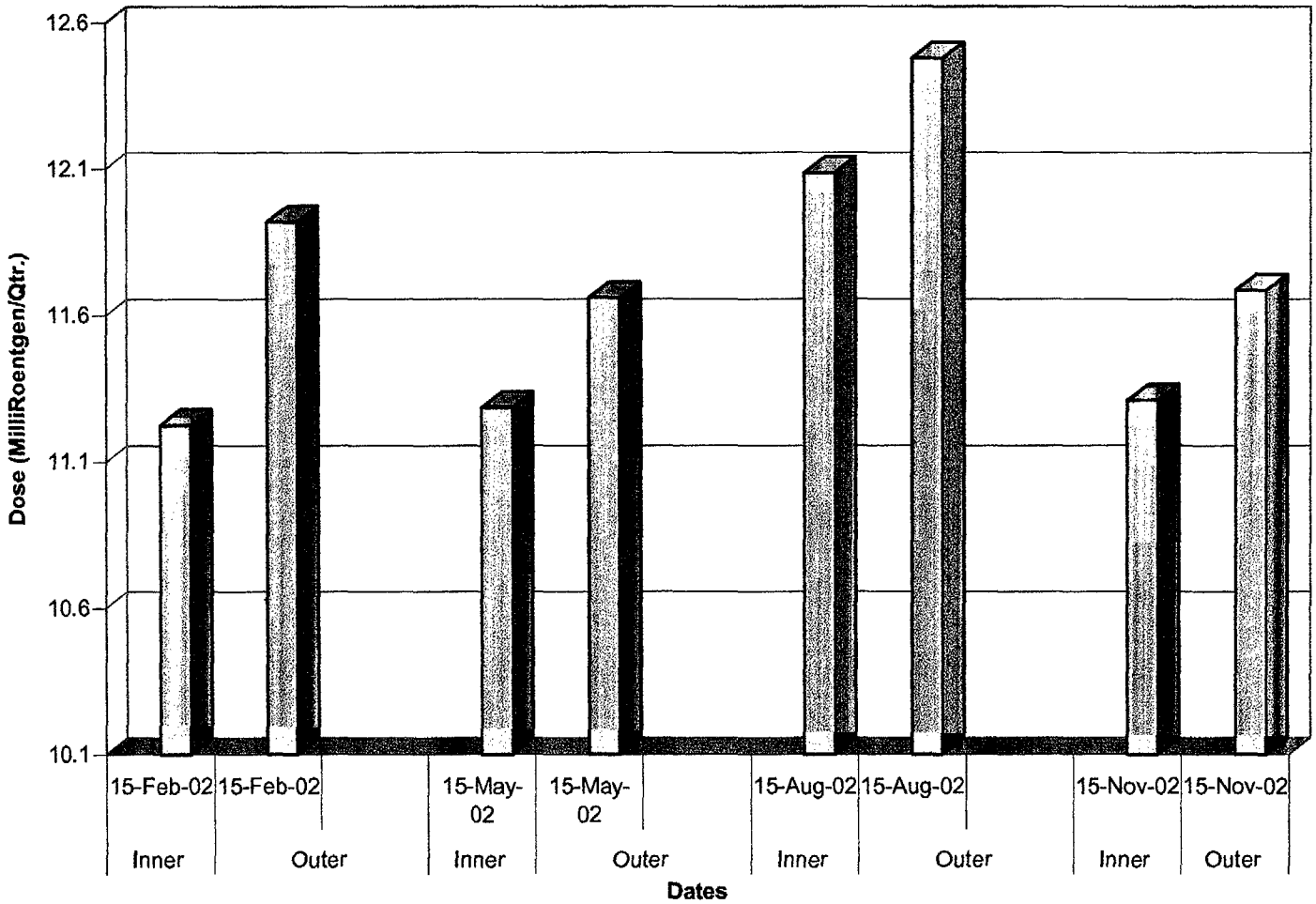
C07

Figure 11 HNP 2002 Surface Water Tritium



C08

Figure 12 HNP 2002 TLD Averages for Inner and Outer Ring Locations



Data Reports

2002 HNP
Radiological Environmental Monitoring TLD Report

Comments

- All HNP Environmental TLDS were present in 2002.
- TLD # 67 was added in the Third Quarter of 2002

HNP Radiological Environmental Monitoring TLD Report

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/15/02	12.5	1.3
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/15/02	12.9	0.6
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/15/02	13.1	0.7
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/15/02	13	0.7
2	SR 1134	2/15/02	13.5	1.9
2	SR 1134	5/15/02	13.1	1.2
2	SR 1134	8/15/02	14.5	0.8
2	SR 1134	11/15/02	13.1	0.6
3	HARRIS E&E CENTER - 2.2 MI NE	2/15/02	10.9	1.5
3	HARRIS E&E CENTER - 2.2 MI NE	5/15/02	10.9	0.8
3	HARRIS E&E CENTER - 2.2 MI NE	8/15/02	12.9	1.2
3	HARRIS E&E CENTER - 2.2 MI NE	11/15/02	11	1
4	NEW HILL NEAR 1ST BAPTIST CH	2/15/02	10.9	1.4
4	NEW HILL NEAR 1ST BAPTIST CH	5/15/02	11.5	1
4	NEW HILL NEAR 1ST BAPTIST CH	8/15/02	11.9	0.7
4	NEW HILL NEAR 1ST BAPTIST CH	11/15/02	11.5	0.6
5	PITTSBORO - CONTROL	2/15/02	15.1	1.3
5	PITTSBORO - CONTROL	5/15/02	14.7	1
5	PITTSBORO - CONTROL	8/15/02	14.2	1.5
5	PITTSBORO - CONTROL	11/15/02	15	0.6
6	INT OF SR 1134 AND 1135	2/15/02	10.9	1.3

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
6	INT OF SR 1134 AND 1135	5/15/02	10.9	0.7
6	INT OF SR 1134 AND 1135	8/15/02	11.9	1.7
6	INT OF SR 1134 AND 1135	11/15/02	10.4	1.7
7	HOUSE RUINS ON SR 1134	2/15/02	10.2	1.2
7	HOUSE RUINS ON SR 1134	5/15/02	9.2	0.7
7	HOUSE RUINS ON SR 1134	8/15/02	10.5	1
7	HOUSE RUINS ON SR 1134	11/15/02	9.4	0.9
8	DEAD END OF SR 1134	2/15/02	13.6	1.6
8	DEAD END OF SR 1134	5/15/02	11.6	0.9
8	DEAD END OF SR 1134	8/15/02	14.8	1.5
8	DEAD END OF SR 1134	11/15/02	11.4	0.6
9	1 MI SW OF HOLLEMANS XRDS ON SR 1130	2/15/02	8.6	1.1
9	1 MI SW OF HOLLEMANS XRDS ON SR 1130	5/15/02	9.3	0.7
9	1 MI SW OF HOLLEMANS XRDS ON SR 1130	8/15/02	9.6	1.1
9	1 MI SW OF HOLLEMANS XRDS ON SR 1130	11/15/02	10.1	0.7
10	2.0 MI SW OF HOLLEMANS XRDS ON SR 1130	2/15/02	10.6	1.2
10	2.0 MI SW OF HOLLEMANS XRDS ON SR 1130	5/15/02	10.9	0.8
10	2.0 MI SW OF HOLLEMANS XRDS ON SR 1130	8/15/02	11.7	0.9
10	2.0 MI SW OF HOLLEMANS XRDS ON SR 1130	11/15/02	11.2	0.7
11	EARTHEN DAM AT HARRIS PLANT	2/15/02	10.2	1.2
11	EARTHEN DAM AT HARRIS PLANT	5/15/02	10	0.7
11	EARTHEN DAM AT HARRIS PLANT	8/15/02	11.4	1.2
11	EARTHEN DAM AT HARRIS PLANT	11/15/02	10.3	1.5
12	1 MI S ON DIRT RD FROM TLD 13	2/15/02	9.3	1.5

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
12	1 MI S ON DIRT RD FROM TLD 13	5/15/02	10.7	0.8
12	1 MI S ON DIRT RD FROM TLD 13	8/15/02	10.6	2
12	1 MI S ON DIRT RD FROM TLD 13	11/15/02	10.7	0.6
13	DIRT RD INT BETWEEN PLANT AND AUX RES	2/15/02	10.5	2.2
13	DIRT RD INT BETWEEN PLANT AND AUX RES	5/15/02	11.3	0.9
13	DIRT RD INT BETWEEN PLANT AND AUX RES	8/15/02	11.4	1.7
13	DIRT RD INT BETWEEN PLANT AND AUX RES	11/15/02	10.9	1
14	DEAD END OF SR 1911	2/15/02	10.5	1.2
14	DEAD END OF SR 1911	5/15/02	10.4	0.6
14	DEAD END OF SR 1911	8/15/02	10.9	1
14	DEAD END OF SR 1911	11/15/02	10.1	0.7
15	CEMETERY ON SR 1911	2/15/02	9.5	1.4
15	CEMETERY ON SR 1911	5/15/02	10.1	0.5
15	CEMETERY ON SR 1911	8/15/02	10.2	0.8
15	CEMETERY ON SR 1911	11/15/02	10	0.9
16	US 1 AT CHATHAM-WAKE CO LINE	2/15/02	11.6	1.6
16	US 1 AT CHATHAM-WAKE CO LINE	5/15/02	12.4	1
16	US 1 AT CHATHAM-WAKE CO LINE	8/15/02	12.4	1
16	US 1 AT CHATHAM-WAKE CO LINE	11/15/02	11.4	0.6
17	INT OF US 1 AND AUX RES	2/15/02	10.9	1.4
17	INT OF US 1 AND AUX RES	5/15/02	10.4	1
17	INT OF US 1 AND AUX RES	8/15/02	12.1	1.3
17	INT OF US 1 AND AUX RES	11/15/02	11.1	1
18	0.6 MI N ON US 1 FROM TLD 17	2/15/02	11.9	1.3

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
18	0.6 MI N ON US 1 FROM TLD 17	5/15/02	12	0.6
18	0.6 MI N ON US 1 FROM TLD 17	8/15/02	12.6	2.1
18	0.6 MI N ON US 1 FROM TLD 17	11/15/02	12	1.2
19	SR 1142 - OLIVES DAIRY	2/15/02	10.5	1.3
19	SR 1142 - OLIVES DAIRY	5/15/02	10.7	0.7
19	SR 1142 - OLIVES DAIRY	8/15/02	11.4	1.1
19	SR 1142 - OLIVES DAIRY	11/15/02	10.7	1.1
20	INT OF SR 1149 AND US 1	2/15/02	13.8	1.5
20	INT OF SR 1149 AND US 1	5/15/02	14.8	0.5
20	INT OF SR 1149 AND US 1	8/15/02	14.6	1.3
20	INT OF SR 1149 AND US 1	11/15/02	13.9	1.2
21	1.3 MI ON SR 1152 FROM INT SR 1153	2/15/02	12.5	1.6
21	1.3 MI ON SR 1152 FROM INT SR 1153	5/15/02	10.2	0.8
21	1.3 MI ON SR 1152 FROM INT SR 1153	8/15/02	13.2	0.8
21	1.3 MI ON SR 1152 FROM INT SR 1153	11/15/02	10.3	1.5
22	2.0 MI E OF HOLLEMANS XRDS ON SR 1115	2/15/02	9.8	1.4
22	2.0 MI E OF HOLLEMANS XRDS ON SR 1115	5/15/02	10.5	0.9
22	2.0 MI E OF HOLLEMANS XRDS ON SR 1115	8/15/02	10.4	1.2
22	2.0 MI E OF HOLLEMANS XRDS ON SR 1115	11/15/02	10.7	0.5
23	INT SR 1116 AND SR 1127	2/15/02	12	1.8
23	INT SR 1116 AND SR 1127	5/15/02	11	0.7
23	INT SR 1116 AND SR 1127	8/15/02	12.2	1.7
23	INT SR 1116 AND SR 1127	11/15/02	11.8	0.9
24	SWEET SPRINGS CHURCH ON SR 1116	2/15/02	11	1.2

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
24	SWEET SPRINGS CHURCH ON SR 1116	5/15/02	11.5	0.6
24	SWEET SPRINGS CHURCH ON SR 1116	8/15/02	11.9	1
24	SWEET SPRINGS CHURCH ON SR 1116	11/15/02	11.7	1.3
25	0.2 MI W OF INT OF SR 1401 AND SR 1402	2/15/02	13.6	1.1
25	0.2 MI W OF INT OF SR 1401 AND SR 1402	5/15/02	10.7	1
25	0.2 MI W OF INT OF SR 1401 AND SR 1402	8/15/02	13.8	1.2
25	0.2 MI W OF INT OF SR 1401 AND SR 1402	11/15/02	10.9	1
26	SPILLWAY ON MAIN RES	2/15/02	11.2	1.2
26	SPILLWAY ON MAIN RES	5/15/02	10.8	0.5
26	SPILLWAY ON MAIN RES	8/15/02	10.8	1
26	SPILLWAY ON MAIN RES	11/15/02	10.5	0.5
27	BUCKHORN UNITED METHODIST CH ON NC 42	2/15/02	9.2	1.2
27	BUCKHORN UNITED METHODIST CH ON NC 42	5/15/02	9	0.4
27	BUCKHORN UNITED METHODIST CH ON NC 42	8/15/02	9.8	1
27	BUCKHORN UNITED METHODIST CH ON NC 42	11/15/02	9.5	0.8
28	0.6 MI FROM INT SR 1916 AND SR 1924	2/15/02	10	1.5
28	0.6 MI FROM INT SR 1916 AND SR 1924	5/15/02	10.4	0.6
28	0.6 MI FROM INT SR 1916 AND SR 1924	8/15/02	11.5	1.5
28	0.6 MI FROM INT SR 1916 AND SR 1924	11/15/02	10.4	0.7
29	NESTE RESIN CORP ON SR 1916	2/15/02	12.7	1.3
29	NESTE RESIN CORP ON SR 1916	5/15/02	12.5	1
29	NESTE RESIN CORP ON SR 1916	8/15/02	12.8	1.2
29	NESTE RESIN CORP ON SR 1916	11/15/02	12.7	1.1
30	INT OF SR 1972 AND US 1	2/15/02	9.6	1.6

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
30	INT OF SR 1972 AND US 1	5/15/02	10.6	0.5
30	INT OF SR 1972 AND US 1	8/15/02	10.4	1
30	INT OF SR 1972 AND US 1	11/15/02	10.6	0.9
31	INT OF SR 1910	2/15/02	12	1.4
31	INT OF SR 1910	5/15/02	9.7	0.4
31	INT OF SR 1910	8/15/02	12.4	1.7
31	INT OF SR 1910	11/15/02	9.4	0.7
32	3 MI ON SR 1008 FROM INT SR 1011	2/15/02	11.6	1.4
32	3 MI ON SR 1008 FROM INT SR 1011	5/15/02	12.1	0.8
32	3 MI ON SR 1008 FROM INT SR 1011	8/15/02	12.7	1
32	3 MI ON SR 1008 FROM INT SR 1011	11/15/02	12.2	1.9
33	SR 1142 AT BARRICADE	2/15/02	10.4	1.3
33	SR 1142 AT BARRICADE	5/15/02	10.5	0.6
33	SR 1142 AT BARRICADE	8/15/02	10.9	1.2
33	SR 1142 AT BARRICADE	11/15/02	10.6	0.7
34	APEX AT JONES PARK	2/15/02	13.4	1.4
34	APEX AT JONES PARK	5/15/02	14.1	0.5
34	APEX AT JONES PARK	8/15/02	15.2	3
34	APEX AT JONES PARK	11/15/02	14.5	1
35	HOLLY SPRINGS ON EARP STREET	2/15/02	13.3	1.3
35	HOLLY SPRINGS ON EARP STREET	5/15/02	12.9	1.1
35	HOLLY SPRINGS ON EARP STREET	8/15/02	13.1	1.1
35	HOLLY SPRINGS ON EARP STREET	11/15/02	12.1	1.4
36	INT OF SR 1393 AND SR 1421	2/15/02	11.6	1.4

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
36	INT OF SR 1393 AND SR 1421	5/15/02	10.7	0.6
36	INT OF SR 1393 AND SR 1421	8/15/02	12.1	1.1
36	INT OF SR 1393 AND SR 1421	11/15/02	11	1.6
37	FUQUAY VARINA AT OLD CP&L OFFICE	2/15/02	15.6	1.4
37	FUQUAY VARINA AT OLD CP&L OFFICE	5/15/02	15.3	1.7
37	FUQUAY VARINA AT OLD CP&L OFFICE	8/15/02	16.5	1
37	FUQUAY VARINA AT OLD CP&L OFFICE	11/15/02	14.9	1.5
48	SR 1142 AT UNDERGROUND CABLE SIGN	2/15/02	12.7	2
48	SR 1142 AT UNDERGROUND CABLE SIGN	5/15/02	13.6	0.7
48	SR 1142 AT UNDERGROUND CABLE SIGN	8/15/02	13.6	1
48	SR 1142 AT UNDERGROUND CABLE SIGN	11/15/02	13.6	0.6
49	SR 1127 AT WAKE CO TRASH COLLECTION AREA	2/15/02	13.5	1.8
49	SR 1127 AT WAKE CO TRASH COLLECTION AREA	5/15/02	14.5	0.7
49	SR 1127 AT WAKE CO TRASH COLLECTION AREA	8/15/02	14.2	1.3
49	SR 1127 AT WAKE CO TRASH COLLECTION AREA	11/15/02	14.5	1.3
50	HOLLEMANS CROSSROADS	2/15/02	11.3	1.9
50	HOLLEMANS CROSSROADS	5/15/02	9.9	1.2
50	HOLLEMANS CROSSROADS	8/15/02	11.6	1.1
50	HOLLEMANS CROSSROADS	11/15/02	9.5	0.7
53	INTERSECTION OF SR 1972 AND SR 1907	2/15/02	10.6	1.4
53	INTERSECTION OF SR 1972 AND SR 1907	5/15/02	10.2	1.4
53	INTERSECTION OF SR 1972 AND SR 1907	8/15/02	11	1.1
53	INTERSECTION OF SR 1972 AND SR 1907	11/15/02	10.1	0.7
56	2.8 MI WSW OF THE SITE	2/15/02	11.3	1.3

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
56	2.8 MI WSW OF THE SITE	5/15/02	11.1	0.7
56	2.8 MI WSW OF THE SITE	8/15/02	12.2	1.3
56	2.8 MI WSW OF THE SITE	11/15/02	11.3	0.6
63	0.7 MI SW SECTOR ON (POWER POLE COJ85)	2/15/02	13.5	1.5
63	0.7 MI SW SECTOR ON (POWER POLE COJ85)	5/15/02	13.9	1.6
63	0.7 MI SW SECTOR ON (POWER POLE COJ85)	8/15/02	13.4	1.7
63	0.7 MI SW SECTOR ON (POWER POLE COJ85)	11/15/02	12.6	1.3
67	1.2 MI FROM HNP IN ENE SECTOR	8/15/02	12	3.4
67	1.2 MI FROM HNP IN ENE SECTOR	11/15/02	13.3	0.9

2002 HNP
Radiological Environmental Monitoring Analysis Report

Comments

- The Less than LLD (<LLD) represents that no detectable radioactivity was present, but lists the LLD values.
- There are no 2 sigma error values reported when activity is <LLD.

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	1/7/2002	512.2	1.83E-02	2.23E-03	1.94E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	1/14/2002	505	1.65E-02	2.20E-03	2.05E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	1/21/2002	514.7	1.92E-02	2.27E-03	1.94E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	1/28/2002	506.2	1.25E-02	2.02E-03	2.09E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/4/2002	517.9	1.29E-02	2.01E-03	2.04E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/11/2002	514.5	1.59E-02	2.09E-03	1.85E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/18/2002	521.2	1.32E-02	2.02E-03	2.03E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/25/2002	495.9	1.41E-02	2.05E-03	1.93E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/4/2002	517.2	1.54E-02	2.10E-03	1.96E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/11/2002	510.4	1.99E-02	2.35E-03	2.09E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/18/2002	503	1.34E-02	2.12E-03	2.23E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/25/2002	513.9	1.53E-02	2.09E-03	1.93E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/1/2002	508.3	1.33E-02	2.03E-03	2.02E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/8/2002	504.9	1.47E-02	2.18E-03	2.22E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/15/2002	506.8	1.45E-02	2.11E-03	2.08E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/22/2002	493.5	1.75E-02	2.33E-03	2.26E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/29/2002	510.5	1.46E-02	2.03E-03	1.96E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/6/2002	504	1.03E-02	1.87E-03	2.08E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/13/2002	500.4	1.74E-02	2.19E-03	2.03E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/20/2002	489.8	1.27E-02	2.12E-03	2.28E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/28/2002	569.6	1.50E-02	1.87E-03	1.65E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/3/2002	431.4	1.38E-02	2.26E-03	2.39E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/10/2002	382.8	1.54E-02	2.49E-03	2.55E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/17/2002	361	1.84E-02	2.72E-03	2.66E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/24/2002	371.4	1.48E-02	2.60E-03	2.85E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/1/2002	364.2	1.17E-02	2.30E-03	2.49E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/9/2002	332.5	2.53E-02	3.17E-03	2.81E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/15/2002	263	1.32E-02	3.21E-03	3.90E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/22/2002	275.3	2.44E-02	3.57E-03	3.46E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/29/2002	281.7	1.42E-02	2.97E-03	3.32E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/5/2002	297.9	2.05E-02	3.20E-03	3.20E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/12/2002	302.6	1.64E-02	3.04E-03	3.35E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/19/2002	293.4	1.54E-02	3.09E-03	3.54E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/26/2002	290	2.07E-02	3.37E-03	3.56E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/3/2002	344	6.55E-03	2.14E-03	2.75E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/9/2002	225.7	1.67E-02	3.91E-03	4.75E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/16/2002	325	1.94E-02	3.07E-03	3.23E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/23/2002	316.9	2.27E-02	3.33E-03	3.45E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/30/2002	323	1.71E-02	2.98E-03	3.26E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	10/7/2002	303.5	2.11E-02	3.19E-03	3.16E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	10/14/2002	272.2	1.72E-02	3.25E-03	3.55E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	10/21/2002	270.8	1.89E-02	3.44E-03	3.79E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	10/28/2002	270.8	1.82E-02	3.20E-03	3.28E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/4/2002	257.2	1.14E-02	3.14E-03	3.94E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/11/2002	252.8	2.26E-02	3.75E-03	3.92E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/18/2002	252.2	1.58E-02	3.41E-03	3.95E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/25/2002	254.4	4.39E-02	4.64E-03	3.82E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/2/2002	257.1	1.85E-02	3.57E-03	4.03E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/9/2002	162.4	2.24E-02	5.19E-03	6.17E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/16/2002	260.4	1.38E-02	3.13E-03	3.61E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/22/2002	223.1	1.89E-02	3.93E-03	4.52E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/30/2002	294.8	1.62E-02	3.07E-03	3.42E-03
2	SR 1134	1/7/2002	821.7	1.65E-02	1.60E-03	1.21E-03
2	SR 1134	1/14/2002	797.1	1.67E-02	1.65E-03	1.30E-03
2	SR 1134	1/21/2002	812.2	1.62E-02	1.60E-03	1.23E-03
2	SR 1134	1/28/2002	798.2	1.15E-02	1.45E-03	1.33E-03
2	SR 1134	2/4/2002	813	1.11E-02	1.41E-03	1.30E-03
2	SR 1134	2/11/2002	811.8	1.30E-02	1.45E-03	1.17E-03
2	SR 1134	2/18/2002	824.6	1.30E-02	1.48E-03	1.28E-03
2	SR 1134	2/25/2002	779.1	1.53E-02	1.59E-03	1.23E-03
2	SR 1134	3/4/2002	815.1	1.54E-02	1.57E-03	1.24E-03
2	SR 1134	3/11/2002	805.4	1.57E-02	1.61E-03	1.32E-03
2	SR 1134	3/18/2002	786.6	1.42E-02	1.60E-03	1.43E-03
2	SR 1134	3/25/2002	807.1	1.38E-02	1.51E-03	1.23E-03
2	SR 1134	4/1/2002	796.6	1.47E-02	1.57E-03	1.29E-03
2	SR 1134	4/8/2002	789.3	1.31E-02	1.55E-03	1.42E-03
2	SR 1134	4/15/2002	789.3	1.30E-02	1.52E-03	1.33E-03
2	SR 1134	4/22/2002	765.3	1.15E-02	1.51E-03	1.46E-03
2	SR 1134	4/29/2002	794.7	1.24E-02	1.43E-03	1.26E-03
2	SR 1134	5/6/2002	788.7	1.09E-02	1.40E-03	1.33E-03
2	SR 1134	5/13/2002	774.5	1.46E-02	1.55E-03	1.31E-03
2	SR 1134	5/20/2002	789.5	1.21E-02	1.51E-03	1.41E-03
2	SR 1134	5/28/2002	868.4	1.47E-02	1.42E-03	1.08E-03
2	SR 1134	6/3/2002	668.2	1.12E-02	1.57E-03	1.54E-03
2	SR 1134	6/10/2002	416	1.55E-02	2.35E-03	2.35E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
2	SR 1134	6/17/2002	358.6	2.09E-02	2.85E-03	2.68E-03
2	SR 1134	6/24/2002	368.7	1.60E-02	2.67E-03	2.87E-03
2	SR 1134	7/1/2002	346.2	1.20E-02	2.41E-03	2.62E-03
2	SR 1134	7/9/2002	168.4	2.38E-02	4.96E-03	5.55E-03
2	SR 1134	7/15/2002	141.2	1.81E-02	5.61E-03	7.26E-03
2	SR 1134	7/22/2002	292.3	2.80E-02	3.59E-03	3.26E-03
2	SR 1134	7/29/2002	288.6	1.50E-02	2.95E-03	3.24E-03
2	SR 1134	8/5/2002	311.5	2.19E-02	3.17E-03	3.06E-03
2	SR 1134	8/12/2002	316.2	1.68E-02	2.96E-03	3.21E-03
2	SR 1134	8/19/2002	246.8	1.64E-02	3.57E-03	4.20E-03
2	SR 1134	8/26/2002	276.8	1.95E-02	3.42E-03	3.73E-03
2	SR 1134	9/3/2002	317.8	7.97E-03	2.37E-03	2.98E-03
2	SR 1134	9/9/2002	209.9	1.74E-02	4.17E-03	5.10E-03
2	SR 1134	9/16/2002	320.8	1.44E-02	2.85E-03	3.27E-03
2	SR 1134	9/23/2002	313.6	2.15E-02	3.31E-03	3.49E-03
2	SR 1134	9/30/2002	319.5	1.51E-02	2.91E-03	3.30E-03
2	SR 1134	10/7/2002	309.1	2.32E-02	3.26E-03	3.10E-03
2	SR 1134	10/14/2002	282.6	1.12E-02	2.83E-03	3.42E-03
2	SR 1134	10/21/2002	280.1	1.23E-02	3.01E-03	3.66E-03
2	SR 1134	10/28/2002	279.3	1.71E-02	3.07E-03	3.18E-03
2	SR 1134	11/4/2002	280.4	1.41E-02	3.09E-03	3.62E-03
2	SR 1134	11/11/2002	276.8	1.89E-02	3.33E-03	3.58E-03
2	SR 1134	11/18/2002	274.2	1.07E-02	2.92E-03	3.63E-03
2	SR 1134	11/25/2002	302.6	2.55E-02	3.42E-03	3.21E-03
2	SR 1134	12/2/2002	292	1.34E-02	2.99E-03	3.55E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
2	SR 1134	12/9/2002	267	1.79E-02	3.39E-03	3.75E-03
2	SR 1134	12/16/2002	289.7	1.27E-02	2.83E-03	3.25E-03
2	SR 1134	12/22/2002	252.4	1.33E-02	3.29E-03	3.99E-03
2	SR 1134	12/30/2002	331.5	1.49E-02	2.76E-03	3.04E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/7/2002	502.4	2.21E-02	2.42E-03	1.98E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/14/2002	490.4	1.57E-02	2.20E-03	2.11E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/21/2002	500	2.03E-02	2.35E-03	2.00E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/28/2002	494	1.18E-02	2.02E-03	2.14E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/4/2002	500.5	1.37E-02	2.10E-03	2.12E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/11/2002	498.7	1.63E-02	2.15E-03	1.91E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/18/2002	511.1	1.37E-02	2.07E-03	2.07E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/4/2002	542.5	1.76E-02	2.13E-03	1.87E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/11/2002	563.7	1.95E-02	2.19E-03	1.89E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/18/2002	545	1.45E-02	2.06E-03	2.06E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/25/2002	560.4	1.59E-02	2.00E-03	1.77E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/1/2002	556	1.60E-02	2.04E-03	1.85E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/8/2002	548	1.54E-02	2.09E-03	2.05E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/15/2002	553.6	1.41E-02	1.97E-03	1.90E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/22/2002	540.3	1.50E-02	2.09E-03	2.06E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/29/2002	554.4	1.52E-02	1.94E-03	1.81E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/6/2002	552	1.02E-02	1.75E-03	1.90E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/13/2002	544.4	1.83E-02	2.11E-03	1.86E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/20/2002	555.6	1.51E-02	2.05E-03	2.01E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/28/2002	621.3	1.71E-02	1.85E-03	1.51E-03
4	NEW HILL NEAR 1ST BAPTIST CH	6/3/2002	469	1.45E-02	2.16E-03	2.20E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
4	NEW HILL NEAR 1ST BAPTIST CH	6/10/2002	391.9	1.80E-02	2.57E-03	2.50E-03
4	NEW HILL NEAR 1ST BAPTIST CH	6/17/2002	364.2	2.05E-02	2.80E-03	2.63E-03
4	NEW HILL NEAR 1ST BAPTIST CH	6/24/2002	374	1.44E-02	2.56E-03	2.83E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/1/2002	366.4	1.04E-02	2.22E-03	2.48E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/9/2002	339	2.51E-02	3.12E-03	2.76E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/15/2002	264.4	1.34E-02	3.21E-03	3.88E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/22/2002	298.9	2.44E-02	3.38E-03	3.19E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/29/2002	294.6	1.49E-02	2.91E-03	3.17E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/5/2002	304.2	2.36E-02	3.30E-03	3.13E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/12/2002	312.7	1.71E-02	3.00E-03	3.24E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/19/2002	292.9	1.61E-02	3.13E-03	3.54E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/26/2002	301.1	2.13E-02	3.31E-03	3.43E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/3/2002	347.7	5.60E-03	2.06E-03	2.72E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/9/2002	229.4	1.76E-02	3.90E-03	4.67E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/16/2002	306.2	1.67E-02	3.07E-03	3.42E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/23/2002	298.8	1.41E-02	3.06E-03	3.66E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/30/2002	318.3	1.58E-02	2.95E-03	3.31E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/7/2002	290.7	2.62E-02	3.53E-03	3.30E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/14/2002	270.4	1.70E-02	3.26E-03	3.57E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/21/2002	270	1.79E-02	3.40E-03	3.80E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/28/2002	269.1	1.79E-02	3.20E-03	3.30E-03
4	NEW HILL NEAR 1ST BAPTIST CH	11/4/2002	273.3	1.50E-02	3.20E-03	3.71E-03
4	NEW HILL NEAR 1ST BAPTIST CH	11/11/2002	276.4	1.82E-02	3.30E-03	3.58E-03
4	NEW HILL NEAR 1ST BAPTIST CH	11/18/2002	274.6	1.14E-02	2.96E-03	3.63E-03
4	NEW HILL NEAR 1ST BAPTIST CH	11/25/2002	272.9	3.38E-02	4.04E-03	3.56E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
4	NEW HILL NEAR 1ST BAPTIST CH	12/2/2002	280.6	1.81E-02	3.33E-03	3.70E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/9/2002	253.5	1.91E-02	3.58E-03	3.95E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/16/2002	283.8	1.40E-02	2.94E-03	3.31E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/22/2002	245.1	1.70E-02	3.57E-03	4.11E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/30/2002	319.9	1.53E-02	2.85E-03	3.15E-03
5	PITTSBORO - CONTROL	1/7/2002	804.3	1.78E-02	1.67E-03	1.23E-03
5	PITTSBORO - CONTROL	1/14/2002	769	1.61E-02	1.66E-03	1.34E-03
5	PITTSBORO - CONTROL	1/28/2002	712.8	1.17E-02	1.57E-03	1.49E-03
5	PITTSBORO - CONTROL	2/4/2002	787.5	1.34E-02	1.54E-03	1.34E-03
5	PITTSBORO - CONTROL	2/11/2002	795	1.35E-02	1.49E-03	1.20E-03
5	PITTSBORO - CONTROL	2/18/2002	748.2	1.47E-02	1.64E-03	1.42E-03
5	PITTSBORO - CONTROL	2/25/2002	761.8	1.30E-02	1.52E-03	1.26E-03
5	PITTSBORO - CONTROL	3/4/2002	796.9	1.43E-02	1.55E-03	1.27E-03
5	PITTSBORO - CONTROL	3/11/2002	767.6	1.78E-02	1.74E-03	1.39E-03
5	PITTSBORO - CONTROL	3/18/2002	765.3	1.32E-02	1.59E-03	1.47E-03
5	PITTSBORO - CONTROL	3/25/2002	783.6	1.47E-02	1.57E-03	1.27E-03
5	PITTSBORO - CONTROL	4/1/2002	764.4	1.33E-02	1.55E-03	1.34E-03
5	PITTSBORO - CONTROL	4/8/2002	767.4	1.40E-02	1.62E-03	1.46E-03
5	PITTSBORO - CONTROL	4/15/2002	762.8	1.27E-02	1.54E-03	1.38E-03
5	PITTSBORO - CONTROL	4/22/2002	736.6	1.45E-02	1.68E-03	1.51E-03
5	PITTSBORO - CONTROL	4/29/2002	765.3	1.34E-02	1.51E-03	1.31E-03
5	PITTSBORO - CONTROL	5/6/2002	760.9	1.11E-02	1.44E-03	1.38E-03
5	PITTSBORO - CONTROL	5/13/2002	746.4	1.65E-02	1.66E-03	1.36E-03
5	PITTSBORO - CONTROL	5/20/2002	753.3	1.29E-02	1.59E-03	1.48E-03
5	PITTSBORO - CONTROL	5/28/2002	870.9	1.51E-02	1.43E-03	1.08E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
5	PITTSBORO - CONTROL	6/3/2002	638.1	1.30E-02	1.70E-03	1.62E-03
5	PITTSBORO - CONTROL	6/10/2002	117.4	1.60E-02	6.19E-03	8.33E-03
5	PITTSBORO - CONTROL	6/17/2002	373.6	2.03E-02	2.75E-03	2.57E-03
5	PITTSBORO - CONTROL	6/24/2002	386.6	1.47E-02	2.52E-03	2.74E-03
5	PITTSBORO - CONTROL	7/1/2002	383.9	1.20E-02	2.23E-03	2.37E-03
5	PITTSBORO - CONTROL	7/9/2002	327.9	2.23E-02	3.06E-03	2.85E-03
5	PITTSBORO - CONTROL	7/15/2002	243.6	1.24E-02	3.36E-03	4.21E-03
5	PITTSBORO - CONTROL	7/22/2002	286.1	2.64E-02	3.57E-03	3.33E-03
5	PITTSBORO - CONTROL	7/29/2002	280.1	1.46E-02	3.00E-03	3.33E-03
5	PITTSBORO - CONTROL	8/5/2002	289.7	2.61E-02	3.53E-03	3.29E-03
5	PITTSBORO - CONTROL	8/12/2002	292.3	1.92E-02	3.25E-03	3.47E-03
5	PITTSBORO - CONTROL	8/19/2002	288.5	1.89E-02	3.31E-03	3.60E-03
5	PITTSBORO - CONTROL	8/26/2002	287.2	2.31E-02	3.51E-03	3.59E-03
5	PITTSBORO - CONTROL	9/3/2002	330.7	8.44E-03	2.33E-03	2.86E-03
5	PITTSBORO - CONTROL	9/9/2002	220	2.12E-02	4.22E-03	4.87E-03
5	PITTSBORO - CONTROL	9/16/2002	321	1.53E-02	2.90E-03	3.27E-03
5	PITTSBORO - CONTROL	9/23/2002	311.1	2.01E-02	3.26E-03	3.51E-03
5	PITTSBORO - CONTROL	9/30/2002	317.7	1.58E-02	2.95E-03	3.32E-03
5	PITTSBORO - CONTROL	10/7/2002	311.1	2.46E-02	3.30E-03	3.08E-03
5	PITTSBORO - CONTROL	10/14/2002	296.3	1.46E-02	2.92E-03	3.26E-03
5	PITTSBORO - CONTROL	10/21/2002	296	2.17E-02	3.36E-03	3.46E-03
5	PITTSBORO - CONTROL	10/28/2002	296.3	2.03E-02	3.12E-03	3.00E-03
5	PITTSBORO - CONTROL	11/4/2002	282.8	1.39E-02	3.06E-03	3.59E-03
5	PITTSBORO - CONTROL	11/11/2002	275.5	1.74E-02	3.27E-03	3.59E-03
5	PITTSBORO - CONTROL	11/18/2002	276.7	1.35E-02	3.06E-03	3.60E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
5	PITTSBORO - CONTROL	11/25/2002	277.9	3.17E-02	3.90E-03	3.50E-03
5	PITTSBORO - CONTROL	12/2/2002	279.9	2.29E-02	3.57E-03	3.71E-03
5	PITTSBORO - CONTROL	12/9/2002	216.6	1.73E-02	3.92E-03	4.63E-03
5	PITTSBORO - CONTROL	12/16/2002	283.5	1.40E-02	2.95E-03	3.32E-03
5	PITTSBORO - CONTROL	12/22/2002	242.3	1.69E-02	3.60E-03	4.16E-03
5	PITTSBORO - CONTROL	12/30/2002	324.1	1.85E-02	2.99E-03	3.11E-03
26	SPILLWAY ON MAIN RES	1/7/2002	188.2	2.93E-02	5.09E-03	5.27E-03
26	SPILLWAY ON MAIN RES	1/14/2002	563.7	1.76E-02	2.09E-03	1.83E-03
26	SPILLWAY ON MAIN RES	1/21/2002	591.6	1.90E-02	2.07E-03	1.69E-03
26	SPILLWAY ON MAIN RES	1/28/2002	582.3	1.19E-02	1.81E-03	1.82E-03
26	SPILLWAY ON MAIN RES	2/4/2002	600	1.36E-02	1.85E-03	1.76E-03
26	SPILLWAY ON MAIN RES	2/18/2002	584.7	1.70E-02	2.03E-03	1.81E-03
26	SPILLWAY ON MAIN RES	2/25/2002	593	1.74E-02	1.97E-03	1.61E-03
26	SPILLWAY ON MAIN RES	3/4/2002	622.7	1.68E-02	1.92E-03	1.63E-03
26	SPILLWAY ON MAIN RES	3/11/2002	589.5	1.79E-02	2.06E-03	1.81E-03
26	SPILLWAY ON MAIN RES	3/18/2002	615.4	1.59E-02	1.96E-03	1.82E-03
26	SPILLWAY ON MAIN RES	3/25/2002	627.2	1.62E-02	1.87E-03	1.58E-03
26	SPILLWAY ON MAIN RES	4/1/2002	618.5	1.49E-02	1.85E-03	1.66E-03
26	SPILLWAY ON MAIN RES	4/8/2002	622.5	1.66E-02	1.97E-03	1.80E-03
26	SPILLWAY ON MAIN RES	4/15/2002	617.5	1.58E-02	1.91E-03	1.70E-03
26	SPILLWAY ON MAIN RES	4/29/2002	499	1.55E-02	2.10E-03	2.01E-03
26	SPILLWAY ON MAIN RES	5/6/2002	499.6	1.17E-02	1.95E-03	2.10E-03
26	SPILLWAY ON MAIN RES	5/13/2002	497.1	1.74E-02	2.19E-03	2.04E-03
26	SPILLWAY ON MAIN RES	5/20/2002	465.8	1.42E-02	2.27E-03	2.39E-03
26	SPILLWAY ON MAIN RES	5/28/2002	586.2	1.39E-02	1.78E-03	1.60E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
26	SPILLWAY ON MAIN RES	6/3/2002	423.1	1.29E-02	2.25E-03	2.44E-03
26	SPILLWAY ON MAIN RES	6/10/2002	385.7	4.20E-03	1.84E-03	2.54E-03
26	SPILLWAY ON MAIN RES	6/17/2002	364.6	1.94E-02	2.75E-03	2.63E-03
26	SPILLWAY ON MAIN RES	6/24/2002	371.2	1.57E-02	2.64E-03	2.86E-03
26	SPILLWAY ON MAIN RES	7/1/2002	357.6	1.13E-02	2.31E-03	2.54E-03
26	SPILLWAY ON MAIN RES	7/9/2002	338.8	2.39E-02	3.07E-03	2.76E-03
26	SPILLWAY ON MAIN RES	7/15/2002	633.2	3.19E-03	1.20E-03	1.62E-03
26	SPILLWAY ON MAIN RES	7/22/2002	264.3	2.45E-02	3.67E-03	3.61E-03
26	SPILLWAY ON MAIN RES	7/29/2002	251.8	1.58E-02	3.31E-03	3.71E-03
26	SPILLWAY ON MAIN RES	8/5/2002	298.4	2.48E-02	3.40E-03	3.19E-03
26	SPILLWAY ON MAIN RES	8/12/2002	295.9	1.69E-02	3.11E-03	3.43E-03
26	SPILLWAY ON MAIN RES	8/19/2002	302.8	1.77E-02	3.13E-03	3.43E-03
26	SPILLWAY ON MAIN RES	8/26/2002	295.8	2.28E-02	3.42E-03	3.49E-03
26	SPILLWAY ON MAIN RES	9/3/2002	347.2	1.00E-02	2.33E-03	2.73E-03
26	SPILLWAY ON MAIN RES	9/9/2002	226	1.99E-02	4.07E-03	4.74E-03
26	SPILLWAY ON MAIN RES	9/16/2002	296.6	1.96E-02	3.29E-03	3.54E-03
26	SPILLWAY ON MAIN RES	9/23/2002	300.5	2.11E-02	3.39E-03	3.64E-03
26	SPILLWAY ON MAIN RES	9/30/2002	321.6	1.72E-02	3.00E-03	3.28E-03
26	SPILLWAY ON MAIN RES	10/7/2002	299.2	2.29E-02	3.31E-03	3.21E-03
26	SPILLWAY ON MAIN RES	10/14/2002	283.9	1.55E-02	3.06E-03	3.40E-03
26	SPILLWAY ON MAIN RES	10/21/2002	281.8	2.01E-02	3.40E-03	3.64E-03
26	SPILLWAY ON MAIN RES	10/28/2002	285.9	2.08E-02	3.22E-03	3.11E-03
26	SPILLWAY ON MAIN RES	11/4/2002	278.9	1.31E-02	3.05E-03	3.64E-03
26	SPILLWAY ON MAIN RES	11/11/2002	274.9	1.93E-02	3.37E-03	3.60E-03
26	SPILLWAY ON MAIN RES	11/18/2002	278.3	1.29E-02	3.01E-03	3.58E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
26	SPILLWAY ON MAIN RES	11/25/2002	279.2	3.35E-02	3.97E-03	3.48E-03
26	SPILLWAY ON MAIN RES	12/2/2002	280.7	1.98E-02	3.41E-03	3.69E-03
26	SPILLWAY ON MAIN RES	12/9/2002	211.8	1.73E-02	3.99E-03	4.73E-03
26	SPILLWAY ON MAIN RES	12/16/2002	286.2	1.34E-02	2.89E-03	3.29E-03
26	SPILLWAY ON MAIN RES	12/22/2002	244.5	1.46E-02	3.44E-03	4.12E-03
26	SPILLWAY ON MAIN RES	12/30/2002	329.5	1.42E-02	2.74E-03	3.06E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/7/2002	683.1	1.82E-02	1.86E-03	1.45E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/14/2002	654.3	1.74E-02	1.89E-03	1.58E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/28/2002	611.8	1.19E-02	1.75E-03	1.73E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/4/2002	677.1	1.42E-02	1.73E-03	1.56E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/11/2002	651.5	1.45E-02	1.74E-03	1.46E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/18/2002	661.4	1.38E-02	1.74E-03	1.60E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/25/2002	660	1.50E-02	1.75E-03	1.45E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/4/2002	684.3	1.87E-02	1.88E-03	1.48E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/11/2002	647.2	1.80E-02	1.95E-03	1.65E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/18/2002	665	1.50E-02	1.82E-03	1.69E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/25/2002	675	1.54E-02	1.76E-03	1.47E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/1/2002	661	1.40E-02	1.73E-03	1.55E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/8/2002	664.5	1.45E-02	1.80E-03	1.69E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/15/2002	659.8	1.24E-02	1.68E-03	1.60E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/22/2002	634.1	1.50E-02	1.87E-03	1.76E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/29/2002	672.6	1.32E-02	1.63E-03	1.49E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/6/2002	657	1.20E-02	1.63E-03	1.60E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/13/2002	650.1	1.65E-02	1.81E-03	1.56E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/20/2002	621.8	1.37E-02	1.84E-03	1.79E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
47	SSW SECTOR 3.4 MI FROM SITE	5/28/2002	756.5	1.52E-02	1.57E-03	1.24E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/3/2002	551.2	1.29E-02	1.87E-03	1.87E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/10/2002	393.1	1.59E-02	2.47E-03	2.49E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/17/2002	353.9	2.03E-02	2.84E-03	2.71E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/24/2002	361.4	1.56E-02	2.69E-03	2.93E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/1/2002	311.8	1.23E-02	2.61E-03	2.91E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/9/2002	307.2	2.54E-02	3.34E-03	3.04E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/15/2002	556.2	5.06E-03	1.45E-03	1.84E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/22/2002	269	2.69E-02	3.74E-03	3.54E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/29/2002	261.7	1.58E-02	3.22E-03	3.57E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/5/2002	271.9	2.71E-02	3.73E-03	3.51E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/12/2002	269.7	1.64E-02	3.31E-03	3.76E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/19/2002	268.5	4.81E-03	2.68E-03	3.86E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/26/2002	305.6	2.26E-02	3.34E-03	3.37E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/3/2002	356.3	6.32E-03	2.07E-03	2.66E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/9/2002	233.5	2.02E-02	3.98E-03	4.59E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/16/2002	280.5	1.38E-02	3.13E-03	3.74E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/23/2002	285.5	2.09E-02	3.50E-03	3.83E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/30/2002	295.1	1.65E-02	3.15E-03	3.57E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/7/2002	280.5	2.63E-02	3.62E-03	3.42E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/14/2002	281.5	1.53E-02	3.07E-03	3.43E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/21/2002	280.8	1.90E-02	3.35E-03	3.65E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/28/2002	285.2	1.88E-02	3.13E-03	3.11E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/4/2002	278.2	1.26E-02	3.03E-03	3.64E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/11/2002	275.9	1.98E-02	3.39E-03	3.59E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
47	SSW SECTOR 3.4 MI FROM SITE	11/18/2002	275.2	1.56E-02	3.19E-03	3.62E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/25/2002	279.5	2.64E-02	3.65E-03	3.48E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/2/2002	283.6	2.23E-02	3.51E-03	3.66E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/9/2002	161.6	1.95E-02	5.05E-03	6.20E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/16/2002	295.7	1.28E-02	2.79E-03	3.18E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/22/2002	267	1.79E-02	3.40E-03	3.78E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/30/2002	357.7	1.88E-02	2.80E-03	2.82E-03

HNP Radiological Environmental Montoring Analysis Report

Media Type: Drinking Water
Quantity: Liters
Concentration (Activity): pCi/Liter

Analysis: Beta

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
38	CAPE FEAR PLANT INTAKE - CONTROL	1/31/2002	1.00	1.00E+01	1.46E+00	1.28E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/28/2002	1.00	4.78E+00	9.40E-01	9.41E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/31/2002	1.00	5.16E+00	1.03E+00	1.09E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/30/2002	1.00	4.62E+00	9.67E-01	1.04E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/31/2002	1.00	5.70E+00	1.13E+00	1.21E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/30/2002	1.00	4.82E+00	1.07E+00	1.16E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/31/2002	1.00	5.67E+00	1.09E+00	1.12E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/31/2002	1.00	1.21E+01	1.67E+00	1.39E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/30/2002	1.00	5.63E+00	1.03E+00	1.02E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/31/2002	1.00	5.08E+00	9.94E-01	1.06E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/30/2002	1.00	4.62E+00	9.07E-01	9.13E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/31/2002	1.00	4.14E+00	9.30E-01	1.04E+00
40	LILLINGTON - CAPE FEAR RIVER	1/31/2002	1.00	7.05E+00	1.18E+00	1.12E+00
40	LILLINGTON - CAPE FEAR RIVER	2/28/2002	1.00	4.73E+00	9.45E-01	9.54E-01
40	LILLINGTON - CAPE FEAR RIVER	3/31/2002	1.00	3.19E+00	8.46E-01	9.92E-01
40	LILLINGTON - CAPE FEAR RIVER	4/30/2002	1.00	4.38E+00	9.33E-01	1.01E+00
40	LILLINGTON - CAPE FEAR RIVER	5/31/2002	1.00	4.47E+00	1.02E+00	1.16E+00
40	LILLINGTON - CAPE FEAR RIVER	6/30/2002	1.00	6.19E+00	1.16E+00	1.17E+00
40	LILLINGTON - CAPE FEAR RIVER	7/31/2002	1.00	8.40E+00	1.34E+00	1.26E+00
40	LILLINGTON - CAPE FEAR RIVER	8/31/2002	1.00	1.31E+01	1.78E+00	1.46E+00
40	LILLINGTON - CAPE FEAR RIVER	9/30/2002	1.00	5.86E+00	1.05E+00	1.04E+00
40	LILLINGTON - CAPE FEAR RIVER	10/31/2002	1.00	3.10E+00	8.50E-01	1.02E+00
40	LILLINGTON - CAPE FEAR RIVER	11/30/2002	1.00	4.46E+00	9.04E-01	9.21E-01
40	LILLINGTON - CAPE FEAR RIVER	12/31/2002	1.00	4.66E+00	9.64E-01	1.04E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/31/2002	1.00	4.00E+00	9.32E-01	1.02E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/28/2002	1.00	3.63E+00	8.58E-01	9.29E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/31/2002	1.00	3.32E+00	8.88E-01	1.04E+00

HNP Radiological Environmental Montoring Analysis Report

Media Type: Drinking Water
Quantity: Liters
Concentration (Activity): pCi/Liter

Analysis: Beta

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/30/2002	1.00	3.97E+00	9.25E-01	1.04E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/31/2002	1.00	3.35E+00	8.91E-01	1.06E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/30/2002	1.00	3.44E+00	8.74E-01	9.98E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/31/2002	1.00	2.97E+00	8.41E-01	9.97E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/31/2002	1.00	3.81E+00	9.28E-01	1.02E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/30/2002	1.00	2.28E+00	8.19E-01	1.03E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/31/2002	1.00	2.81E+00	9.03E-01	1.14E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/30/2002	1.00	3.52E+00	8.60E-01	9.48E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/31/2002	1.00	3.55E+00	9.01E-01	1.05E+00

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water
Quantity: Liters
Concentration (Activity): pCi/Liter

Analysis: Beta

Sample Point		Sample Date	Quantity	Activity	2 Sigma Error	LLD
26	SPILLWAY ON MAIN RES	1/31/2002	1.00	2.33E+00	7.34E-01	8.90E-01
26	SPILLWAY ON MAIN RES	2/28/2002	1.00	2.94E+00	7.44E-01	8.26E-01
26	SPILLWAY ON MAIN RES	3/31/2002	1.00	3.95E+00	8.47E-01	9.19E-01
26	SPILLWAY ON MAIN RES	4/30/2002	1.00	2.99E+00	7.90E-01	9.24E-01
26	SPILLWAY ON MAIN RES	5/31/2002	1.00	3.10E+00	8.03E-01	9.46E-01
26	SPILLWAY ON MAIN RES	6/30/2002	1.00	3.43E+00	8.22E-01	9.18E-01
26	SPILLWAY ON MAIN RES	7/31/2002	1.00	2.37E+00	7.22E-01	8.78E-01
26	SPILLWAY ON MAIN RES	8/31/2002	1.00	3.11E+00	7.86E-01	8.73E-01
26	SPILLWAY ON MAIN RES	9/30/2002	1.00	3.60E+00	8.16E-01	8.86E-01
26	SPILLWAY ON MAIN RES	10/31/2002	1.00	3.75E+00	8.71E-01	9.93E-01
26	SPILLWAY ON MAIN RES	11/30/2002	1.00	4.02E+00	8.41E-01	8.69E-01
26	SPILLWAY ON MAIN RES	12/31/2002	1.00	6.78E+00	1.04E+00	9.83E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/31/2002	1.00	1.00E+01	1.46E+00	1.28E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/28/2002	1.00	4.78E+00	9.40E-01	9.41E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/31/2002	1.00	5.16E+00	1.03E+00	1.09E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/30/2002	1.00	4.62E+00	9.67E-01	1.04E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/31/2002	1.00	5.70E+00	1.13E+00	1.21E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/30/2002	1.00	4.82E+00	1.07E+00	1.16E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/31/2002	1.00	5.67E+00	1.09E+00	1.12E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/31/2002	1.00	1.21E+01	1.67E+00	1.39E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/30/2002	1.00	5.63E+00	1.03E+00	1.02E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/31/2002	1.00	5.08E+00	9.94E-01	1.06E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/30/2002	1.00	4.62E+00	9.07E-01	9.13E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/31/2002	1.00	4.14E+00	9.30E-01	1.04E+00
40	LILLINGTON - CAPE FEAR RIVER	1/31/2002	1.00	7.05E+00	1.18E+00	1.12E+00
40	LILLINGTON - CAPE FEAR RIVER	2/28/2002	1.00	4.73E+00	9.45E-01	9.54E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water
Quantity: Liters
Concentration (Activity): pCi/Liter

Analysis: Beta

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
40	LILLINGTON - CAPE FEAR RIVER	3/31/2002	1.00	3.19E+00	8.46E-01	9.92E-01
40	LILLINGTON - CAPE FEAR RIVER	4/30/2002	1.00	4.38E+00	9.33E-01	1.01E+00
40	LILLINGTON - CAPE FEAR RIVER	5/31/2002	1.00	4.47E+00	1.02E+00	1.16E+00
40	LILLINGTON - CAPE FEAR RIVER	6/30/2002	1.00	6.19E+00	1.16E+00	1.17E+00
40	LILLINGTON - CAPE FEAR RIVER	7/31/2002	1.00	8.40E+00	1.34E+00	1.26E+00
40	LILLINGTON - CAPE FEAR RIVER	8/31/2002	1.00	1.31E+01	1.78E+00	1.46E+00
40	LILLINGTON - CAPE FEAR RIVER	9/30/2002	1.00	5.86E+00	1.05E+00	1.04E+00
40	LILLINGTON - CAPE FEAR RIVER	10/31/2002	1.00	3.10E+00	8.50E-01	1.02E+00
40	LILLINGTON - CAPE FEAR RIVER	11/30/2002	1.00	4.46E+00	9.04E-01	9.21E-01
40	LILLINGTON - CAPE FEAR RIVER	12/31/2002	1.00	4.66E+00	9.64E-01	1.04E+00

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge
Quantity: cubic meters
Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	1/7/2002	519.20	<LLD		2.56E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	1/14/2002	505.00	<LLD		2.34E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	1/21/2002	514.70	<LLD		8.41E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	1/28/2002	506.20	<LLD		1.78E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/4/2002	517.90	<LLD		2.90E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/11/2002	514.50	<LLD		9.34E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/18/2002	521.20	<LLD		2.38E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/25/2002	495.90	<LLD		2.40E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/4/2002	517.20	<LLD		1.68E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/11/2002	510.40	<LLD		1.53E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/18/2002	50.30	<LLD		2.87E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/25/2002	513.90	<LLD		2.38E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/1/2002	508.30	<LLD		5.26E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/8/2002	504.90	<LLD		2.61E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/15/2002	506.80	<LLD		2.14E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/22/2002	493.50	<LLD		2.04E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/29/2002	510.50	<LLD		2.07E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/6/2002	504.00	<LLD		2.85E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/13/2002	500.40	<LLD		2.03E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/20/2002	489.80	<LLD		2.80E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/28/2002	569.60	<LLD		3.43E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/3/2002	431.40	<LLD		2.59E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/10/2002	382.80	<LLD		2.27E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/17/2002	361.00	<LLD		1.72E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/24/2002	365.30	<LLD		2.30E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/1/2002	358.20	<LLD		1.86E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/9/2002	299.20	<LLD		2.26E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge
Quantity: cubic meters
Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/15/2002	236.70	<LLD		3.23E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/22/2002	247.80	<LLD		2.33E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/29/2002	253.50	<LLD		2.25E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/5/2002	268.10	<LLD		2.13E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/12/2002	272.30	<LLD		2.50E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/19/2002	264.10	<LLD		2.91E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/26/2002	261.00	<LLD		1.77E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/3/2002	309.60	<LLD		2.28E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/9/2002	225.70	<LLD		3.11E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/16/2002	292.40	<LLD		2.94E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/23/2002	285.20	<LLD		3.00E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/30/2002	290.70	<LLD		2.05E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	10/7/2002	273.20	<LLD		2.84E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	10/14/2002	245.00	<LLD		2.55E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	10/21/2002	243.70	<LLD		2.99E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	10/28/2002	243.70	<LLD		2.23E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/4/2002	231.50	<LLD		2.81E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/11/2002	227.50	<LLD		2.40E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/18/2002	227.00	<LLD		2.42E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/25/2002	229.00	<LLD		3.07E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/2/2002	231.40	<LLD		2.84E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/9/2002	146.20	<LLD		6.60E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/16/2002	234.30	<LLD		2.72E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/22/2002	200.80	<LLD		2.79E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/30/2002	265.30	<LLD		2.98E-02
2	SR 1134	1/7/2002	821.70	<LLD		1.42E-02
2	SR 1134	1/14/2002	797.10	<LLD		2.07E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge
Quantity: cubic meters
Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point		Sample Date	Quantity	Activity	2 Sigma Error	LLD
2	SR 1134	1/21/2002	812.20	<LLD		2.04E-02
2	SR 1134	1/28/2002	798.20	<LLD		2.49E-02
2	SR 1134	2/4/2002	813.00	<LLD		1.16E-02
2	SR 1134	2/11/2002	811.80	<LLD		1.02E-02
2	SR 1134	2/18/2002	824.60	<LLD		1.66E-02
2	SR 1134	2/25/2002	779.10	<LLD		1.68E-02
2	SR 1134	3/4/2002	815.10	<LLD		1.41E-02
2	SR 1134	3/11/2002	805.40	<LLD		2.16E-02
2	SR 1134	3/18/2002	786.60	<LLD		1.67E-02
2	SR 1134	3/25/2002	807.10	<LLD		1.34E-02
2	SR 1134	4/1/2002	796.60	<LLD		8.35E-03
2	SR 1134	4/8/2002	789.30	<LLD		1.47E-02
2	SR 1134	4/15/2002	789.30	<LLD		1.82E-02
2	SR 1134	4/22/2002	765.30	<LLD		2.25E-02
2	SR 1134	4/29/2002	794.70	<LLD		2.14E-02
2	SR 1134	5/6/2002	788.70	<LLD		1.54E-02
2	SR 1134	5/13/2002	774.50	<LLD		2.00E-02
2	SR 1134	5/20/2002	789.50	<LLD		2.58E-02
2	SR 1134	5/28/2002	868.40	<LLD		2.31E-02
2	SR 1134	6/3/2002	668.20	<LLD		2.77E-02
2	SR 1134	6/10/2002	416.00	<LLD		3.33E-02
2	SR 1134	6/17/2002	358.60	<LLD		3.74E-02
2	SR 1134	6/24/2002	362.60	<LLD		3.53E-02
2	SR 1134	7/1/2002	340.50	<LLD		3.19E-02
2	SR 1134	7/9/2002	151.60	<LLD		3.89E-02
2	SR 1134	7/15/2002	127.10	<LLD		5.11E-02
2	SR 1134	7/22/2002	263.10	<LLD		3.56E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge
Quantity: cubic meters
Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point		Sample Date	Quantity	Activity	2 Sigma Error	LLD
2	SR 1134	7/29/2002	259.70	<LLD		3.01E-02
2	SR 1134	8/5/2002	280.40	<LLD		2.98E-02
2	SR 1134	8/12/2002	284.60	<LLD		3.27E-02
2	SR 1134	8/19/2002	222.10	<LLD		6.60E-02
2	SR 1134	8/26/2002	249.10	<LLD		3.72E-02
2	SR 1134	9/3/2002	286.00	<LLD		3.38E-02
2	SR 1134	9/9/2002	209.90	<LLD		4.55E-02
2	SR 1134	9/16/2002	288.70	<LLD		4.16E-02
2	SR 1134	9/23/2002	282.20	<LLD		3.20E-02
2	SR 1134	9/30/2002	287.60	<LLD		4.29E-02
2	SR 1134	10/7/2002	278.20	<LLD		4.10E-02
2	SR 1134	10/14/2002	254.30	<LLD		3.97E-02
2	SR 1134	10/21/2002	252.10	<LLD		4.70E-02
2	SR 1134	10/28/2002	251.40	<LLD		2.97E-02
2	SR 1134	11/4/2002	252.30	<LLD		3.96E-02
2	SR 1134	11/11/2002	249.10	<LLD		4.05E-02
2	SR 1134	11/18/2002	246.80	<LLD		4.58E-02
2	SR 1134	11/25/2002	272.40	<LLD		2.62E-02
2	SR 1134	12/2/2002	262.80	<LLD		4.07E-02
2	SR 1134	12/9/2002	240.30	<LLD		4.48E-02
2	SR 1134	12/16/2002	260.70	<LLD		2.87E-02
2	SR 1134	12/22/2002	227.10	<LLD		3.45E-02
2	SR 1134	12/30/2002	298.40	<LLD		3.11E-02
4	NEW HILL NEAR 1ST BAPTIST CH	1/7/2002	502.40	<LLD		2.96E-02
4	NEW HILL NEAR 1ST BAPTIST CH	1/14/2002	490.40	<LLD		3.58E-02
4	NEW HILL NEAR 1ST BAPTIST CH	1/21/2002	500.00	<LLD		3.68E-02
4	NEW HILL NEAR 1ST BAPTIST CH	1/28/2002	494.00	<LLD		1.35E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge
Quantity: cubic meters
Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point		Sample Date	Quantity	Activity	2 Sigma Error	LLD
4	NEW HILL NEAR 1ST BAPTIST CH	2/4/2002	500.50	<LLD		2.31E-02
4	NEW HILL NEAR 1ST BAPTIST CH	2/11/2002	498.70	<LLD		3.82E-02
4	NEW HILL NEAR 1ST BAPTIST CH	2/18/2002	511.10	<LLD		3.87E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/4/2002	542.50	<LLD		2.84E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/11/2002	563.70	<LLD		3.06E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/18/2002	545.00	<LLD		2.24E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/25/2002	560.40	<LLD		3.05E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/1/2002	556.00	<LLD		2.36E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/8/2002	548.00	<LLD		3.01E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/15/2002	553.60	<LLD		2.93E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/22/2002	540.30	<LLD		4.33E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/29/2002	554.40	<LLD		3.85E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/6/2002	552.00	<LLD		3.62E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/13/2002	544.40	<LLD		2.34E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/20/2002	555.60	<LLD		1.91E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/28/2002	621.30	<LLD		1.94E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/3/2002	469.00	<LLD		2.92E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/10/2002	391.90	<LLD		2.57E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/17/2002	364.20	<LLD		3.50E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/24/2002	367.40	<LLD		2.05E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/1/2002	360.00	<LLD		3.73E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/9/2002	305.10	<LLD		3.86E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/15/2002	238.00	<LLD		3.93E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/22/2002	269.00	<LLD		3.96E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/29/2002	265.10	<LLD		2.28E-02
4	NEW HILL NEAR 1ST BAPTIST CH	8/5/2002	273.80	<LLD		2.01E-02
4	NEW HILL NEAR 1ST BAPTIST CH	8/12/2002	281.40	<LLD		2.32E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge
Quantity: cubic meters
Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
4	NEW HILL NEAR 1ST BAPTIST CH	8/19/2002	263.60	<LLD		3.21E-02
4	NEW HILL NEAR 1ST BAPTIST CH	8/26/2002	271.00	<LLD		3.56E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/3/2002	312.90	<LLD		1.57E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/9/2002	229.40	<LLD		3.13E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/16/2002	275.60	<LLD		2.63E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/23/2002	268.90	<LLD		2.48E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/30/2002	286.50	<LLD		2.95E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/7/2002	261.60	<LLD		3.48E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/14/2002	243.40	<LLD		2.73E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/21/2002	243.00	<LLD		2.83E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/28/2002	242.20	<LLD		5.13E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/4/2002	246.00	<LLD		4.31E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/11/2002	248.80	<LLD		3.86E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/18/2002	247.20	<LLD		4.08E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/25/2002	245.60	<LLD		4.89E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/2/2002	252.60	<LLD		3.90E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/9/2002	228.10	<LLD		2.89E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/16/2002	255.40	<LLD		3.63E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/22/2002	220.60	<LLD		3.38E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/30/2002	287.90	<LLD		3.67E-02
5	PITTSBORO - CONTROL	1/7/2002	804.30	<LLD		1.78E-02
5	PITTSBORO - CONTROL	1/14/2002	769.00	<LLD		2.13E-02
5	PITTSBORO - CONTROL	1/28/2002	712.80	<LLD		1.50E-02
5	PITTSBORO - CONTROL	2/4/2002	787.50	<LLD		8.48E-03
5	PITTSBORO - CONTROL	2/11/2002	795.00	<LLD		2.21E-02
5	PITTSBORO - CONTROL	2/18/2002	784.20	<LLD		7.76E-03
5	PITTSBORO - CONTROL	2/25/2002	761.80	<LLD		7.96E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge
Quantity: cubic meters
Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point		Sample Date	Quantity	Activity	2 Sigma Error	LLD
5	PITTSBORO - CONTROL	3/4/2002	796.90	<LLD		1.10E-02
5	PITTSBORO - CONTROL	3/11/2002	767.60	<LLD		1.29E-02
5	PITTSBORO - CONTROL	3/18/2002	765.30	<LLD		1.98E-02
5	PITTSBORO - CONTROL	3/25/2002	783.60	<LLD		1.11E-02
5	PITTSBORO - CONTROL	4/1/2002	764.40	<LLD		1.53E-02
5	PITTSBORO - CONTROL	4/8/2002	767.40	<LLD		1.36E-02
5	PITTSBORO - CONTROL	4/15/2002	762.80	<LLD		1.23E-02
5	PITTSBORO - CONTROL	4/22/2002	736.60	<LLD		1.19E-02
5	PITTSBORO - CONTROL	4/29/2002	765.30	<LLD		1.13E-02
5	PITTSBORO - CONTROL	5/6/2002	760.90	<LLD		1.71E-02
5	PITTSBORO - CONTROL	5/13/2002	746.40	<LLD		1.64E-02
5	PITTSBORO - CONTROL	5/20/2002	753.30	<LLD		3.45E-02
5	PITTSBORO - CONTROL	5/28/2002	870.90	<LLD		1.51E-02
5	PITTSBORO - CONTROL	6/3/2002	638.10	<LLD		2.88E-02
5	PITTSBORO - CONTROL	6/10/2002	117.40	<LLD		1.31E-01
5	PITTSBORO - CONTROL	6/17/2002	373.60	<LLD		2.89E-02
5	PITTSBORO - CONTROL	6/24/2002	379.80	<LLD		3.75E-02
5	PITTSBORO - CONTROL	7/1/2002	377.10	<LLD		1.34E-02
5	PITTSBORO - CONTROL	7/9/2002	295.10	<LLD		2.23E-02
5	PITTSBORO - CONTROL	7/15/2002	219.20	<LLD		3.00E-02
5	PITTSBORO - CONTROL	7/22/2002	257.50	<LLD		3.03E-02
5	PITTSBORO - CONTROL	7/29/2002	252.10	<LLD		4.80E-02
5	PITTSBORO - CONTROL	8/5/2002	260.70	<LLD		3.76E-02
5	PITTSBORO - CONTROL	8/12/2002	263.10	<LLD		4.42E-02
5	PITTSBORO - CONTROL	8/19/2002	259.70	<LLD		5.29E-02
5	PITTSBORO - CONTROL	8/26/2002	258.50	<LLD		1.84E-02
5	PITTSBORO - CONTROL	9/3/2002	297.60	<LLD		4.23E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge
Quantity: cubic meters
Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
5	PITTSBORO - CONTROL	9/9/2002	220.00	<LLD		3.80E-02
5	PITTSBORO - CONTROL	9/16/2002	288.90	<LLD		3.88E-02
5	PITTSBORO - CONTROL	9/23/2002	280.00	<LLD		3.80E-02
5	PITTSBORO - CONTROL	9/30/2002	285.90	<LLD		4.54E-02
5	PITTSBORO - CONTROL	10/7/2002	280.00	<LLD		5.17E-02
5	PITTSBORO - CONTROL	10/14/2002	266.70	<LLD		5.09E-02
5	PITTSBORO - CONTROL	10/21/2002	266.40	<LLD		3.62E-02
5	PITTSBORO - CONTROL	10/28/2002	266.90	<LLD		2.77E-02
5	PITTSBORO - CONTROL	11/4/2002	254.50	<LLD		2.50E-02
5	PITTSBORO - CONTROL	11/11/2002	248.00	<LLD		2.73E-02
5	PITTSBORO - CONTROL	11/18/2002	249.10	<LLD		2.32E-02
5	PITTSBORO - CONTROL	11/25/2002	250.10	<LLD		1.84E-02
5	PITTSBORO - CONTROL	12/2/2002	251.90	<LLD		3.02E-02
5	PITTSBORO - CONTROL	12/9/2002	194.90	<LLD		4.47E-02
5	PITTSBORO - CONTROL	12/16/2002	255.20	<LLD		2.83E-02
5	PITTSBORO - CONTROL	12/22/2002	218.10	<LLD		2.57E-02
5	PITTSBORO - CONTROL	12/30/2002	291.70	<LLD		2.75E-02
26	SPILLWAY ON MAIN RES	1/7/2002	188.20	<LLD		3.53E-02
26	SPILLWAY ON MAIN RES	1/14/2002	563.70	<LLD		2.90E-02
26	SPILLWAY ON MAIN RES	1/21/2002	591.60	<LLD		1.92E-02
26	SPILLWAY ON MAIN RES	1/28/2002	582.30	<LLD		1.96E-02
26	SPILLWAY ON MAIN RES	2/4/2002	600.00	<LLD		2.62E-02
26	SPILLWAY ON MAIN RES	2/18/2002	584.70	<LLD		2.90E-02
26	SPILLWAY ON MAIN RES	2/25/2002	593.00	<LLD		3.12E-02
26	SPILLWAY ON MAIN RES	3/4/2002	622.70	<LLD		1.86E-02
26	SPILLWAY ON MAIN RES	3/11/2002	589.50	<LLD		2.33E-02
26	SPILLWAY ON MAIN RES	3/18/2002	615.40	<LLD		1.40E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge
Quantity: cubic meters
Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point		Sample Date	Quantity	Activity	2 Sigma Error	LLD
26	SPILLWAY ON MAIN RES	3/25/2002	627.20	<LLD		2.49E-02
26	SPILLWAY ON MAIN RES	4/1/2002	618.50	<LLD		2.62E-02
26	SPILLWAY ON MAIN RES	4/8/2002	622.50	<LLD		1.87E-02
26	SPILLWAY ON MAIN RES	4/15/2002	617.50	<LLD		2.42E-02
26	SPILLWAY ON MAIN RES	4/29/2002	499.00	<LLD		2.64E-02
26	SPILLWAY ON MAIN RES	5/6/2002	499.60	<LLD		2.06E-02
26	SPILLWAY ON MAIN RES	5/13/2002	497.10	<LLD		2.82E-02
26	SPILLWAY ON MAIN RES	5/20/2002	465.80	<LLD		1.57E-02
26	SPILLWAY ON MAIN RES	5/28/2002	586.20	<LLD		1.37E-02
26	SPILLWAY ON MAIN RES	6/3/2002	423.10	<LLD		2.82E-02
26	SPILLWAY ON MAIN RES	6/10/2002	385.70	<LLD		3.89E-02
26	SPILLWAY ON MAIN RES	6/17/2002	364.60	<LLD		3.69E-02
26	SPILLWAY ON MAIN RES	6/24/2002	364.70	<LLD		2.48E-02
26	SPILLWAY ON MAIN RES	7/1/2002	351.30	<LLD		2.53E-02
26	SPILLWAY ON MAIN RES	7/9/2002	304.90	<LLD		2.92E-02
26	SPILLWAY ON MAIN RES	7/15/2002	569.90	<LLD		1.26E-02
26	SPILLWAY ON MAIN RES	7/22/2002	237.90	<LLD		2.71E-02
26	SPILLWAY ON MAIN RES	7/29/2002	226.60	<LLD		2.70E-02
26	SPILLWAY ON MAIN RES	8/5/2002	268.60	<LLD		2.44E-02
26	SPILLWAY ON MAIN RES	8/12/2002	266.30	<LLD		1.82E-02
26	SPILLWAY ON MAIN RES	8/19/2002	272.50	<LLD		5.53E-02
26	SPILLWAY ON MAIN RES	8/26/2002	266.20	<LLD		3.57E-02
26	SPILLWAY ON MAIN RES	9/3/2002	312.50	<LLD		3.03E-02
26	SPILLWAY ON MAIN RES	9/9/2002	226.00	<LLD		2.60E-02
26	SPILLWAY ON MAIN RES	9/16/2002	267.00	<LLD		3.23E-02
26	SPILLWAY ON MAIN RES	9/23/2002	270.40	<LLD		2.84E-02
26	SPILLWAY ON MAIN RES	9/30/2002	289.40	<LLD		2.26E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge
Quantity: cubic meters
Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point		Sample Date	Quantity	Activity	2 Sigma Error	LLD
26	SPILLWAY ON MAIN RES	10/7/2002	269.30	<LLD		3.01E-02
26	SPILLWAY ON MAIN RES	10/14/2002	255.50	<LLD		2.98E-02
26	SPILLWAY ON MAIN RES	10/21/2002	253.60	<LLD		3.23E-02
26	SPILLWAY ON MAIN RES	10/28/2002	257.30	<LLD		4.04E-02
26	SPILLWAY ON MAIN RES	11/4/2002	251.00	<LLD		3.78E-02
26	SPILLWAY ON MAIN RES	11/11/2002	247.40	<LLD		3.26E-02
26	SPILLWAY ON MAIN RES	11/18/2002	250.50	<LLD		2.55E-02
26	SPILLWAY ON MAIN RES	11/25/2002	251.30	<LLD		3.72E-02
26	SPILLWAY ON MAIN RES	12/2/2002	252.60	<LLD		3.86E-02
26	SPILLWAY ON MAIN RES	12/9/2002	190.60	<LLD		4.27E-02
26	SPILLWAY ON MAIN RES	12/16/2002	257.60	<LLD		2.84E-02
26	SPILLWAY ON MAIN RES	12/22/2002	220.10	<LLD		3.77E-02
26	SPILLWAY ON MAIN RES	12/30/2002	296.50	<LLD		3.45E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/7/2002	683.10	<LLD		3.74E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/14/2002	654.30	<LLD		3.10E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/28/2002	611.80	<LLD		1.24E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/4/2002	677.10	<LLD		1.99E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/11/2002	651.50	<LLD		1.80E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/18/2002	661.40	<LLD		2.31E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/25/2002	660.00	<LLD		2.68E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/4/2002	684.30	<LLD		2.28E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/11/2002	647.20	<LLD		2.99E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/18/2002	665.00	<LLD		2.55E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/25/2002	675.00	<LLD		2.55E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/1/2002	661.00	<LLD		2.50E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/8/2002	664.50	<LLD		1.44E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/15/2002	659.80	<LLD		2.11E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge
Quantity: cubic meters
Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
47	SSW SECTOR 3.4 MI FROM SITE	4/22/2002	634.10	<LLD		2.45E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/29/2002	672.60	<LLD		2.28E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/6/2002	657.00	<LLD		1.63E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/13/2002	650.10	<LLD		2.36E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/20/2002	621.80	<LLD		2.08E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/28/2002	756.50	<LLD		2.46E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/3/2002	551.20	<LLD		2.89E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/10/2002	393.10	<LLD		3.91E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/17/2002	353.90	<LLD		4.99E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/24/2002	354.40	<LLD		3.06E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/1/2002	305.70	<LLD		3.84E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/9/2002	276.50	<LLD		3.44E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/15/2002	500.60	<LLD		2.09E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/22/2002	242.10	<LLD		3.85E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/29/2002	235.50	<LLD		4.82E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/5/2002	244.70	<LLD		2.99E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/12/2002	242.70	<LLD		3.64E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/19/2002	241.70	<LLD		2.75E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/26/2002	275.00	<LLD		2.75E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/3/2002	320.70	<LLD		4.36E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/9/2002	233.50	<LLD		4.65E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/16/2002	252.50	<LLD		3.50E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/23/2002	257.00	<LLD		3.32E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/30/2002	265.60	<LLD		5.66E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/7/2002	252.50	<LLD		6.40E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/14/2002	253.40	<LLD		4.00E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/21/2002	252.70	<LLD		5.54E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge
Quantity: cubic meters
Concentration (Activity): pCi/cubic meter

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
47	SSW SECTOR 3.4 MI FROM SITE	10/28/2002	256.70	<LLD		4.42E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/4/2002	250.40	<LLD		3.29E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/11/2002	248.30	<LLD		3.45E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/18/2002	247.70	<LLD		4.24E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/25/2002	251.50	<LLD		4.61E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/2/2002	255.20	<LLD		2.63E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/9/2002	145.40	<LLD		6.34E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/16/2002	266.10	<LLD		4.27E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/22/2002	240.30	<LLD		4.38E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/30/2002	321.90	<LLD		3.29E-02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Drinking Water
Quantity: Liters
Concentration (Activity): pCi/Liter

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
38	CAPE FEAR PLANT INTAKE - CONTROL	1/7/2002	4.00	<LLD		3.63E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/21/2002	4.00	<LLD		5.08E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/4/2002	4.00	<LLD		6.28E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/18/2002	4.00	<LLD		4.56E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/4/2002	4.00	<LLD		3.77E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/18/2002	4.00	<LLD		4.97E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/1/2002	4.00	<LLD		4.62E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/15/2002	4.00	<LLD		3.66E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/29/2002	4.00	<LLD		3.50E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/13/2002	4.00	<LLD		3.87E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/28/2002	4.00	<LLD		4.02E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/10/2002	4.00	<LLD		3.85E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/24/2002	4.00	<LLD		3.50E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/9/2002	4.00	<LLD		4.59E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/22/2002	4.00	<LLD		3.67E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/5/2002	4.00	<LLD		4.97E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/19/2002	4.00	<LLD		4.76E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/3/2002	4.00	<LLD		5.89E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/16/2002	4.00	<LLD		3.22E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/30/2002	4.00	<LLD		3.54E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/14/2002	4.00	<LLD		5.88E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/28/2002	4.00	<LLD		3.42E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/11/2002	4.00	<LLD		3.60E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/25/2002	4.00	<LLD		3.95E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/9/2002	4.00	<LLD		3.63E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/22/2002	4.00	<LLD		3.31E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Drinking Water
Quantity: Liters
Concentration (Activity): pCi/Liter

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
40	LILLINGTON - CAPE FEAR RIVER	1/7/2002	4.00	<LLD		3.88E-01
40	LILLINGTON - CAPE FEAR RIVER	1/21/2002	4.00	<LLD		3.64E-01
40	LILLINGTON - CAPE FEAR RIVER	2/4/2002	4.00	<LLD		4.29E-01
40	LILLINGTON - CAPE FEAR RIVER	2/18/2002	4.00	<LLD		4.52E-01
40	LILLINGTON - CAPE FEAR RIVER	3/4/2002	4.00	<LLD		4.55E-01
40	LILLINGTON - CAPE FEAR RIVER	3/18/2002	4.00	<LLD		5.17E-01
40	LILLINGTON - CAPE FEAR RIVER	4/1/2002	4.00	<LLD		5.08E-01
40	LILLINGTON - CAPE FEAR RIVER	4/15/2002	4.00	<LLD		4.58E-01
40	LILLINGTON - CAPE FEAR RIVER	4/29/2002	4.00	<LLD		4.68E-01
40	LILLINGTON - CAPE FEAR RIVER	5/13/2002	4.00	<LLD		4.45E-01
40	LILLINGTON - CAPE FEAR RIVER	5/28/2002	4.00	<LLD		4.43E-01
40	LILLINGTON - CAPE FEAR RIVER	6/10/2002	4.00	<LLD		4.70E-01
40	LILLINGTON - CAPE FEAR RIVER	6/24/2002	4.00	<LLD		4.20E-01
40	LILLINGTON - CAPE FEAR RIVER	7/9/2002	4.00	<LLD		4.77E-01
40	LILLINGTON - CAPE FEAR RIVER	7/22/2002	4.00	<LLD		4.54E-01
40	LILLINGTON - CAPE FEAR RIVER	8/5/2002	4.00	<LLD		5.13E-01
40	LILLINGTON - CAPE FEAR RIVER	8/19/2002	4.00	<LLD		6.15E-01
40	LILLINGTON - CAPE FEAR RIVER	9/3/2002	4.00	<LLD		3.88E-01
40	LILLINGTON - CAPE FEAR RIVER	9/16/2002	4.00	<LLD		5.37E-01
40	LILLINGTON - CAPE FEAR RIVER	9/30/2002	4.00	<LLD		4.95E-01
40	LILLINGTON - CAPE FEAR RIVER	10/14/2002	4.00	<LLD		4.89E-01
40	LILLINGTON - CAPE FEAR RIVER	10/28/2002	4.00	<LLD		4.66E-01
40	LILLINGTON - CAPE FEAR RIVER	11/11/2002	4.00	<LLD		4.08E-01
40	LILLINGTON - CAPE FEAR RIVER	11/25/2002	4.00	<LLD		3.99E-01
40	LILLINGTON - CAPE FEAR RIVER	12/9/2002	4.00	<LLD		4.42E-01
40	LILLINGTON - CAPE FEAR RIVER	12/22/2002	4.00	<LLD		5.97E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Drinking Water
Quantity: Liters
Concentration (Activity): pCi/Liter

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/7/2002	4.00	<LLD		4.49E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/21/2002	4.00	<LLD		4.70E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/4/2002	4.00	<LLD		5.22E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/18/2002	4.00	<LLD		5.42E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/4/2002	4.00	<LLD		4.46E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/18/2002	4.00	<LLD		3.08E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/1/2002	4.00	<LLD		5.38E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/15/2002	4.00	<LLD		5.79E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/29/2002	4.00	<LLD		5.83E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/13/2002	4.00	<LLD		5.24E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/28/2002	4.00	<LLD		5.11E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/10/2002	4.00	<LLD		5.53E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/24/2002	4.00	<LLD		4.26E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/9/2002	4.00	<LLD		4.83E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/22/2002	4.00	<LLD		4.90E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/5/2002	4.00	<LLD		4.12E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/19/2002	4.00	<LLD		3.88E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/3/2002	4.00	<LLD		4.67E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/16/2002	4.00	<LLD		5.64E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/30/2002	4.00	<LLD		6.11E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/14/2002	4.00	<LLD		3.87E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/28/2002	4.00	<LLD		5.51E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/11/2002	4.00	<LLD		5.77E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/25/2002	4.00	<LLD		5.31E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/9/2002	4.00	<LLD		4.16E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/22/2002	4.00	<LLD		4.27E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Milk
Quantity: Liters
Concentration (Activity): pCi/Lite

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
5	PITTSBORO - CONTROL	1/7/2002	4.00	<LLD		5.56E-01
5	PITTSBORO - CONTROL	1/21/2002	4.00	<LLD		3.00E-01
5	PITTSBORO - CONTROL	2/4/2002	4.00	<LLD		6.84E-01
5	PITTSBORO - CONTROL	2/18/2002	4.00	<LLD		3.07E-01
5	PITTSBORO - CONTROL	3/4/2002	4.00	<LLD		4.41E-01
5	PITTSBORO - CONTROL	3/18/2002	4.00	<LLD		5.31E-01
5	PITTSBORO - CONTROL	4/1/2002	4.00	<LLD		4.07E-01
5	PITTSBORO - CONTROL	4/15/2002	4.00	<LLD		4.38E-01
5	PITTSBORO - CONTROL	5/13/2002	4.00	<LLD		5.72E-01
5	PITTSBORO - CONTROL	5/28/2002	4.00	<LLD		4.23E-01
5	PITTSBORO - CONTROL	6/10/2002	4.00	<LLD		4.35E-01
5	PITTSBORO - CONTROL	6/24/2002	4.00	<LLD		5.44E-01
5	PITTSBORO - CONTROL	7/9/2002	4.00	<LLD		3.54E-01
5	PITTSBORO - CONTROL	7/23/2002	4.00	<LLD		5.48E-01
5	PITTSBORO - CONTROL	8/5/2002	4.00	<LLD		4.63E-01
5	PITTSBORO - CONTROL	8/19/2002	4.00	<LLD		4.00E-01
5	PITTSBORO - CONTROL	9/3/2002	4.00	<LLD		3.54E-01
5	PITTSBORO - CONTROL	9/16/2002	4.00	<LLD		4.11E-01
5	PITTSBORO - CONTROL	10/14/2002	4.00	<LLD		4.80E-01
5	PITTSBORO - CONTROL	10/28/2002	4.00	<LLD		4.58E-01
5	PITTSBORO - CONTROL	11/11/2002	4.00	<LLD		4.99E-01
5	PITTSBORO - CONTROL	11/25/2002	4.00	<LLD		4.21E-02
5	PITTSBORO - CONTROL	12/9/2002	4.00	<LLD		4.46E-01
5	PITTSBORO - CONTROL	12/22/2002	4.00	<LLD		4.36E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water
Quantity: Liters
Concentration (Activity): pCi/Liter

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
38	CAPE FEAR PLANT INTAKE - CONTROL	1/7/2002	4.00	<LLD		3.63E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/21/2002	4.00	<LLD		5.08E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/4/2002	4.00	<LLD		6.28E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/18/2002	4.00	<LLD		4.56E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/4/2002	4.00	<LLD		3.77E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/18/2002	4.00	<LLD		4.97E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/1/2002	4.00	<LLD		4.62E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/15/2002	4.00	<LLD		3.66E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/29/2002	4.00	<LLD		3.50E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/13/2002	4.00	<LLD		3.87E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/28/2002	4.00	<LLD		4.02E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/10/2002	4.00	<LLD		3.85E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/24/2002	4.00	<LLD		3.50E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/9/2002	4.00	<LLD		4.59E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/22/2002	4.00	<LLD		3.67E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/5/2002	4.00	<LLD		4.97E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/19/2002	4.00	<LLD		4.76E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/3/2002	4.00	<LLD		5.89E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/16/2002	4.00	<LLD		3.22E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/30/2002	4.00	<LLD		3.54E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/14/2002	4.00	<LLD		5.88E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/28/2002	4.00	<LLD		3.42E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water
Quantity: Liters
Concentration (Activity): pCi/Liter

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
38	CAPE FEAR PLANT INTAKE - CONTROL	11/11/2002	4.00	<LLD		3.60E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/25/2002	4.00	<LLD		3.95E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/9/2002	4.00	<LLD		3.63E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/22/2002	4.00	<LLD		3.31E-01
40	LILLINGTON - CAPE FEAR RIVER	1/7/2002	4.00	<LLD		3.88E-01
40	LILLINGTON - CAPE FEAR RIVER	1/21/2002	4.00	<LLD		3.64E-01
40	LILLINGTON - CAPE FEAR RIVER	2/4/2002	4.00	<LLD		4.29E-01
40	LILLINGTON - CAPE FEAR RIVER	2/18/2002	4.00	<LLD		4.52E-01
40	LILLINGTON - CAPE FEAR RIVER	3/4/2002	4.00	<LLD		4.55E-01
40	LILLINGTON - CAPE FEAR RIVER	3/18/2002	4.00	<LLD		5.17E-01
40	LILLINGTON - CAPE FEAR RIVER	4/1/2002	4.00	<LLD		5.08E-01
40	LILLINGTON - CAPE FEAR RIVER	4/15/2002	4.00	<LLD		4.58E-01
40	LILLINGTON - CAPE FEAR RIVER	4/29/2002	4.00	<LLD		4.68E-01
40	LILLINGTON - CAPE FEAR RIVER	5/13/2002	4.00	<LLD		4.45E-01
40	LILLINGTON - CAPE FEAR RIVER	5/28/2002	4.00	<LLD		4.43E-01
40	LILLINGTON - CAPE FEAR RIVER	6/10/2002	4.00	<LLD		4.70E-01
40	LILLINGTON - CAPE FEAR RIVER	6/24/2002	4.00	<LLD		4.20E-01
40	LILLINGTON - CAPE FEAR RIVER	7/9/2002	4.00	<LLD		4.77E-01
40	LILLINGTON - CAPE FEAR RIVER	7/22/2002	4.00	<LLD		4.54E-01
40	LILLINGTON - CAPE FEAR RIVER	8/5/2002	4.00	<LLD		5.13E-01
40	LILLINGTON - CAPE FEAR RIVER	8/19/2002	4.00	<LLD		6.15E-01
40	LILLINGTON - CAPE FEAR RIVER	9/3/2002	4.00	<LLD		3.88E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water
Quantity: Liters
Concentration (Activity): pCi/Liter

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
40	LILLINGTON - CAPE FEAR RIVER	9/16/2002	4.00	<LLD		5.37E-01
40	LILLINGTON - CAPE FEAR RIVER	9/30/2002	4.00	<LLD		4.95E-01
40	LILLINGTON - CAPE FEAR RIVER	10/14/2002	4.00	<LLD		4.89E-01
40	LILLINGTON - CAPE FEAR RIVER	10/28/2002	4.00	<LLD		4.66E-01
40	LILLINGTON - CAPE FEAR RIVER	11/11/2002	4.00	<LLD		4.08E-01
40	LILLINGTON - CAPE FEAR RIVER	11/25/2002	4.00	<LLD		3.99E-01
40	LILLINGTON - CAPE FEAR RIVER	12/9/2002	4.00	<LLD		4.42E-01
40	LILLINGTON - CAPE FEAR RIVER	12/22/2002	4.00	<LLD		5.97E-01

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Drinking Water
Quantity: Liters
Concentration (Activty): pCi/Liter

Analysis: Tritium

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
38	CAPE FEAR PLANT INTAKE - CONTROL	1/31/2002	0.005	<LLD		3.05E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	2/28/2002	0.005	<LLD		3.03E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	3/31/2002	0.005	<LLD		2.80E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	4/30/2002	0.005	<LLD		3.02E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	5/31/2002	0.005	<LLD		2.97E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	6/30/2002	0.005	<LLD		3.09E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	7/31/2002	0.005	<LLD		3.22E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	8/31/2002	0.005	<LLD		3.09E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	9/30/2002	0.005	<LLD		3.00E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	10/31/2002	0.005	<LLD		3.03E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	11/30/2002	0.005	<LLD		3.09E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	12/31/2002	0.005	<LLD		3.06E+02
40	LILLINGTON - CAPE FEAR RIVER	1/31/2002	0.005	<LLD		3.05E+02
40	LILLINGTON - CAPE FEAR RIVER	2/28/2002	0.005	<LLD		3.03E+02
40	LILLINGTON - CAPE FEAR RIVER	3/31/2002	0.005	<LLD		2.82E+02
40	LILLINGTON - CAPE FEAR RIVER	4/30/2002	0.005	<LLD		3.03E+02
40	LILLINGTON - CAPE FEAR RIVER	5/31/2002	0.005	<LLD		2.98E+02
40	LILLINGTON - CAPE FEAR RIVER	6/30/2002	0.005	<LLD		3.08E+02
40	LILLINGTON - CAPE FEAR RIVER	7/31/2002	0.005	<LLD		3.22E+02
40	LILLINGTON - CAPE FEAR RIVER	8/31/2002	0.005	<LLD		3.06E+02
40	LILLINGTON - CAPE FEAR RIVER	9/30/2002	0.005	<LLD		3.00E+02
40	LILLINGTON - CAPE FEAR RIVER	10/31/2002	0.005	<LLD		3.01E+02
40	LILLINGTON - CAPE FEAR RIVER	11/30/2002	0.005	<LLD		3.09E+02
40	LILLINGTON - CAPE FEAR RIVER	12/31/2002	0.005	<LLD		3.08E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/31/2002	0.005	6.06E+03	6.23E+02	8.38E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/28/2002	0.005	4.63E+03	6.23E+02	8.87E+02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Drinking Water
Quantity: Liters
Concentration (Activty): pCi/Liter

Analysis: Tritium

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/31/2002	0.005	5.07E+03	2.38E+02	2.82E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/30/2002	0.005	4.44E+03	2.40E+02	3.02E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/31/2002	0.005	4.24E+03	2.35E+02	2.96E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/30/2002	0.005	4.08E+03	2.40E+02	3.09E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/31/2002	0.005	3.76E+03	2.42E+02	3.22E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/31/2002	0.005	3.69E+03	2.35E+02	3.09E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/30/2002	0.005	4.28E+03	2.38E+02	3.00E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/31/2002	0.005	3.46E+03	2.29E+02	3.02E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/30/2002	0.005	2.75E+03	2.23E+02	3.08E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/31/2002	0.005	2.35E+03	2.18E+02	3.08E+02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Groundwater
Quantity: Liters
Concentration (Activity): pCi/Liter

Analysis: Tritium

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
39	DEEP WELL NEAR DIABASE DIKES	2/26/2002	0.005	<LLD		2.96E+02
39	DEEP WELL NEAR DIABASE DIKES	5/30/2002	0.005	<LLD		2.91E+02
39	DEEP WELL NEAR DIABASE DIKES	8/29/2002	0.005	<LLD		3.08E+02
39	DEEP WELL NEAR DIABASE DIKES	11/22/2002	0.005	<LLD		3.12E+02
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	2/27/2002	0.005	<LLD		2.96E+02
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	5/30/2002	0.005	<LLD		2.91E+02
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	8/29/2002	0.005	<LLD		3.08E+02
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	11/22/2002	0.005	<LLD		3.12E+02
58	0.5 MI WSW SECTOR N BANK ESW INTAKE	2/26/2002	0.005	7.25E+02	1.91E+02	2.97E+02
58	0.5 MI WSW SECTOR N BANK ESW INTAKE	5/30/2002	0.005	1.16E+03	1.93E+02	2.91E+02
58	0.5 MI WSW SECTOR N BANK ESW INTAKE	8/29/2002	0.005	1.01E+03	2.02E+02	3.09E+02
58	0.5 MI WSW SECTOR N BANK ESW INTAKE	11/22/2002	0.005	9.54E+02	2.02E+02	3.12E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	2/26/2002	0.005	<LLD		2.95E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	5/30/2002	0.005	<LLD		2.89E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	9/9/2002	0.005	<LLD		2.96E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	11/22/2002	0.005	<LLD		3.12E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	2/26/2002	0.005	<LLD		2.97E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	5/30/2002	0.005	<LLD		2.91E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	8/29/2002	0.005	<LLD		3.08E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	11/22/2002	0.005	<LLD		3.12E+02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water
Quantity: Liters
Concentration (Activity): pCi/Liter

Analysis: Tritium

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
26	SPILLWAY ON MAIN RES	1/31/2002	0.005	6.91E+03	6.56E+02	8.78E+02
26	SPILLWAY ON MAIN RES	2/28/2002	0.005	6.47E+03	6.53E+02	8.87E+02
26	SPILLWAY ON MAIN RES	3/31/2002	0.005	5.62E+03	2.43E+02	2.80E+02
26	SPILLWAY ON MAIN RES	4/30/2002	0.005	4.49E+03	2.40E+02	3.02E+02
26	SPILLWAY ON MAIN RES	5/31/2002	0.005	4.57E+03	2.39E+02	2.97E+02
26	SPILLWAY ON MAIN RES	6/30/2002	0.005	4.19E+03	2.41E+02	3.09E+02
26	SPILLWAY ON MAIN RES	7/31/2002	0.005	3.72E+03	2.42E+02	3.22E+02
26	SPILLWAY ON MAIN RES	8/31/2002	0.005	3.63E+03	2.35E+02	3.09E+02
26	SPILLWAY ON MAIN RES	9/30/2002	0.005	4.19E+03	2.37E+02	3.00E+02
26	SPILLWAY ON MAIN RES	10/31/2002	0.005	4.03E+03	2.36E+02	3.03E+02
26	SPILLWAY ON MAIN RES	11/30/2002	0.005	3.23E+03	2.30E+02	3.09E+02
26	SPILLWAY ON MAIN RES	12/31/2002	0.005	2.80E+03	2.24E+02	3.08E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	1/31/2002	0.005	<LLD		3.05E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	2/28/2002	0.005	<LLD		3.03E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	3/31/2002	0.005	<LLD		2.80E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	4/30/2002	0.005	<LLD		3.02E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	5/31/2002	0.005	<LLD		2.97E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	6/30/2002	0.005	<LLD		3.09E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	7/31/2002	0.005	<LLD		3.22E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	8/31/2002	0.005	<LLD		3.09E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	9/30/2002	0.005	<LLD		3.00E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	10/31/2002	0.005	<LLD		3.03E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	11/30/2002	0.005	<LLD		3.09E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	12/31/2002	0.005	<LLD		3.06E+02

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water
Quantity: Liters
Concentration (Activity): pCi/Liter

Analysis: Tritium

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
40	LILLINGTON - CAPE FEAR RIVER	1/31/2002	0.005	<LLD		3.05E+02
40	LILLINGTON - CAPE FEAR RIVER	2/28/2002	0.005	<LLD		3.03E+02
40	LILLINGTON - CAPE FEAR RIVER	3/31/2002	0.005	<LLD		2.82E+02
40	LILLINGTON - CAPE FEAR RIVER	4/30/2002	0.005	<LLD		3.03E+02
40	LILLINGTON - CAPE FEAR RIVER	5/31/2002	0.005	<LLD		2.98E+02
40	LILLINGTON - CAPE FEAR RIVER	6/30/2002	0.005	<LLD		3.08E+02
40	LILLINGTON - CAPE FEAR RIVER	7/31/2002	0.005	<LLD		3.22E+02
40	LILLINGTON - CAPE FEAR RIVER	8/31/2002	0.005	<LLD		3.06E+02
40	LILLINGTON - CAPE FEAR RIVER	9/30/2002	0.005	<LLD		3.00E+02
40	LILLINGTON - CAPE FEAR RIVER	10/31/2002	0.005	<LLD		3.01E+02
40	LILLINGTON - CAPE FEAR RIVER	11/30/2002	0.005	<LLD		3.09E+02
40	LILLINGTON - CAPE FEAR RIVER	12/31/2002	0.005	<LLD		3.08E+02

2002 HNP
Radiological Environmental Monitoring Gamma Isotopic Report

Comments

- NO-ACT refers to no detectable gamma activity being present in the samples. Refer to Table 4 for typical gamma Lower Limits of Detection for specific nuclides.

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Air Particulate
Quantity: CUBIC METERS
Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/15/2002	6139.1	TL-208	6.12E-04	4.41E-04
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/15/2002	6139.1	BE-7	8.74E-02	1.40E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/15/2002	6134.4	BE-7	1.10E-01	1.82E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/15/2002	4260.2	BE-7	9.73E-02	1.07E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/15/2002	4260.2	RA-226	9.33E-03	8.51E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/15/2002	3331.7	PB-214	4.43E-03	1.36E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/15/2002	3331.7	BI-214	5.13E-03	1.73E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/15/2002	3331.7	K-40	1.98E-02	1.34E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/15/2002	3331.7	BE-7	7.20E-02	1.48E-02
2	SR 1134	2/15/2002	9671.9	BE-7	7.85E-02	1.50E-02
2	SR 1134	5/15/2002	8967.8	BE-7	8.99E-02	1.97E-02
2	SR 1134	8/15/2002	3892.9	PB-214	2.10E-03	7.71E-04
2	SR 1134	8/15/2002	3892.9	BE-7	9.51E-02	7.62E-03
2	SR 1134	8/15/2002	3892.9	K-40	1.57E-02	7.04E-03
2	SR 1134	8/15/2002	3892.9	BI-214	2.13E-03	8.02E-04
2	SR 1134	8/15/2002	3892.9	PB-212	6.70E-04	3.47E-04
2	SR 1134	11/15/2002	3717.7	BE-7	5.86E-02	1.56E-02
2	SR 1134	11/15/2002	3717.7	PB-214	3.77E-03	1.55E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/15/2002	5778.5	BE-7	8.84E-02	2.06E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/15/2002	6624.7	BE-7	1.03E-01	1.65E-02
4	NEW HILL NEAR 1ST BAPTIST CH	8/15/2002	4300.1	K-40	5.13E-02	8.07E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/15/2002	4300.1	BE-7	9.44E-02	9.23E-03
4	NEW HILL NEAR 1ST BAPTIST CH	11/15/2002	3580.3	BE-7	8.99E-02	1.49E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/15/2002	3580.3	K-40	6.66E-02	1.22E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Air Particulate
Quantity: CUBIC METERS
Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	2/15/2002	8587.3	BE-7	8.76E-02	1.50E-02
5	PITTSBORO - CONTROL	5/15/2002	8443.7	BE-7	8.52E-02	1.46E-02
5	PITTSBORO - CONTROL	8/15/2002	4204.3	BE-7	9.93E-02	1.29E-02
5	PITTSBORO - CONTROL	11/15/2002	3659.3	BE-7	5.89E-02	1.41E-02
26	SPILLWAY ON MAIN RES	2/15/2002	6172.1	BE-7	8.33E-02	1.64E-02
26	SPILLWAY ON MAIN RES	5/15/2002	6108.4	K-40	1.48E-02	1.04E-02
26	SPILLWAY ON MAIN RES	5/15/2002	6108.4	BE-7	1.01E-01	1.77E-02
26	SPILLWAY ON MAIN RES	8/15/2002	4555.6	BE-7	1.02E-01	1.32E-02
26	SPILLWAY ON MAIN RES	8/15/2002	4555.6	K-40	4.47E-02	9.24E-03
26	SPILLWAY ON MAIN RES	11/15/2002	3614.8	BE-7	7.44E-02	1.05E-02
26	SPILLWAY ON MAIN RES	11/15/2002	3614.8	K-40	1.33E-02	8.93E-03
26	SPILLWAY ON MAIN RES	11/15/2002	3614.8	PB-214	1.46E-03	1.11E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/15/2002	7316.8	BE-7	9.24E-02	1.79E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/15/2002	7637	BE-7	1.11E-01	1.61E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/15/2002	4298.4	BE-7	8.40E-02	8.01E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/15/2002	3602.4	BE-7	6.28E-02	1.40E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Aquatic Vegetation
Quantity: Grams (wet)
Concentration (Activity): pCi/gm wet

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
26	SPILLWAY ON MAIN RES	11/19/2002	531.7	K-40	4.23E+00	4.81E-01
26	SPILLWAY ON MAIN RES	11/19/2002	531.7	BE-7	5.13E-01	1.74E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/19/2002	605.3	K-40	2.76E+00	4.64E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/19/2002	605.3	BE-7	3.74E-01	1.52E-01
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/19/2002	531.8	K-40	2.53E+00	4.34E-01
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/19/2002	531.8	BE-7	3.72E-01	2.08E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Bottom Feeder
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Catfish

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
44	SITE VARIES WITHIN HARRIS LAKE	5/29/2002	426.5	K-40	3.62E+00	1.18E+00
44	SITE VARIES WITHIN HARRIS LAKE	11/6/2002	502.1	K-40	6.47E+00	1.26E+00
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/29/2002	464	K-40	4.83E+00	1.13E+00
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/6/2002	320.9	K-40	4.74E+00	1.53E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Bottom Sediment
Quantity: GRAMS (dry)
Concentration (Activity): pCi/gm dry

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/17/2002	650.2	CS-137	3.62E-01	9.20E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/17/2002	650.2	CO-60	3.56E+00	2.38E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/17/2002	650.2	AC-228	1.16E+00	4.43E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/17/2002	650.2	RA-226	1.86E+00	1.32E+00
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/17/2002	650.2	PB-214	7.19E-01	1.89E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/17/2002	650.2	PB-212	8.85E-01	1.15E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/17/2002	650.2	TL-208	3.15E-01	7.76E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/17/2002	650.2	K-40	1.12E+01	1.37E+00
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/13/2002	683.8	CS-137	4.21E-01	1.06E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/13/2002	683.8	CO-60	2.67E+00	2.35E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/13/2002	683.8	PB-214	8.95E-01	2.18E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/13/2002	683.8	PB-212	9.61E-01	1.43E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/13/2002	683.8	TL-208	2.83E-01	1.20E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/13/2002	683.8	K-40	1.01E+01	1.71E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Dogwood

Sample Point		Sample Date	Quantity	Isotope	Activity	2 Sigma Error
65	1.36 MI S SECTOR	5/30/2002	426.1	K-40	3.08E+00	5.51E-01
65	1.36 MI S SECTOR	5/30/2002	426.1	PB-212	8.02E-02	3.51E-02
65	1.36 MI S SECTOR	5/30/2002	426.1	BE-7	4.60E-01	2.41E-01
65	1.36 MI S SECTOR	6/25/2002	343.6	BE-7	7.88E-01	1.99E-01
65	1.36 MI S SECTOR	6/25/2002	343.6	K-40	4.85E+00	5.82E-01
65	1.36 MI S SECTOR	6/25/2002	343.6	TL-208	2.04E-02	1.78E-02
65	1.36 MI S SECTOR	6/25/2002	343.6	PB-212	1.17E-01	4.44E-02
65	1.36 MI S SECTOR	7/31/2002	396.3	PB-212	7.44E-02	4.75E-02
65	1.36 MI S SECTOR	7/31/2002	396.3	BE-7	8.65E-01	2.31E-01
65	1.36 MI S SECTOR	7/31/2002	396.3	K-40	2.43E+00	5.30E-01
65	1.36 MI S SECTOR	8/28/2002	398.3	K-40	2.18E+00	4.26E-01
65	1.36 MI S SECTOR	8/28/2002	398.3	BE-7	1.09E+00	1.88E-01
65	1.36 MI S SECTOR	8/28/2002	398.3	PB-212	1.36E-01	3.46E-02
65	1.36 MI S SECTOR	8/28/2002	398.3	TL-208	4.61E-02	2.76E-02
65	1.36 MI S SECTOR	9/26/2002	353.2	K-40	1.78E+00	5.63E-01
65	1.36 MI S SECTOR	9/26/2002	353.2	BE-7	9.87E-01	2.78E-01
66	1.33 MI SSW SECTOR	5/30/2002	431.6	BE-7	6.26E-01	1.57E-01
66	1.33 MI SSW SECTOR	5/30/2002	431.6	K-40	3.65E+00	4.86E-01
66	1.33 MI SSW SECTOR	5/30/2002	431.6	PB-212	5.92E-02	3.16E-02
66	1.33 MI SSW SECTOR	6/25/2002	312.4	BE-7	8.18E-01	2.85E-01
66	1.33 MI SSW SECTOR	6/25/2002	312.4	K-40	4.41E+00	7.53E-01
66	1.33 MI SSW SECTOR	7/31/2002	328.1	K-40	2.60E+00	6.59E-01
66	1.33 MI SSW SECTOR	7/31/2002	328.1	BE-7	9.85E-01	3.09E-01
66	1.33 MI SSW SECTOR	8/28/2002	352.1	TL-208	2.23E-02	2.05E-02
66	1.33 MI SSW SECTOR	8/28/2002	352.1	K-40	2.83E+00	4.75E-01
66	1.33 MI SSW SECTOR	8/28/2002	352.1	BE-7	1.54E+00	2.55E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Dogwood

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
66	1.33 MI SSW SECTOR	8/28/2002	352.1	PB-212	9.86E-02	3.69E-02
66	1.33 MI SSW SECTOR	9/26/2002	347.1	RA-226	7.78E-01	4.27E-01
66	1.33 MI SSW SECTOR	9/26/2002	347.1	BE-7	1.71E+00	2.76E-01
66	1.33 MI SSW SECTOR	9/26/2002	347.1	K-40	2.12E+00	4.37E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Maple

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
65	1.36 MI S SECTOR	5/30/2002	484.1	K-40	2.58E+00	4.76E-01
65	1.36 MI S SECTOR	5/30/2002	484.1	TL-208	4.03E-02	2.12E-02
65	1.36 MI S SECTOR	5/30/2002	484.1	PB-214	5.08E-02	4.24E-02
65	1.36 MI S SECTOR	5/30/2002	484.1	BE-7	4.13E-01	1.52E-01
65	1.36 MI S SECTOR	6/25/2002	470.5	BE-7	4.25E-01	2.46E-01
65	1.36 MI S SECTOR	6/25/2002	470.5	K-40	2.47E+00	4.85E-01
65	1.36 MI S SECTOR	6/25/2002	470.5	RA-226	4.20E-01	3.65E-01
65	1.36 MI S SECTOR	7/31/2002	422.6	PB-212	1.12E-01	3.94E-02
65	1.36 MI S SECTOR	7/31/2002	422.6	BE-7	6.92E-01	2.37E-01
65	1.36 MI S SECTOR	7/31/2002	422.6	K-40	2.72E+00	5.35E-01
65	1.36 MI S SECTOR	7/31/2002	422.6	TL-208	3.70E-02	2.56E-02
65	1.36 MI S SECTOR	8/28/2002	518.3	PB-212	1.72E-01	4.33E-02
65	1.36 MI S SECTOR	8/28/2002	518.3	BE-7	1.31E+00	2.80E-01
65	1.36 MI S SECTOR	8/28/2002	518.3	K-40	2.75E+00	4.88E-01
65	1.36 MI S SECTOR	8/28/2002	518.3	TL-208	6.48E-02	2.32E-02
65	1.36 MI S SECTOR	9/26/2002	408.2	TL-208	5.23E-02	2.27E-02
65	1.36 MI S SECTOR	9/26/2002	408.2	BE-7	3.20E+00	3.86E-01
65	1.36 MI S SECTOR	9/26/2002	408.2	K-40	2.93E+00	4.84E-01
66	1.33 MI SSW SECTOR	5/30/2002	518.1	K-40	2.96E+00	4.81E-01
66	1.33 MI SSW SECTOR	5/30/2002	518.1	CS-137	6.86E-02	2.54E-02
66	1.33 MI SSW SECTOR	5/30/2002	518.1	BE-7	3.13E-01	2.27E-01
66	1.33 MI SSW SECTOR	6/25/2002	311.4	K-40	3.12E+00	7.38E-01
66	1.33 MI SSW SECTOR	6/25/2002	311.4	BE-7	7.71E-01	3.19E-01
66	1.33 MI SSW SECTOR	7/31/2002	356.6	BE-7	8.77E-01	2.90E-01
66	1.33 MI SSW SECTOR	7/31/2002	356.6	K-40	1.68E+00	6.15E-01
66	1.33 MI SSW SECTOR	7/31/2002	356.6	TL-208	3.38E-02	3.06E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Maple

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
66	1.33 MI SSW SECTOR	7/31/2002	356.6	PB-212	8.07E-02	5.23E-02
66	1.33 MI SSW SECTOR	8/28/2002	438.9	BE-7	1.84E+00	2.61E-01
66	1.33 MI SSW SECTOR	8/28/2002	438.9	K-40	3.07E+00	4.54E-01
66	1.33 MI SSW SECTOR	9/26/2002	351.1	K-40	1.44E+00	4.89E-01
66	1.33 MI SSW SECTOR	9/26/2002	351.1	BE-7	6.73E-01	2.74E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Broadleaf Vegetation
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Sweetgum

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
65	1.36 MI S SECTOR	5/30/2002	545.3	K-40	1.85E+00	3.98E-01
65	1.36 MI S SECTOR	5/30/2002	545.3	TL-208	3.33E-02	1.78E-02
65	1.36 MI S SECTOR	5/30/2002	545.3	BE-7	2.38E-01	1.59E-01
65	1.36 MI S SECTOR	6/25/2002	341.8	BE-7	5.36E-01	2.86E-01
65	1.36 MI S SECTOR	6/25/2002	341.8	K-40	2.68E+00	4.77E-01
65	1.36 MI S SECTOR	7/31/2002	455.3	PB-212	2.97E-01	4.75E-02
65	1.36 MI S SECTOR	7/31/2002	455.3	BE-7	9.41E-01	2.26E-01
65	1.36 MI S SECTOR	7/31/2002	455.3	K-40	1.93E+00	4.55E-01
65	1.36 MI S SECTOR	7/31/2002	455.3	TL-208	1.20E-01	3.09E-02
65	1.36 MI S SECTOR	8/28/2002	438.3	BE-7	1.01E+00	2.31E-01
65	1.36 MI S SECTOR	8/28/2002	438.3	K-40	1.81E+00	4.53E-01
65	1.36 MI S SECTOR	9/26/2002	431.9	K-40	1.13E+00	3.94E-01
65	1.36 MI S SECTOR	9/26/2002	431.9	BE-7	2.02E+00	2.78E-01
66	1.33 MI SSW SECTOR	5/30/2002	460.9	BE-7	3.75E-01	1.67E-01
66	1.33 MI SSW SECTOR	5/30/2002	460.9	K-40	2.42E+00	4.56E-01
66	1.33 MI SSW SECTOR	6/25/2002	447.2	K-40	2.54E+00	5.14E-01
66	1.33 MI SSW SECTOR	6/25/2002	447.2	BE-7	5.59E-01	1.99E-01
66	1.33 MI SSW SECTOR	7/31/2002	337.5	PB-212	1.18E-01	5.25E-02
66	1.33 MI SSW SECTOR	7/31/2002	337.5	BE-7	7.25E-01	2.46E-01
66	1.33 MI SSW SECTOR	7/31/2002	337.5	K-40	1.40E+00	5.54E-01
66	1.33 MI SSW SECTOR	7/31/2002	337.5	TL-208	7.68E-02	3.28E-02
66	1.33 MI SSW SECTOR	8/28/2002	438.8	BE-7	1.54E+00	2.40E-01
66	1.33 MI SSW SECTOR	8/28/2002	438.8	K-40	2.92E+00	4.58E-01
66	1.33 MI SSW SECTOR	9/26/2002	450.9	TL-208	3.74E-02	2.67E-02
66	1.33 MI SSW SECTOR	9/26/2002	450.9	BE-7	2.40E+00	3.35E-01
66	1.33 MI SSW SECTOR	9/26/2002	450.9	K-40	2.41E+00	4.31E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Drinking Water
Quantity: Liters
Concentration (Activity): pCi/L

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
38	CAPE FEAR PLANT INTAKE - CONTROL	1/31/2002	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	2/28/2002	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	3/31/2002	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	4/30/2002	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	5/31/2002	1.0	PB-212	3.81E+00	2.73E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/30/2002	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	7/31/2002	1.0	K-40	1.89E+02	4.95E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/31/2002	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	9/30/2002	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	10/31/2002	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	11/30/2002	1.0	K-40	6.21E+01	5.42E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/31/2002	1.0	PB-212	3.99E+00	3.42E+00
40	LILLINGTON - CAPE FEAR RIVER	1/31/2002	1.0	PB-212	5.84E+00	4.18E+00
40	LILLINGTON - CAPE FEAR RIVER	1/31/2002	1.0	K-40	9.32E+01	4.60E+01
40	LILLINGTON - CAPE FEAR RIVER	2/28/2002	1.0	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	3/31/2002	1.0	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	4/30/2002	1.0	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	5/31/2002	1.0	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	6/30/2002	1.0	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	7/31/2002	1.0	K-40	2.12E+02	5.20E+01
40	LILLINGTON - CAPE FEAR RIVER	8/31/2002	1.0	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	9/30/2002	1.0	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	10/31/2002	1.0	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	11/30/2002	1.0	K-40	3.03E+02	1.00E+02
40	LILLINGTON - CAPE FEAR RIVER	12/31/2002	1.0	K-40	1.47E+02	5.08E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/31/2002	1.0	K-40	1.17E+02	3.83E+01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Drinking Water
Quantity: Liters
Concentration (Activity): pCi/L

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/28/2002	1.0	NO-ACT		
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/31/2002	1.0	NO-ACT		
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/30/2002	1.0	NO-ACT		
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/31/2002	1.0	BI-214	7.32E+00	6.78E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/30/2002	1.0	K-40	7.73E+01	6.73E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/31/2002	1.0	NO-ACT		
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/31/2002	1.0	K-40	3.07E+02	7.33E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/31/2002	1.0	TL-208	7.83E+00	3.92E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/30/2002	1.0	K-40	1.11E+02	8.73E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/31/2002	1.0	NO-ACT		
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/30/2002	1.0	NO-ACT		
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/31/2002	1.0	K-40	2.65E+02	7.26E+01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Broccoli

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
55	RD 1167 1.7 MI NNW (GOODWIN)	6/25/2002	485.6	K-40	3.67E+00	5.01E-01
64	1.8 MI ENE SECTOR (MICHAEL)	6/25/2002	584.3	TL-208	2.49E-02	2.25E-02
64	1.8 MI ENE SECTOR (MICHAEL)	6/25/2002	584.3	K-40	5.07E+00	4.90E-01
64	1.8 MI ENE SECTOR (MICHAEL)	8/29/2002	439.4	K-40	5.59E+00	5.59E-01
64	1.8 MI ENE SECTOR (MICHAEL)	8/29/2002	439.4	BE-7	3.53E-01	2.43E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Cabbage

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	6/25/2002	415.8	PB-212	1.29E-01	3.81E-02
5	PITTSBORO - CONTROL	6/25/2002	415.8	TL-208	4.71E-02	2.60E-02
5	PITTSBORO - CONTROL	6/25/2002	415.8	K-40	5.60E+00	5.22E-01
5	PITTSBORO - CONTROL	9/26/2002	788.4	K-40	1.73E+00	2.38E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	6/25/2002	479.7	K-40	3.40E+00	3.81E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Collards

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	1/29/2002	542.5	K-40	3.93E+00	3.93E-01
5	PITTSBORO - CONTROL	1/29/2002	542.5	TL-208	1.92E-02	1.68E-02
5	PITTSBORO - CONTROL	1/29/2002	542.5	PB-214	7.36E-02	2.83E-02
5	PITTSBORO - CONTROL	1/29/2002	542.5	BE-7	2.18E-01	9.70E-02
5	PITTSBORO - CONTROL	2/19/2002	490.9	TL-208	5.60E-02	2.60E-02
5	PITTSBORO - CONTROL	2/19/2002	490.9	K-40	3.68E+00	5.52E-01
5	PITTSBORO - CONTROL	3/28/2002	543.3	K-40	3.17E+00	4.09E-01
5	PITTSBORO - CONTROL	3/28/2002	543.3	PB-212	2.05E-01	3.21E-02
5	PITTSBORO - CONTROL	3/28/2002	543.3	TL-208	6.86E-02	1.98E-02
5	PITTSBORO - CONTROL	10/31/2002	417.9	K-40	2.98E+00	5.37E-01
5	PITTSBORO - CONTROL	10/31/2002	417.9	TL-208	2.54E-02	2.39E-02
5	PITTSBORO - CONTROL	11/22/2002	510.6	K-40	3.01E+00	3.98E-01
5	PITTSBORO - CONTROL	11/22/2002	510.6	PB-212	7.13E-02	2.27E-02
5	PITTSBORO - CONTROL	11/22/2002	510.6	BE-7	6.23E-01	1.58E-01
5	PITTSBORO - CONTROL	12/30/2002	446.7	BE-7	4.30E-01	1.44E-01
5	PITTSBORO - CONTROL	12/30/2002	446.7	K-40	2.54E+00	4.13E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	1/29/2002	542.1	BE-7	2.87E-01	1.35E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	1/29/2002	542.1	K-40	2.37E+00	4.30E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	2/19/2002	492.8	K-40	2.98E+00	4.91E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	3/28/2002	545.6	K-40	2.46E+00	4.19E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	8/29/2002	493.9	K-40	2.97E+00	4.94E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	9/26/2002	579	TL-208	2.94E-02	1.53E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	9/26/2002	579	K-40	2.15E+00	3.42E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	10/31/2002	424.8	BE-7	2.98E-01	2.07E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	10/31/2002	424.8	K-40	4.96E+00	6.02E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	11/22/2002	547.1	BE-7	3.99E-01	1.54E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Collards

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
55	RD 1167 1.7 MI NNW (GOODWIN)	11/22/2002	547.1	K-40	3.54E+00	4.51E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	12/30/2002	580.2	K-40	2.99E+00	3.56E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	12/30/2002	580.2	BE-7	2.21E-01	1.39E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Corn

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
62	2.3 MI NE SECTOR (LEE)	8/29/2002	330.7	K-40	3.40E+00	4.36E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Cucumbers

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	8/29/2002	608	K-40	2.44E+00	3.14E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Eggplant

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	9/26/2002	542.9	K-40	2.61E+00	4.75E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Mustard Greens

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	5/29/2002	617.4	PB-212	6.00E-02	2.16E-02
5	PITTSBORO - CONTROL	5/29/2002	617.4	TL-208	1.26E-02	1.19E-02
5	PITTSBORO - CONTROL	5/29/2002	617.4	K-40	6.18E+00	4.84E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Okra

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	9/26/2002	618.4	PB-212	4.87E-02	3.69E-02
5	PITTSBORO - CONTROL	9/26/2002	618.4	K-40	3.19E+00	3.70E-01
64	1.8 MI ENE SECTOR (MICHAEL)	8/29/2002	443.9	K-40	4.14E+00	5.88E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Squash

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	6/25/2002	731.2	K-40	2.08E+00	2.77E-01
5	PITTSBORO - CONTROL	6/25/2002	678.7	K-40	2.23E+00	3.60E-01
5	PITTSBORO - CONTROL	7/25/2002	566.8	K-40	1.90E+00	3.67E-01
5	PITTSBORO - CONTROL	8/29/2002	525.4	K-40	4.86E+00	5.54E-01
62	2.3 MI NE SECTOR (LEE)	7/25/2002	510	K-40	2.70E+00	3.54E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Tomatoes

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	7/25/2002	597.7	K-40	2.92E+00	4.68E-01
5	PITTSBORO - CONTROL	8/29/2002	774.1	K-40	3.33E+00	3.33E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	8/29/2002	641.1	K-40	1.74E+00	3.29E-01
62	2.3 MI NE SECTOR (LEE)	8/29/2002	661	K-40	3.13E+00	3.47E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Food Crop
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Turnips and Greens

Sample Point		Sample Date	Quantity	Isotope	Activity	2 Sigma Error
5	PITTSBORO - CONTROL	10/31/2002	490.1	K-40	5.04E+00	4.86E-01
5	PITTSBORO - CONTROL	10/31/2002	490.1	PB-212	7.36E-02	2.60E-02
5	PITTSBORO - CONTROL	10/31/2002	490.1	BE-7	3.17E-01	1.27E-01
5	PITTSBORO - CONTROL	11/22/2002	566.9	TL-208	2.20E-02	1.93E-02
5	PITTSBORO - CONTROL	11/22/2002	566.9	K-40	4.23E+00	4.96E-01
5	PITTSBORO - CONTROL	11/22/2002	566.9	BI-214	6.74E-02	3.81E-02
5	PITTSBORO - CONTROL	11/22/2002	566.9	BE-7	4.41E-01	1.84E-01
5	PITTSBORO - CONTROL	12/30/2002	549.5	K-40	5.34E+00	5.62E-01
5	PITTSBORO - CONTROL	12/30/2002	549.5	BE-7	9.71E-01	2.21E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	10/31/2002	504.6	PB-212	6.64E-02	4.16E-02
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	10/31/2002	504.6	K-40	4.21E+00	5.29E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	10/31/2002	504.6	BE-7	4.55E-01	1.56E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	11/22/2002	523.2	BE-7	5.45E-01	2.01E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	11/22/2002	523.2	K-40	4.64E+00	5.70E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	11/22/2002	523.2	TL-208	2.94E-02	2.30E-02
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	11/22/2002	523.2	BI-214	6.79E-02	4.78E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Free Swimmer
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Largemouth Bass

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
44	SITE VARIES WITHIN HARRIS LAKE	5/29/2002	620.6	K-40	2.74E+00	8.43E-01
44	SITE VARIES WITHIN HARRIS LAKE	11/6/2002	573.7	K-40	5.26E+00	1.14E+00
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/29/2002	599.6	K-40	3.29E+00	9.25E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/6/2002	483.1	PB-214	1.10E-01	7.72E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/6/2002	483.1	K-40	4.46E+00	1.03E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Free Swimmer
Quantity: GRAMS (wet)
Concentration (Activity): pCi/gm wet

Media: Sunfish

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
44	SITE VARIES WITHIN HARRIS LAKE	5/29/2002	497.5	K-40	2.95E+00	1.02E+00
44	SITE VARIES WITHIN HARRIS LAKE	11/6/2002	510.3	K-40	3.65E+00	9.13E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/29/2002	515.2	K-40	2.36E+00	9.67E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/6/2002	462.6	K-40	3.52E+00	1.13E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Groundwater
Quantity: Liters
Concentration (Activity): pCi/L

Sample Point		Sample Date	Quantity	Isotope	Activity	2 Sigma Error
39	DEEP WELL NEAR DIABASE DIKES	2/26/2002	1	NO-ACT		
39	DEEP WELL NEAR DIABASE DIKES	5/30/2002	1	NO-ACT		
39	DEEP WELL NEAR DIABASE DIKES	8/29/2002	1	NO-ACT		
39	DEEP WELL NEAR DIABASE DIKES	11/22/2002	1	NO-ACT		
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	2/26/2002	1	NO-ACT		
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	5/30/2002	1	NO-ACT		
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	8/29/2002	1	NO-ACT		
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	11/22/2002	1	NO-ACT		
58	0.5 MI WSW SECTOR N BANK ESW INTAKE	2/27/2002	1	NO-ACT		
58	0.5 MI WSW SECTOR N BANK ESW INTAKE	5/30/2002	1	K-40	6.44E+01	5.85E+01
58	0.5 MI WSW SECTOR N BANK ESW INTAKE	8/29/2002	1	K-40	3.36E+02	9.14E+01
58	0.5 MI WSW SECTOR N BANK ESW INTAKE	11/22/2002	1	NO-ACT		
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	2/26/2002	1	NO-ACT		
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	5/30/2002	1	NO-ACT		
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	9/9/2002	1	NO-ACT		
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	11/22/2002	1	NO-ACT		
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	2/26/2002	1	RA-226	4.40E+01	3.63E+01
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	5/30/2002	1	NO-ACT		
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	8/29/2002	1	NO-ACT		
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	11/22/2002	1	NO-ACT		

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Milk
Quantity: Liters
Concentration (Activity): pCi/L

Sample Point		Sample Date	Quantity	Isotope	Activity	2 Sigma Error
5	PITTSBORO - CONTROL	1/7/2002	1	K-40	2.15E+03	2.10E+02
5	PITTSBORO - CONTROL	1/21/2002	1	K-40	1.37E+03	1.96E+02
5	PITTSBORO - CONTROL	2/4/2002	1	K-40	1.18E+03	1.97E+02
5	PITTSBORO - CONTROL	2/18/2002	1	K-40	1.56E+03	2.06E+02
5	PITTSBORO - CONTROL	3/4/2002	1	K-40	1.23E+03	2.00E+02
5	PITTSBORO - CONTROL	3/18/2002	1	K-40	1.51E+03	2.00E+02
5	PITTSBORO - CONTROL	4/1/2002	1	K-40	1.23E+03	1.66E+02
5	PITTSBORO - CONTROL	4/15/2002	1	K-40	1.35E+03	1.92E+02
5	PITTSBORO - CONTROL	5/13/2002	1	K-40	1.37E+03	1.96E+02
5	PITTSBORO - CONTROL	5/28/2002	1	K-40	1.19E+03	1.98E+02
5	PITTSBORO - CONTROL	6/10/2002	1	K-40	1.15E+03	1.49E+02
5	PITTSBORO - CONTROL	6/24/2002	1	K-40	1.31E+03	2.09E+02
5	PITTSBORO - CONTROL	7/9/2002	1	K-40	1.48E+03	2.05E+02
5	PITTSBORO - CONTROL	7/23/2002	1	K-40	1.30E+03	2.01E+02
5	PITTSBORO - CONTROL	8/5/2002	1	K-40	1.20E+03	2.11E+02
5	PITTSBORO - CONTROL	8/19/2002	1	K-40	6.31E+02	1.99E+02
5	PITTSBORO - CONTROL	8/19/2002	1	PB-212	1.47E+01	1.06E+01
5	PITTSBORO - CONTROL	9/3/2002	1	K-40	1.58E+03	2.07E+02
5	PITTSBORO - CONTROL	9/16/2002	1	K-40	1.40E+03	1.93E+02
5	PITTSBORO - CONTROL	10/14/2002	1	K-40	1.34E+03	1.74E+02
5	PITTSBORO - CONTROL	10/28/2002	1	K-40	1.58E+03	1.99E+02
5	PITTSBORO - CONTROL	11/11/2002	1	K-40	1.54E+03	2.02E+02
5	PITTSBORO - CONTROL	11/25/2002	1	K-40	1.32E+03	2.00E+02
5	PITTSBORO - CONTROL	12/9/2002	1	K-40	1.50E+03	2.10E+02
5	PITTSBORO - CONTROL	12/22/2002	1	K-40	1.54E+03	2.06E+02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Shoreline Sediment
Quantity: GRAMS (dry)
Concentration (Activity): pCi/gm dry

Sample Point		Sample Date	Quantity	Isotope	Activity	2 Sigma Error
26	SPILLWAY ON MAIN RES	1/17/2002	1407.1	TL-208	9.43E-02	3.79E-02
26	SPILLWAY ON MAIN RES	1/17/2002	1407.1	PB-212	2.55E-01	5.36E-02
26	SPILLWAY ON MAIN RES	1/17/2002	1407.1	PB-214	1.82E-01	6.63E-02
26	SPILLWAY ON MAIN RES	1/17/2002	1407.1	RA-226	1.37E+00	7.72E-01
26	SPILLWAY ON MAIN RES	1/17/2002	1407.1	K-40	1.13E+01	1.06E+00
26	SPILLWAY ON MAIN RES	8/13/2002	1288.6	PB-212	3.29E-01	9.75E-02
26	SPILLWAY ON MAIN RES	8/13/2002	1288.6	TL-208	1.43E-01	4.03E-02
26	SPILLWAY ON MAIN RES	8/13/2002	1288.6	K-40	1.47E+01	1.21E+00
26	SPILLWAY ON MAIN RES	8/13/2002	1288.6	PB-214	3.59E-01	7.41E-02
26	SPILLWAY ON MAIN RES	8/13/2002	1288.6	RA-226	1.97E+00	8.23E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/17/2002	1617.4	BI-214	2.47E-01	5.56E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/17/2002	1617.4	TL-208	4.71E-02	2.71E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/17/2002	1617.4	K-40	1.19E+01	8.80E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/17/2002	1617.4	PB-214	2.02E-01	5.55E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	8/13/2002	1143.8	K-40	1.38E+01	1.16E+00
41	SHORELINE OF COOLING TOWER MIXING ZONE	8/13/2002	1143.8	TL-208	8.17E-01	3.37E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	8/13/2002	1143.8	PB-212	3.04E-01	4.91E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	8/13/2002	1143.8	BI-214	2.85E-01	7.64E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	8/13/2002	1143.8	PB-214	2.37E-01	6.45E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	8/13/2002	1143.8	RA-226	1.03E+00	5.87E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Surface Water
Quantity: Liters
Concentration (Activity): pCi/L

Sample Point		Sample Date	Quantity	Isotope	Activity	2 Sigma Error
26	SPILLWAY ON MAIN RES	1/31/2002	1	NO-ACT		
26	SPILLWAY ON MAIN RES	2/28/2002	1	NO-ACT		
26	SPILLWAY ON MAIN RES	3/31/2002	1	K-40	8.21E+01	5.76E+01
26	SPILLWAY ON MAIN RES	4/30/2002	1	RA-226	6.93E+01	3.91E+01
26	SPILLWAY ON MAIN RES	5/31/2002	1	RA-226	5.22E+01	4.53E+01
26	SPILLWAY ON MAIN RES	5/31/2002	1	K-40	9.24E+01	3.48E+01
26	SPILLWAY ON MAIN RES	6/30/2002	1	NO-ACT		
26	SPILLWAY ON MAIN RES	7/31/2002	1	K-40	8.19E+01	7.19E+01
26	SPILLWAY ON MAIN RES	8/31/2002	1	NO-ACT		
26	SPILLWAY ON MAIN RES	9/30/2002	1	NO-ACT		
26	SPILLWAY ON MAIN RES	10/31/2002	1	TL-208	7.91E+00	5.50E+00
26	SPILLWAY ON MAIN RES	10/31/2002	1	K-40	9.71E+01	8.60E+01
26	SPILLWAY ON MAIN RES	11/30/2002	1	NO-ACT		
26	SPILLWAY ON MAIN RES	12/31/2002	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	1/31/2002	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	2/28/2002	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	3/31/2002	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	4/30/2002	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	5/31/2002	1	PB-212	3.81E+00	2.73E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/30/2002	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	7/31/2002	1	K-40	1.89E+02	4.95E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/31/2002	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	9/30/2002	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	10/31/2002	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	11/30/2002	1	K-40	6.21E+01	5.42E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/31/2002	1	PB-212	3.99E+00	3.42E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

Media Type: Surface Water
Quantity: Liters
Concentration (Activity): pCi/L

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
40	LILLINGTON - CAPE FEAR RIVER	1/31/2002	1	K-40	9.23E+01	4.60E+01
40	LILLINGTON - CAPE FEAR RIVER	1/31/2002	1	PB-212	5.84E+00	4.18E+00
40	LILLINGTON - CAPE FEAR RIVER	2/28/2002	1	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	3/31/2002	1	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	4/30/2002	1	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	5/31/2002	1	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	6/30/2002	1	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	7/31/2002	1	K-40	2.12E+02	5.20E+01
40	LILLINGTON - CAPE FEAR RIVER	8/31/2002	1	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	9/30/2002	1	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	10/31/2002	1	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	11/30/2002	1	K-40	3.03E+02	1.00E+02
40	LILLINGTON - CAPE FEAR RIVER	12/31/2002	1	K-40	1.47E+02	5.08E+01