Progress Energy

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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, Carolina Power & Light Company doing business as Progress Energy Carolinas, Inc. is providing the enclosed Annual Radiological Environmental Operating Report for 2003.

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. R. A. Musser (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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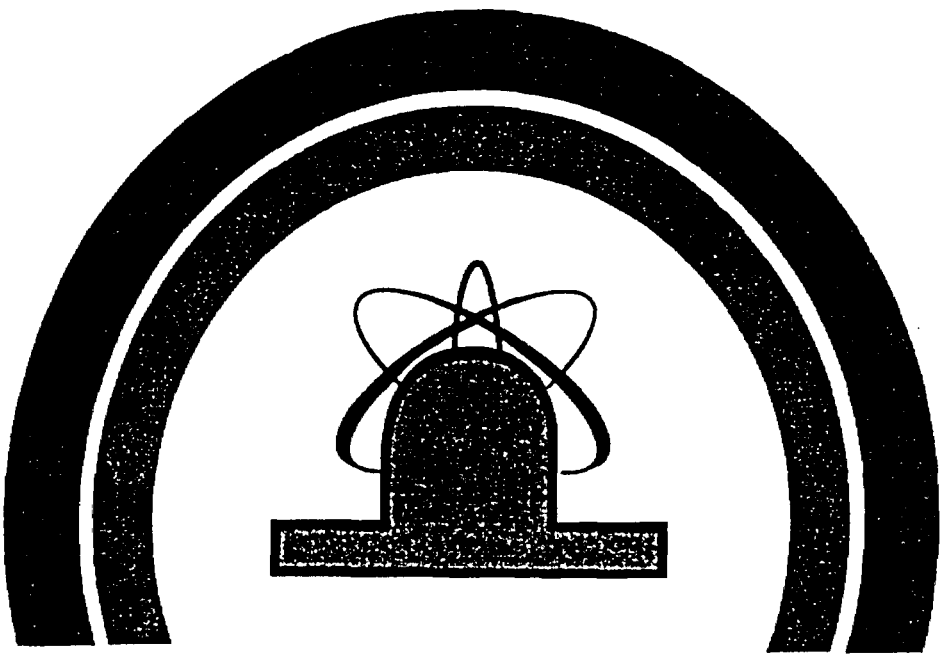
RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT 2003



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, 2003

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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, 2003 through December 31, 2003.

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, except for the I-131 noted in Interpretations and Conclusions section/ Drinking and Surface Water, 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 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.

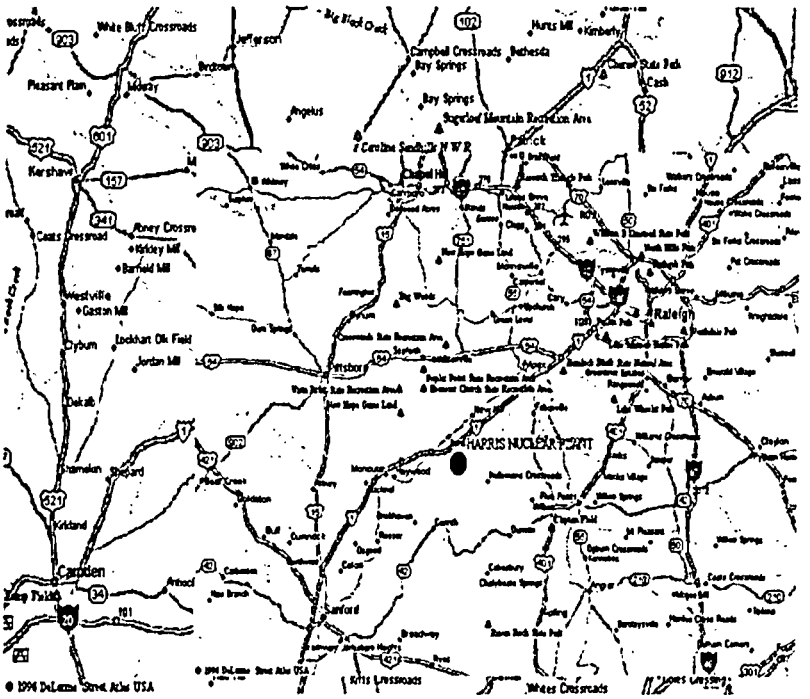

Figure 1: Location of Harris Nuclear Plant

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

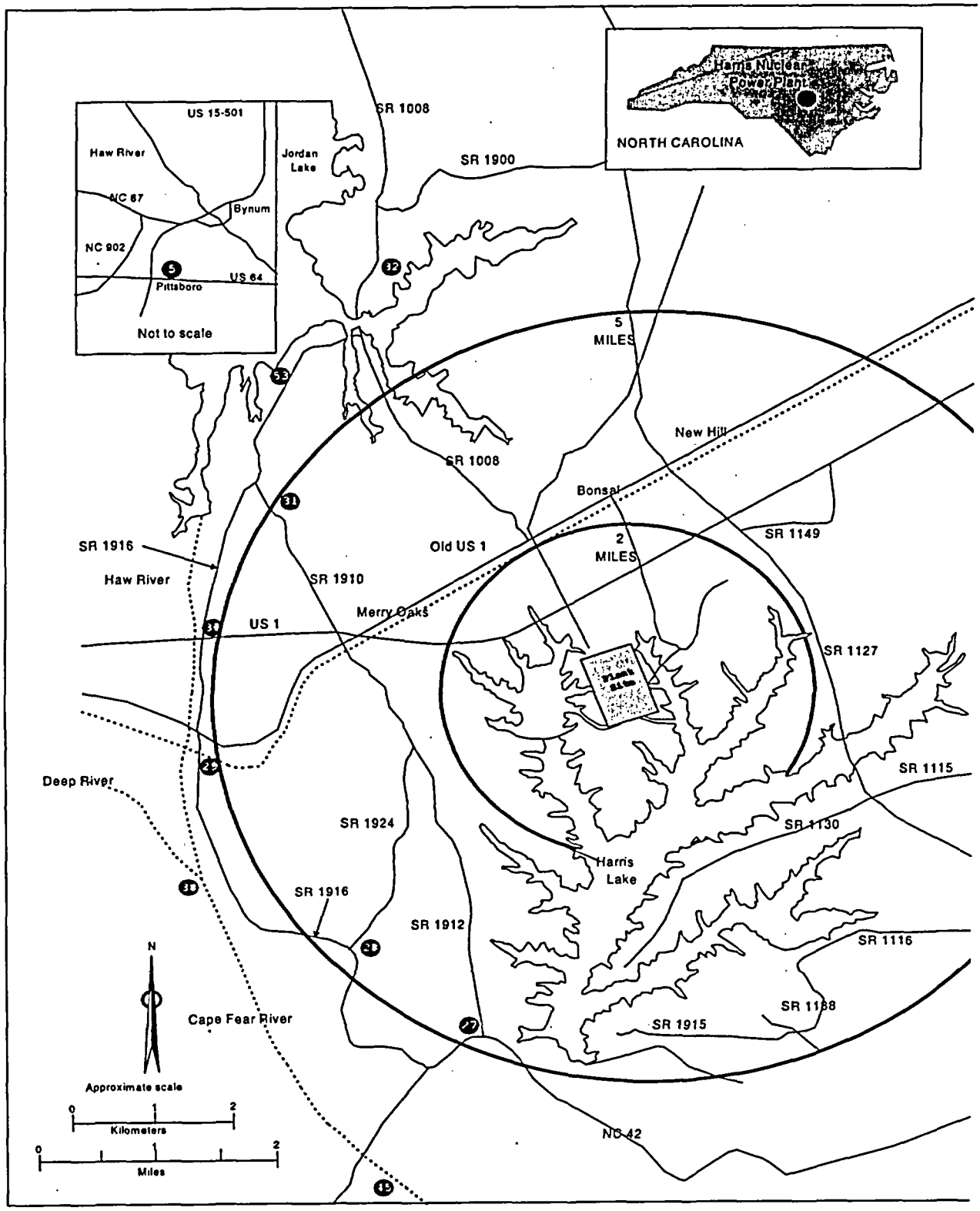

Figure 2a: Radiological Environmental Sampling Locations (Distant from Plant)

Radiological Environmental Sampling Locations

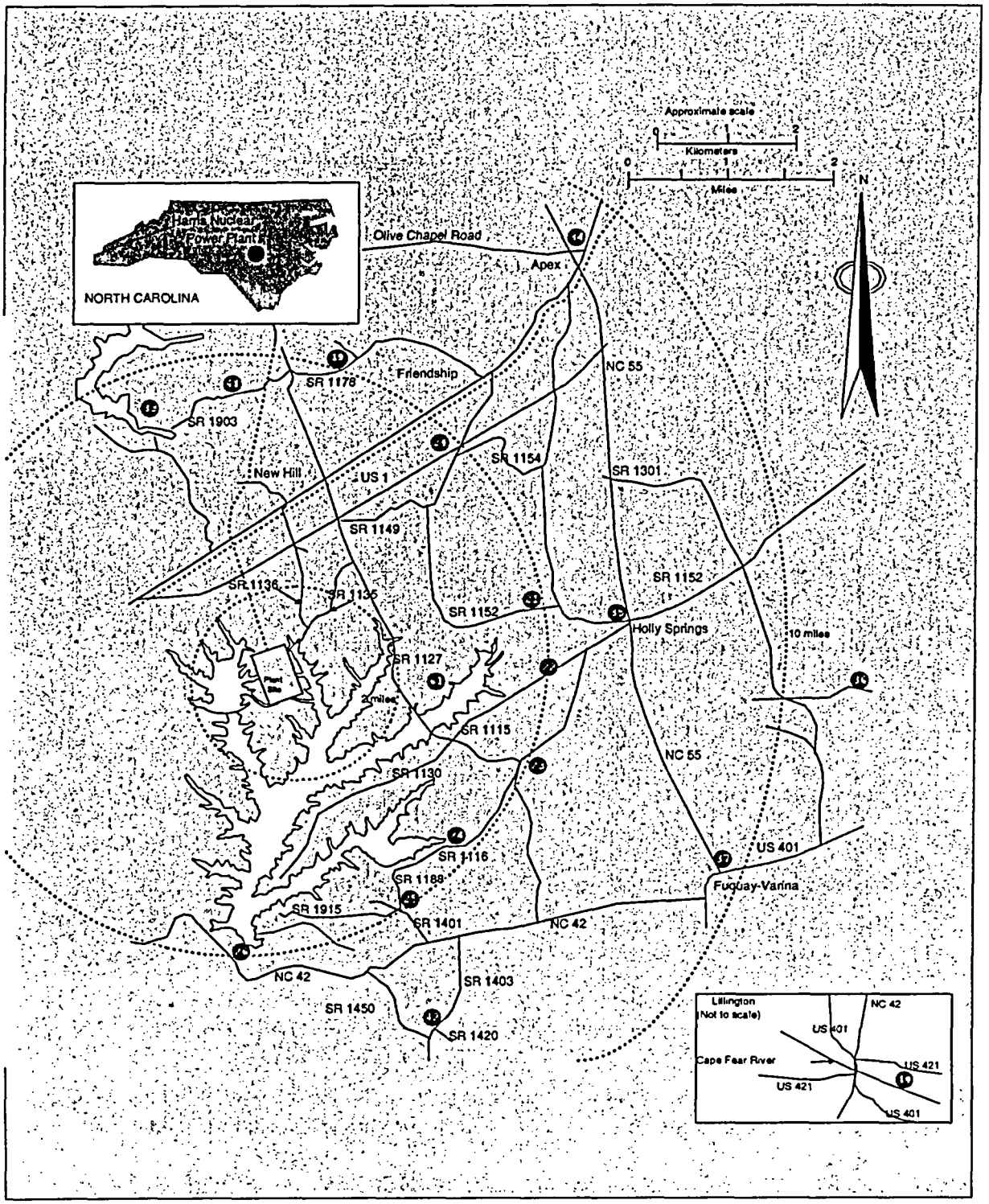

Figure 2b: Radiological Environmental Sampling Locations (Distant from Plant)

Radiological Environmental Sampling Locations

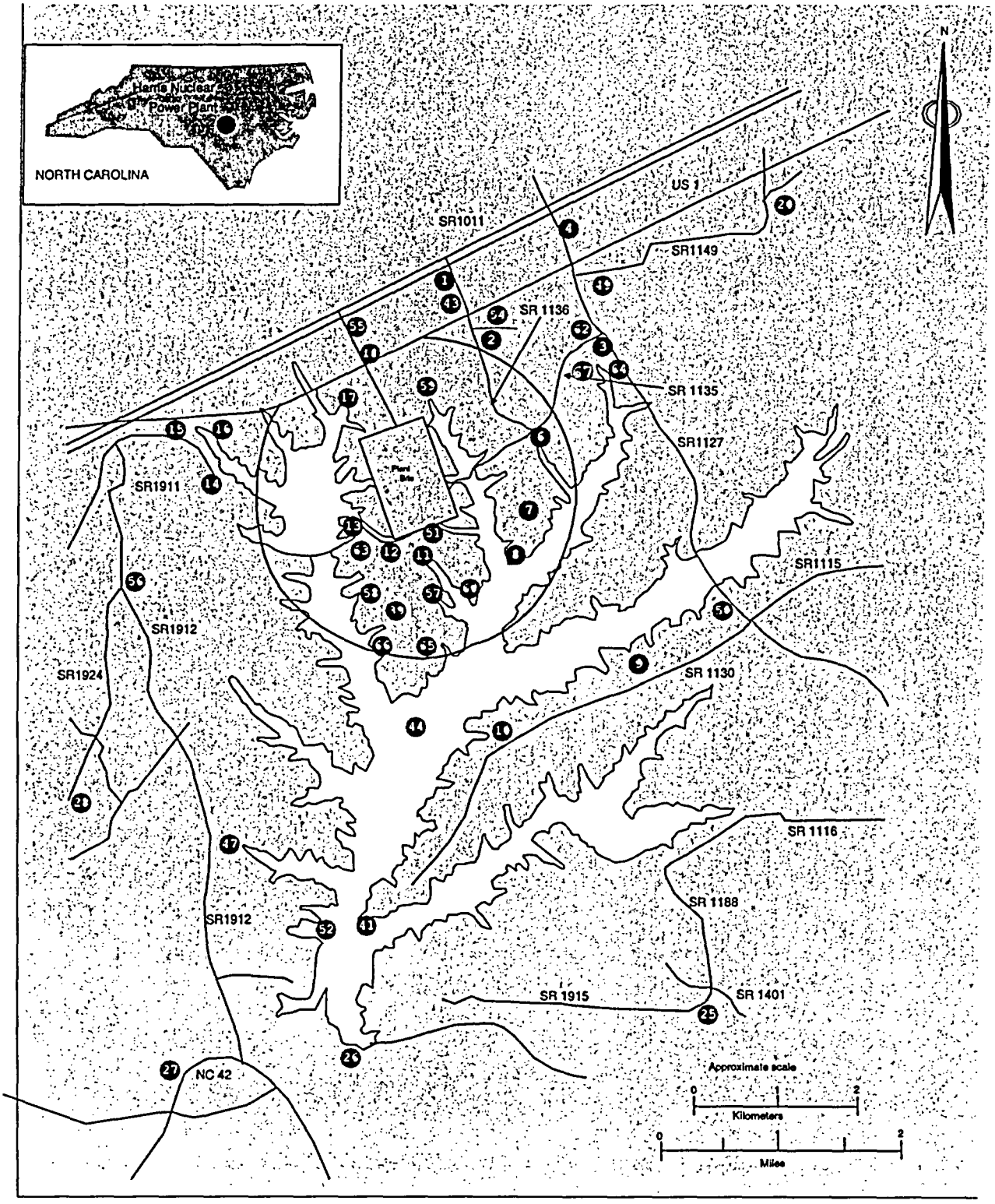

Figure 3: Radiological Environmental Sampling Locations (Nearest Plant)

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 2003 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 1150 total samples of 13 different media types from approximately 900 indicator stations were compared to approximately 250 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 2003 for which there is a potential dose pathway to the public 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	2,670 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.	0.006 Total Body

The radiological environmental data indicates that HNP operations in 2003 had no significant impact on the environment or public health and safety.

A statistical summary of all the data for 2003 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 2003. 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: 2003

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-131 312	4.2E-2	All less than LLD	N/A	All less than LLD	All less than LLD
Air Particulate (pCi/m^3)	Gross Beta 310[3]	1.0E-3	1.69E-2 (259/260) 7.44E-3 – 3.47E-2	New Hill Near 1st Baptist Church 3.1 miles NNE	1.78E-2 (52/52) 8.74E-3 – 3.32E-2	1.70E-2 (51/52) 7.29E-3 - 3.03E-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 54	1.0E+0	All less than LLD	Cape Fear Plant Intake (Control) 6.2 miles WSW	1.11E+0 (1/27) Single Value	1.11E+0 (1/27) Single Value
	Gross Beta 24	1.0E+0	3.81E+0 (12/12) 2.16E+0 – 4.87E+0	Lillington Cape Fear River 17.2 miles SSE	3.81E+0 (12/12) 2.16E+0 – 4.87E+0	3.69E+0 (12/12) 2.37E+0 – 5.16E+0
	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[6]	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: 2003

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 65[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 34[3]	Refer to Table 4	All less than LLD	N/A	All less than LLD	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]	7.74E+2 (4/20) 5.64E+2 – 9.12E+2	North Bank ESW Intake 0.5 mile WSW	7.74E+2 (4/20) 5.64E+2 – 9.12E+2	No control

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

Shearon Harris Nuclear Power Plant
Wake County, North Carolina

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Calendar Year: 2003

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: Name, Distance, and Direction	Location w/Highest Annual Mean: Mean[2] Range	Control Locations 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	5.8 E-2	2.52E+0 (2/2) 1.48E+0 – 3.55E+0	Harris Lake Cooling Tower Mixing Zone 3.8 miles S	2.52E+0 (2/2) 1.48E+0 – 3.55E+0	No Control
	Cs-137	4.8 E-2	2.78E-1 (2/2) 2.07E-1 – 3.49E-1	Harris Lake Cooling Tower Mixing Zone 3.8 miles S	2.78E-1 (2/2) 2.07E-1 – 3.49E-1	No Control
Surface Water[4] (pCi/l)	I-131 54	1.0E+0	All less than LLD	Cape Fear Plant Intake (Control) 6.2 miles WSW	1.11E+0 (1/27) Single Value	1.11E+0 (1/27) Single Value
	Gross Beta 36	1.0E+0	3.49E+0 (24/24) 2.16E+0 - 4.87E+0	Lillington Cape Fear River 17.2 miles SSE	3.81E+0 (12/12) 2.16E+0 - 4.87E+0	3.69E+0 (12/12) 2.37E+0 – 5.16E+0
	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] 1.00E+3 (12/36)[6]	All less than LLD 2.67E+3 (12/24) 2.26E+3 – 3.12E+3	N/A Harris Lake 4.7 miles S	All less than LLD 2.67E+3 (12/12) 2.26E+3 - 3.12E+3	All less than LLD
Direct Radiation (mR/qtr) [5]	TLD 175[3]		1.18E+1 (171/172) 9.00E+0 – 1.61E+1	Fuquay Varina at Old CP&L Office 9.2 miles ESE	1.56E+1 (4/4) 1.51E+1 – 1.61E+1	1.45E+1 (4/4) 1.41E+1 – 1.48E+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 Surveillances.

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 312 air cartridge samples from indicator and control stations had I-131 concentrations less than the typical LLD of 4.2E-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 2003, which is the entire operating history of the plant.

For the period of January 1, 2003 to December 31, 2003; the gross beta activity was detectable in all airborne particulate samples, with acceptable runtime, from the five indicator locations. The 259 indicator samples had an average concentration of 1.69E-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 1.70E-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 2003. On 10/13/03, all the samples (indictors and control) show an elevated activity indicating an increase in natural radiation during this time. No gamma activity was observed for any air particulates during 2003. 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 27 drinking water samples collected at the Lillington Municipal water supply and the 27 control samples collected from the Cape Fear River above the Buckhorn Dam contained less than detectable I-131 activity (< 1.0E+0 pCi/L) during 2003, except for the anomalous positive result for I-131 (1.11 ± 0.957 E+0 pCi/L) in the bi-weekly drinking/surface water composite for the control location (DW/SW-38) at Cape Fear collected on 12/29/03 (AR # 115169). The control sample location is upstream from where the Harris Nuclear Plant discharges into the Cape Fear

River; therefore, the iodine was not due to plant operation. The indicator sample locations at Harris Lake and Lillington showed no detectable iodine, as is the normal trend. Reanalysis was performed to confirm the anomalous result and additional sampling was done with no detectable iodine present. No detectable I-131 activity was detected in drinking/surface water composites. This has typically been the experience for the preoperational and operational period with the exception of 1986 when the fallout from Chernobyl was detected. For DW/SW-38 and DW-51 from June – August, 2003, an incorrect sample date was used (AR # 110160), resulting in several samples not meeting the required LLD of 1.0E+0 pCi/L.

The average annual gross beta concentrations at the indicator and control locations were similar in concentrations of 3.81E+0 pCi/L and 3.69E+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 2003 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 2003. This is consistent with the data for 1989-2002. 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 0.006 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	0.004	0.005	0.006

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 0.004, 0.005, and 0.006 mrem/year respectively.

Milk/Broadleaf Vegetation

During 2003, 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 1.15E+3 pCi/L – 2.21E+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 did not detect any plant-related radioactivity in any of the broadleaf vegetation (Dogwood, Maple, and Sweetgum) in 2003.

Surface Water

Surface water samples were collected (weekly) and analyzed (bi-weekly) for I-131. Water samples collected during 2003 contained no detectable I-131 (< 1.0E+0 pCi/L), except for the anomalous positive result for I-131 (1.11 ± 0.957 E+0 pCi/L) in the bi-weekly drinking/surface water composite for the control location (DW/SW-38) at Cape Fear collected on 12/29/03 (AR # 115169). The control sample location is upstream from where the Harris Nuclear Plant discharges into the Cape Fear River; therefore, the iodine was not due to plant operation. The indicator sample locations at Harris Lake and Lillington showed no detectable iodine, as is the normal trend. Reanalysis was performed to confirm the anomalous result and additional sampling was done with no detectable iodine present. No detectable I-131 activity was detected in drinking/surface water composites. For DW/SW-38 from June – August, 2003, an incorrect sample date was used (AR # 110160) resulting in several samples not meeting the required LLD of 1.0E+0 pCi/L.

Average gross beta concentrations at the indicator and control locations were 3.49E+0 pCi/L and 3.69E+0 pCi/L, respectively, in 2003, 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 2.67E+3 pCi/L with minimum and maximum values of 2.26E+3 pCi/L and 3.12E+3 pCi/L, respectively (see Figure 11). The average Harris Lake tritium concentration showed a decrease in tritium compared to the annual average of 4.49E+3 pCi/L in 2002. 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 2003.

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 2003, 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 2003 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 2003. No long-term trends are readily observed in these samples.

Bottom Sediment

The 2003 data shows Cobalt (Co)-60 (1.48E+0 – 3.55E+0 pCi/gm dry), and Cesium (Cs)-137 (2.07E-1 - 3.49E-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 2003 included broccoli, cabbage, collards, cucumbers, eggplants, lettuce, mustard greens, okra, pears, peppers, tomatoes, turnips and greens, and watermelons. Gamma analyses of the food crops detected no plant-related activity in 36 samples from indicator locations and 29 samples from control locations collected in 2003.

Aquatic Vegetation

The 2003 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 2003. 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 11.8 mR and 14.5 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 0.31 mR to 0.48 mR).

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 no missed surveillances and two missed AP samples in 2003.

Missed Samples:

- AP-1, August 4 – No AP sample due to air particulate filter being dislodged and allowing air to bypass the particulate filter – No sample was counted (AR #101903).
- AP-5, September 2 – No AP sample due to air sampler running backwards (mechanical failure) – No sample was counted (AR #103553) Per AR, to prevent a recurrence, replace sample pump motor by that vendor with another sample pump motor.

Missed Surveillances:

- None noted

Food Crops

Food crops were not available from any garden location for sampling during May of 2003 (AR # 122717). 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 2003. The farmers' and individuals' gardens at each sample location did not plant or produce three (3) different kinds of food crops in 2003, which was mostly due to seasonal unavailability, weather conditions, deer, or inadequate time to maintain a garden. Condition reports were written to document food crop unavailability (AR # 83105, 86178, 89052, 92034, 97585, 102066, and 109485).

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 2003 (AR # 83106, 86180, 89054, 92040, and 109487).

TLDs

One sample (TLD # 32 during 2nd Quarter 2003 AR # 98419), of a possible 176 TLD samples (indicator and control locations), was missing during 2003.

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 4.2 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 7,000 seconds.

Liquid samples, except milk, are boiled down to a small volume, transferred to a Poly Bottle (PB-50 beaker) and analyzed groundwater samples for 7,000 seconds and others for 40,000 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 2003, 101 analyses were completed on 18 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 101 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.

All of the 101 analyses were within 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 any evaluation will be available and provided to the NRC upon request.

Lower Limits of Detection

All samples analyzed met the LLD required by the ODCM, with the exception noted in Interpretations and Conclusions section/ Drinking Water and Surface Water subsections.

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

Drinking Water/Surface Water/Ground Water Samples	
Isotope	**LLD (pCi/L)**
Mn-54	6
Co-58	6
Fe-59	14
Co-60	7
Zn-65	13
Zr-Nb-95	7
I-131	1.0*
Cs-134	8
Cs-137	6
Ba-La-140	8
Other Expected Gamma Emitters	3 to 290
Air Particulates (Quarterly Composite)	
Isotope	**LLD (pCi/m^3)**
I-131	0.038
Cs-134	0.001
Cs-137	0.001
Other Expected Gamma Emitters	0.001 to 0.033
Milk	
Isotope	**LLD (pCi/L)**
I-131	1.0*
Cs-134	11
Cs-137	9
Other Expected Gamma Emitters	6 to 192
Sediment	
Isotope	**LLD (pCi/kg dry)**
Cs-134	66
Cs-137	48
Other Expected Gamma Emitters	27 to 1274
Fish	
Isotope	**LLD (pCi/kg wet)**
Mn-54	57
Co-58	37
Fe-59	70
Co-60	65
Zn-65	146
Cs-134	74
Cs-137	52
Other Expected Gamma Emitters	41 to 1409

* 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	37
Cs-134	30
Cs-137	33
Other Expected Gamma Emitters	21 to 647

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 methods are visual inspection from the roadside within the five (5) mile radius and personal contact with the individuals.

2003 Land-Use Census Results

The 2002 and 2003 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 2002 to 2003. No gardens were located within 5 miles of the plant for the E, S, WNW, and NW sectors. All the gardens located in 2003 were the same as 2002, except that the following gardens were no longer found at 1.7 miles in the E sector and at 2.3 miles in the WNW sector. No meat animals were found in the NE, S, SSW, WNW, and NW sectors in 2003. A meat animal location was identified in the NNE sector at 1.9 miles compared to 2.2 miles in 2002 and a meat animal location was discontinued in the NE sector at 2.3 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 2003 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 (2002-2003)
Nearest Pathway (Miles)

SECTOR	RESIDENT		GARDEN		MEAT ANIMAL		MILK ANIMAL	
	2003	2002	2003	2002	2003	2002	2003	2002
N	2.2	2.2	2.2	2.2	2.2	2.2	---	---
NNE	1.9	1.9	1.9	1.9	1.9*	2.2	---	---
NE	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	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	3.0	3.1	3.1	---	---
WNW	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.

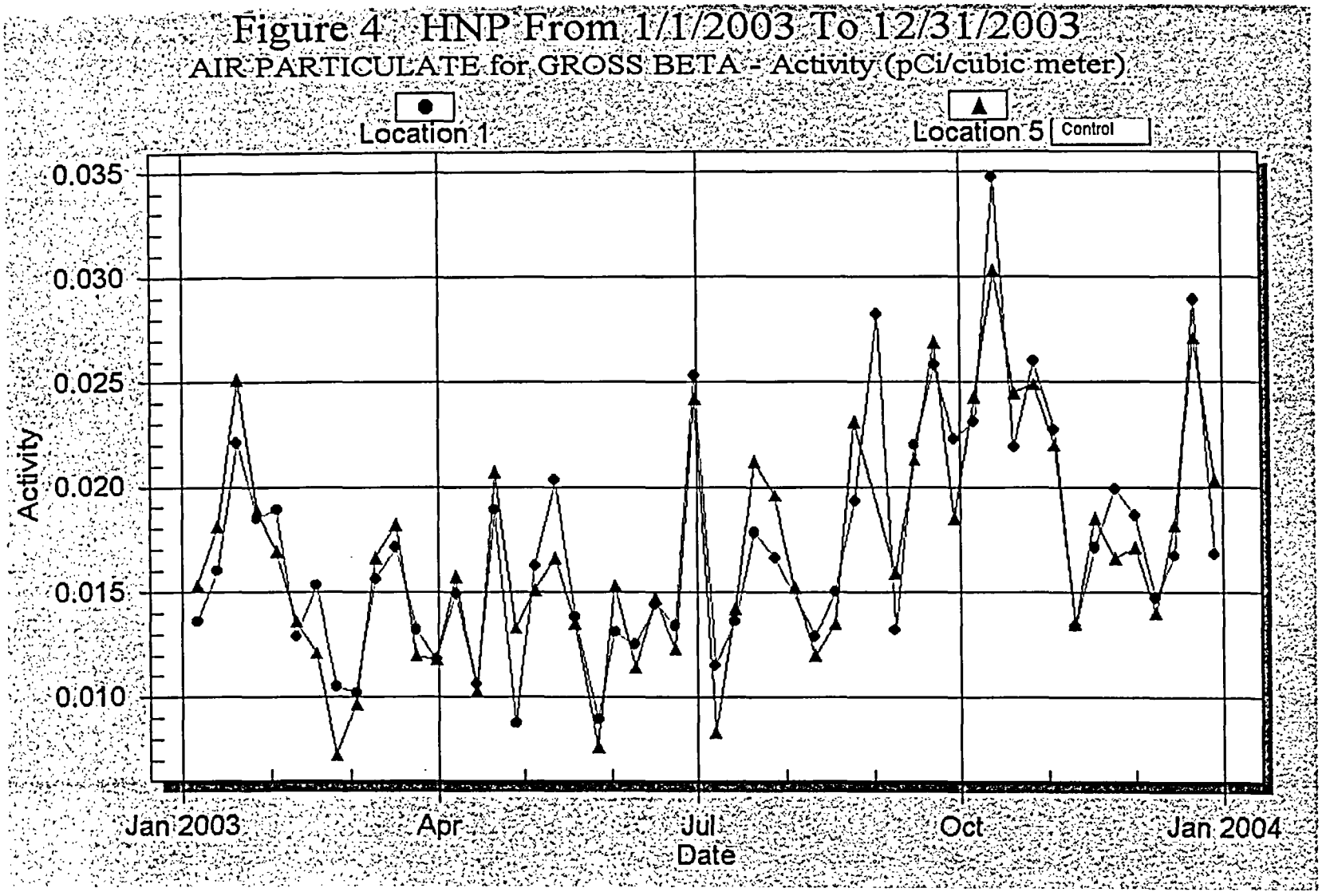


Figure 4 HNP From 1/1/2003 To 12/31/2003
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)
Location 1
Location 5
Control
0.035
0.030
0.025
0.020
0.015
0.010
Activity
Jan 2003
Apr
Jul
Oct
Jan 2004
Date

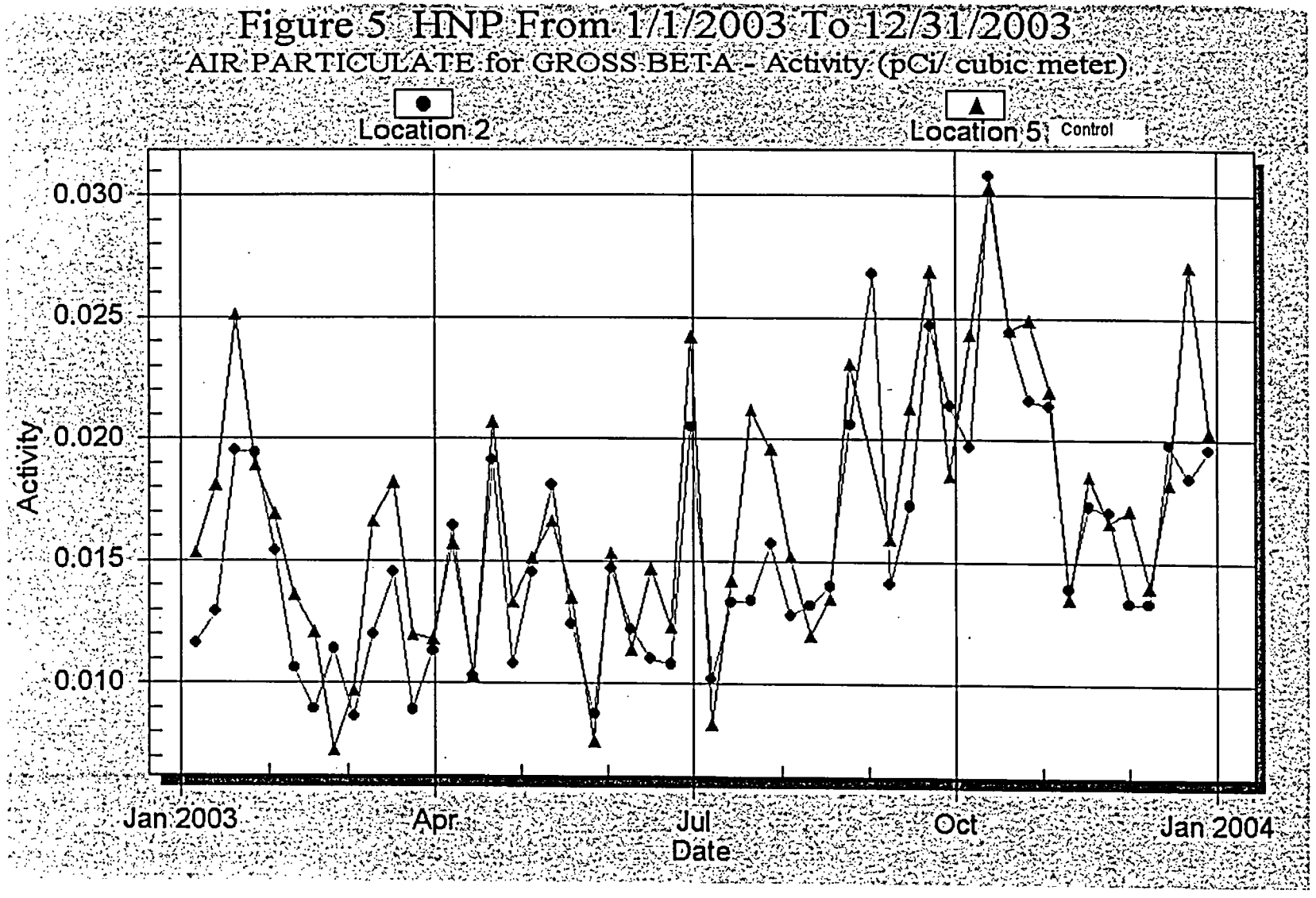


Figure 5 HNP From 1/1/2003 To 12/31/2003
AIR PARTICULATE for GROSS BETA - Activity (pCi/ cubic meter)
Location 2
Location 5
Control
0.030
0.025
0.020
0.015
0.010
Activity
Jan 2003
Apr
Jul
Oct
Jan 2004
Date

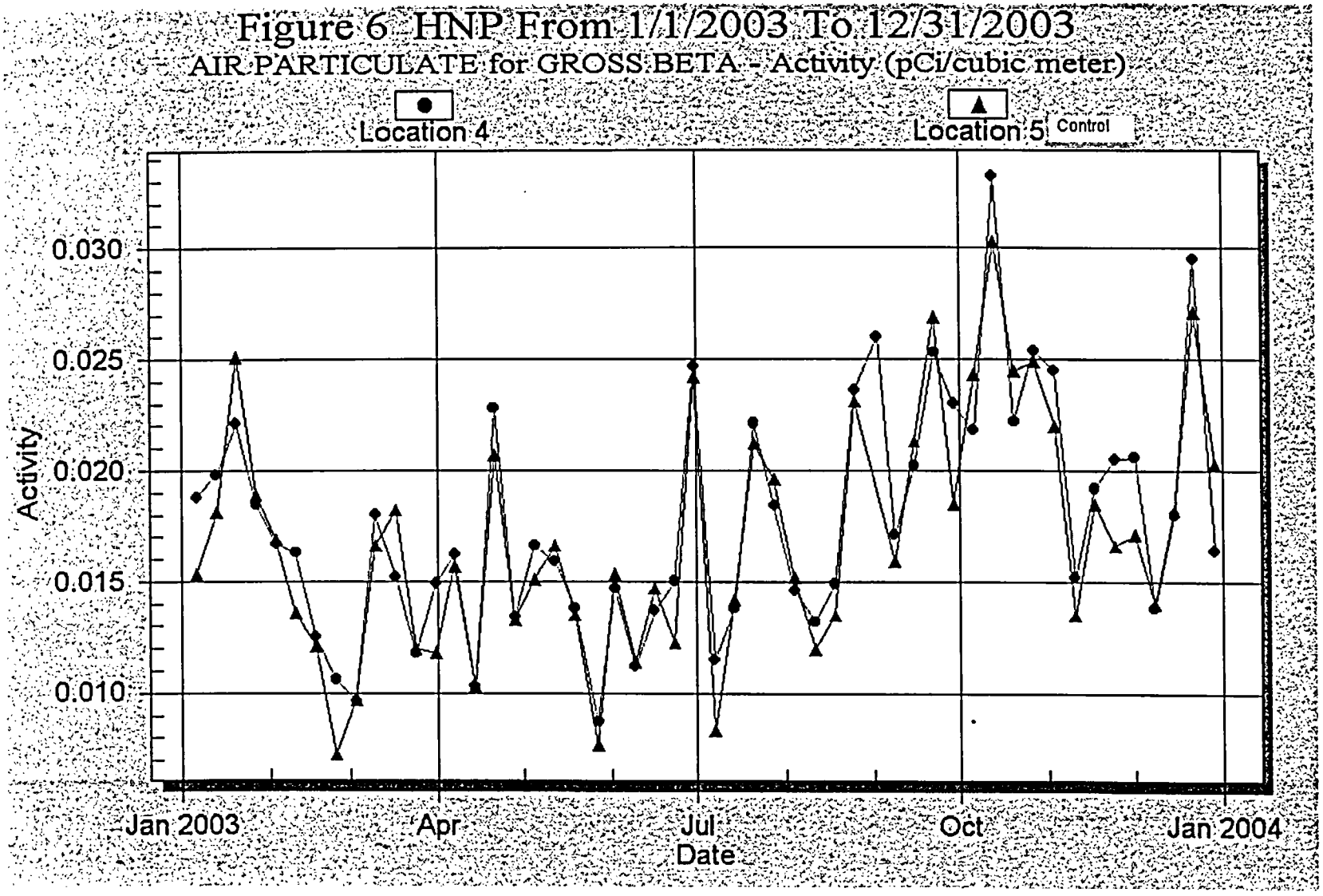


Figure 6 HNP From 1/1/2003 To 12/31/2003
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)
Location 4
Location 5
Control
0.030
0.025
0.020
0.015
0.010
Activity
Jan 2003
Apr
Jul
Oct
Jan 2004
Date

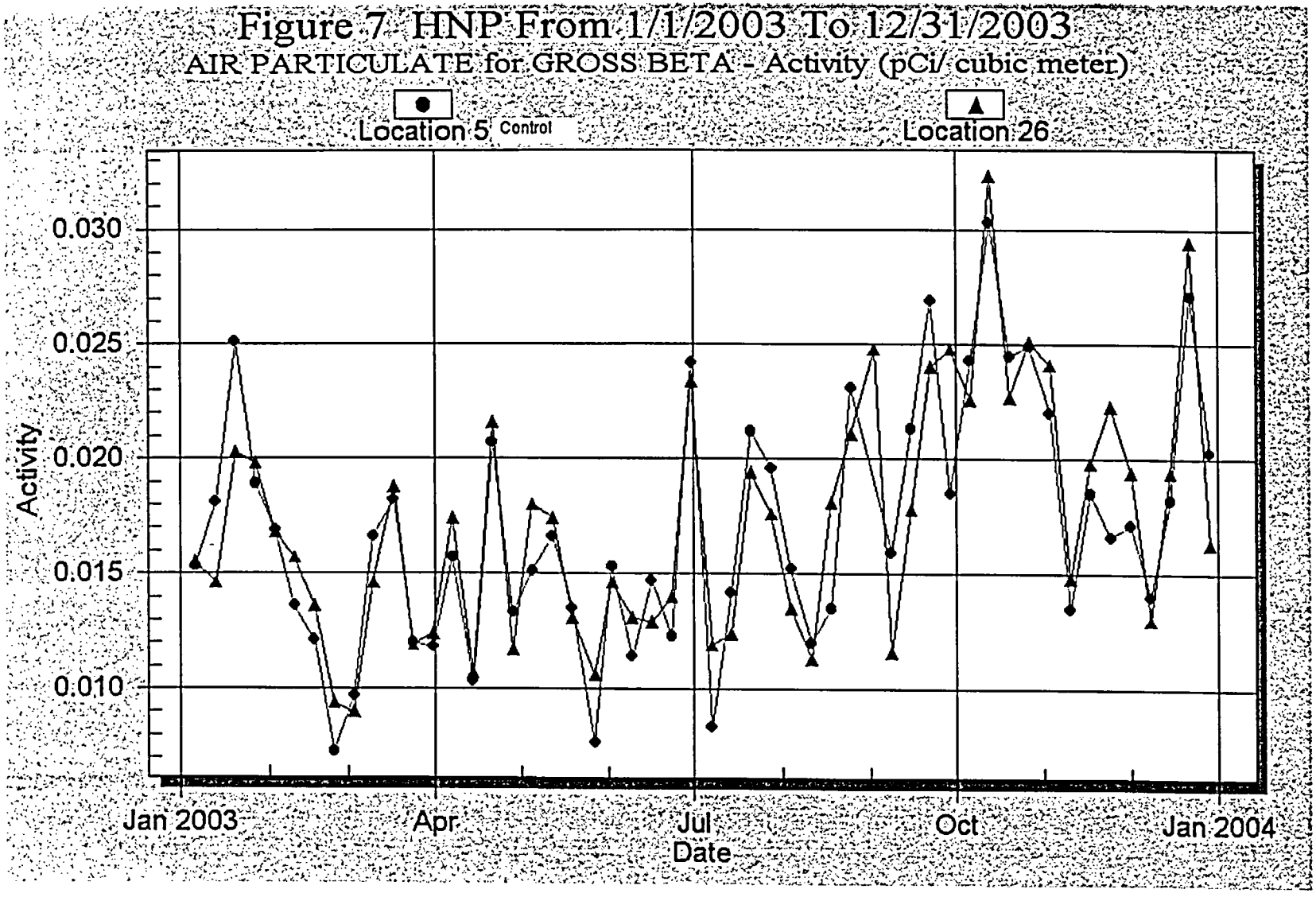


Figure 7 HNP From 1/1/2003 To 12/31/2003
AIR PARTICULATE for GROSS BETA - Activity (pCi/ cubic meter)
Location 5 Control
Location 26
0.030
0.025
0.020
0.015
0.010
Activity
Jan 2003
Apr
Jul
Oct
Jan 2004
Date

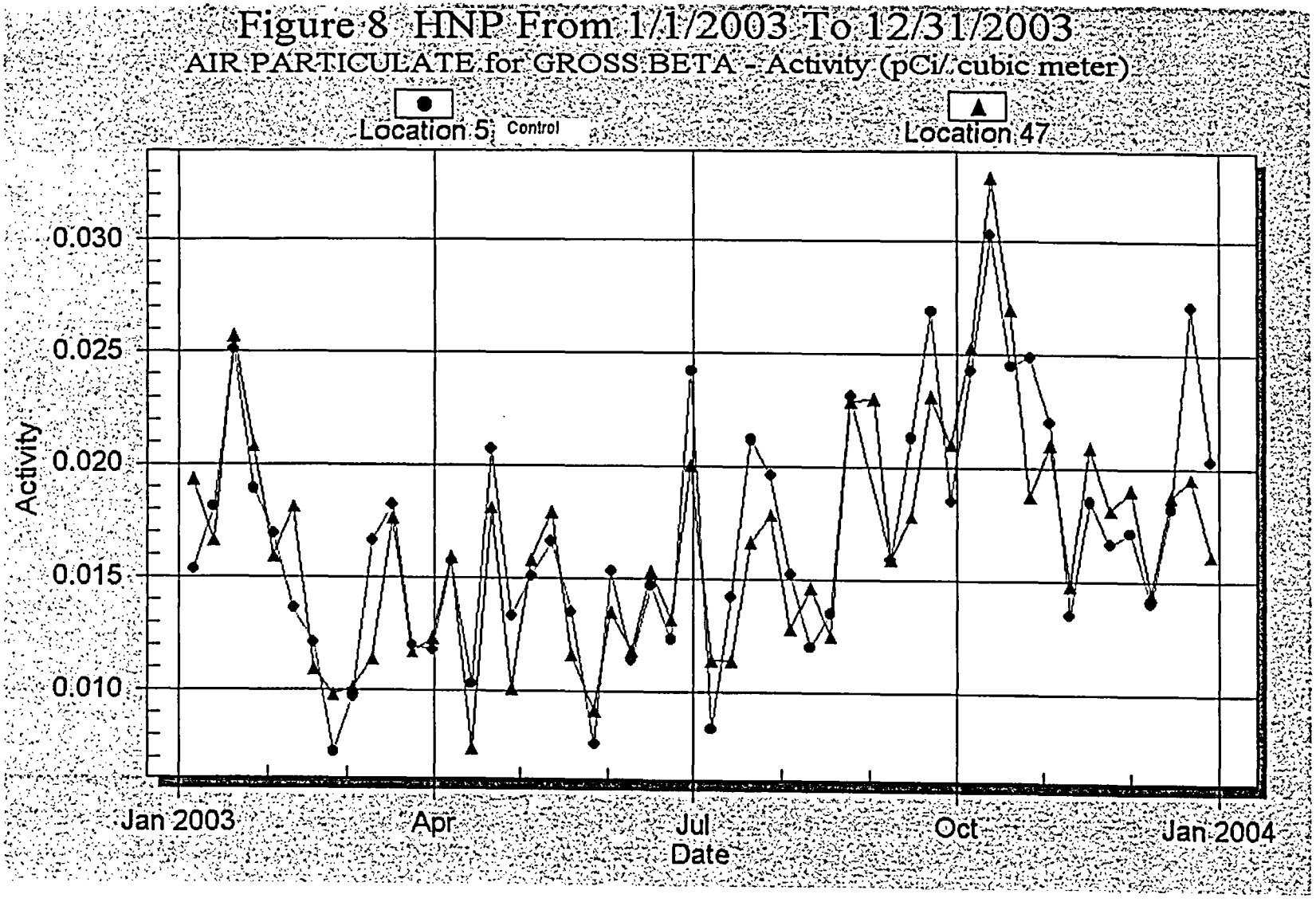


Figure 8 HNP From 1/1/2003 To 12/31/2003
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)
Location 5 Control
Location 47
0.030
0.025
0.020
0.015
0.010
Activity
Jan 2003
Apr
Jul
Oct
Jan 2004
Date

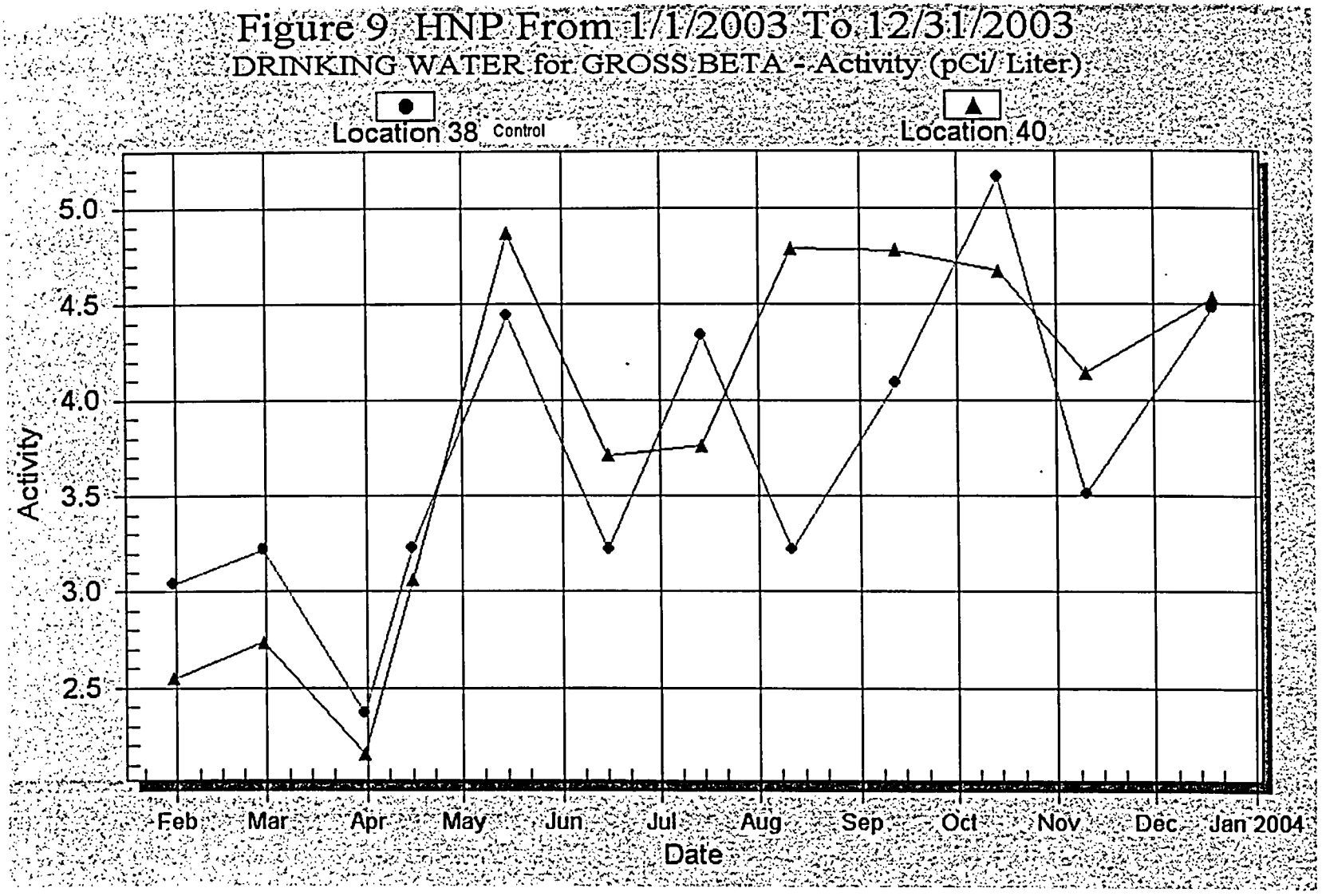


Figure 9 HNP From 1/1/2003 To 12/31/2003
DRINKING WATER for GROSS BETA - Activity (pCi/ Liter)
Location 38 Control
Location 40
5.0
4.5
4.0
3.5
3.0
2.5
Activity
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan 2004
Date

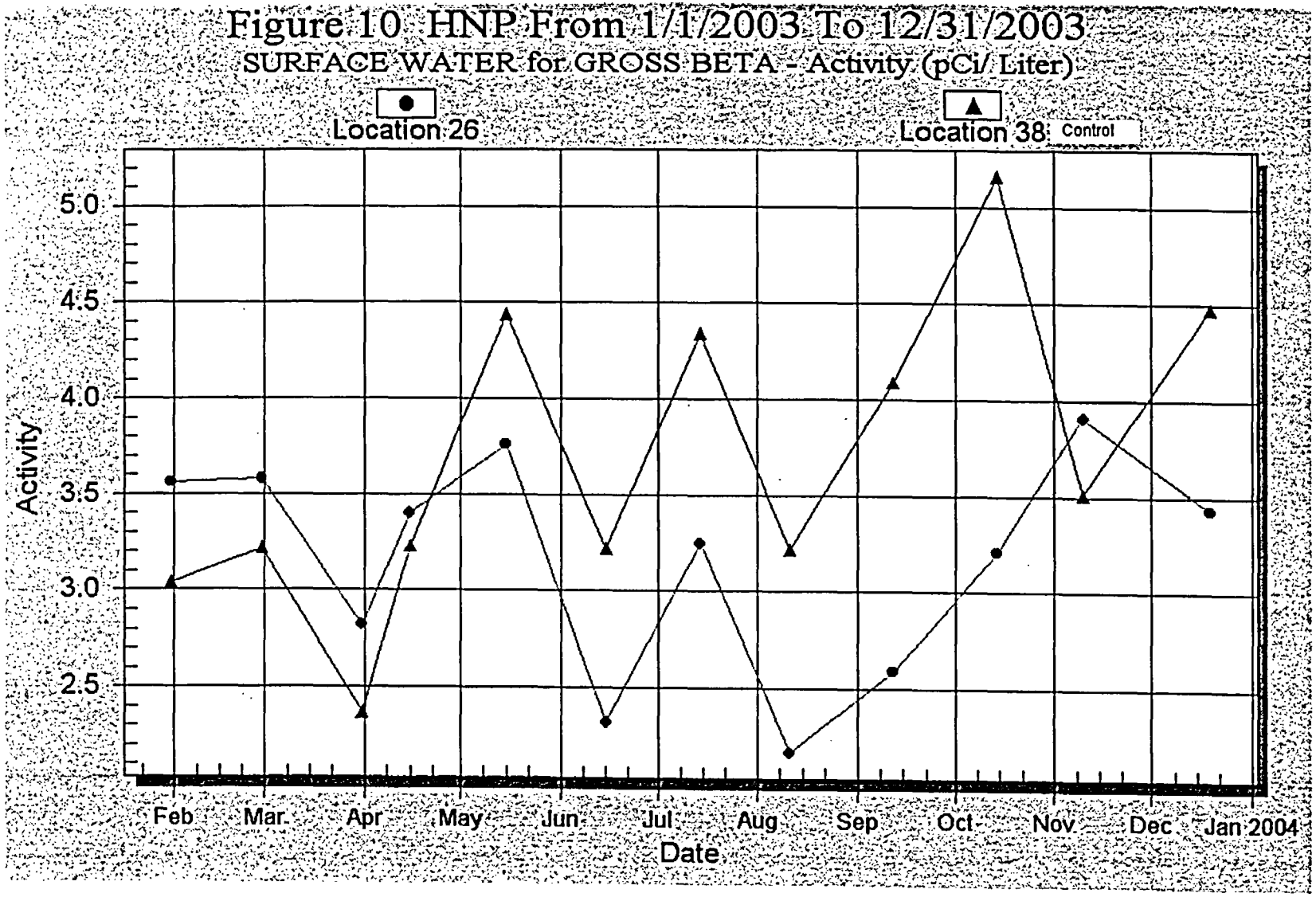


Figure 10 HNP From 1/1/2003 To 12/31/2003
SURFACE WATER for GROSS BETA - Activity (pCi/ Liter)
Location 26
Location 38 Control
5.0
4.5
4.0
3.5
3.0
2.5
Activity
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Jan 2004
Date

Figure 11 HNP 2003 Surface Water Tritium

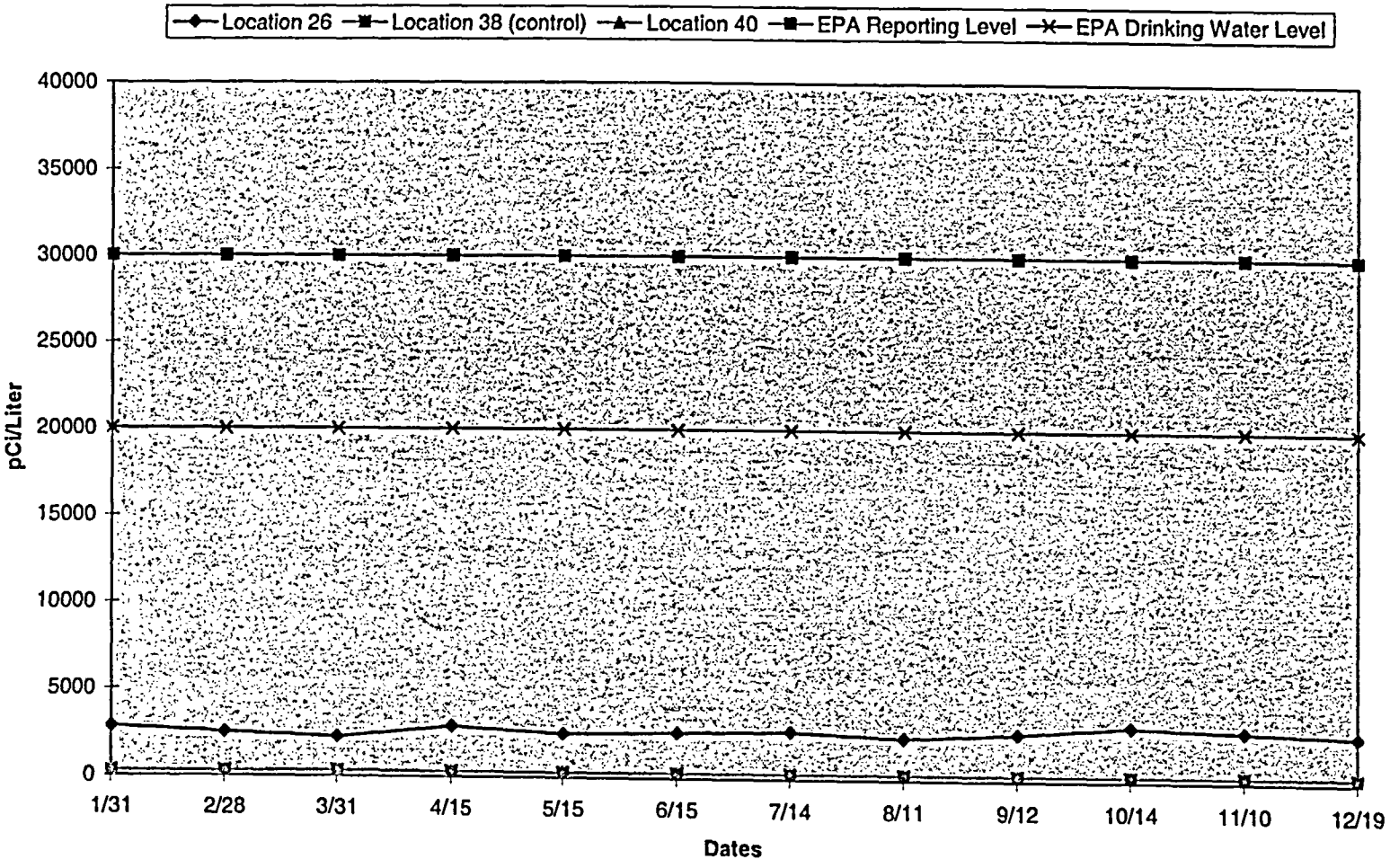
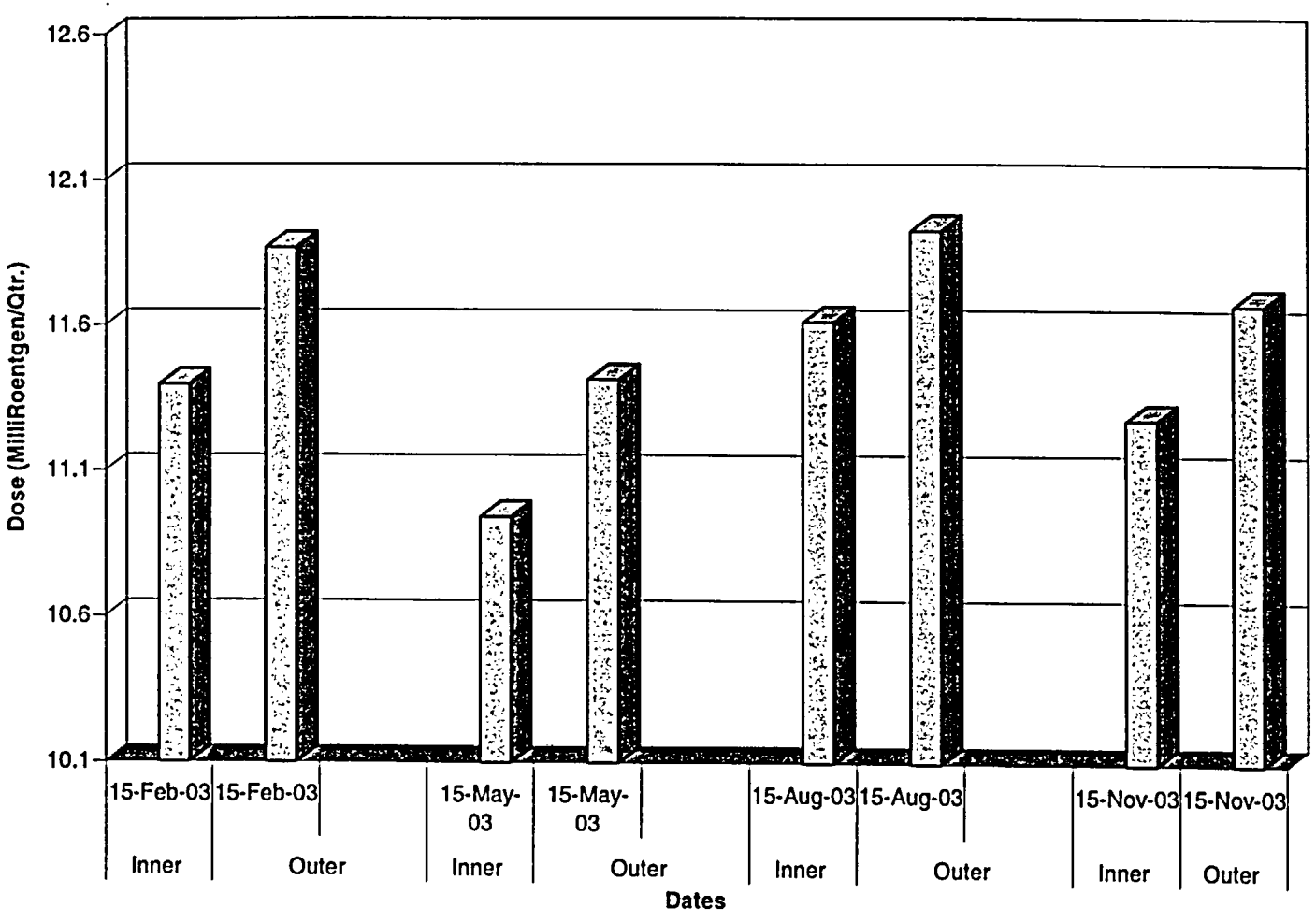


Figure 12 HNP 2003 TLD Averages for Inner and Outer Ring Locations



Data Reports

2003 HNP
Radiological Environmental Monitoring TLD Report

Comments

- None

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	2/15/2003	12.9	1.2
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/15/2003	12.5	1.1
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/15/2003	12.7	1.5
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/15/2003	13.1	0.8
2	SR 1134	2/15/2003	13.5	1.1
2	SR 1134	5/15/2003	13	1.1
2	SR 1134	8/15/2003	14.4	1.6
2	SR 1134	11/15/2003	12.8	0.8
3	HARRIS E&E CENTER - 2.2 MI NE	2/15/2003	11.9	1.4
3	HARRIS E&E CENTER - 2.2 MI NE	5/15/2003	10.9	1
3	HARRIS E&E CENTER - 2.2 MI NE	8/15/2003	11.9	1
3	HARRIS E&E CENTER - 2.2 MI NE	11/15/2003	11	0.7
4	NEW HILL NEAR 1ST BAPTIST CH	2/15/2003	11.4	1.2
4	NEW HILL NEAR 1ST BAPTIST CH	5/15/2003	10.8	0.8
4	NEW HILL NEAR 1ST BAPTIST CH	8/15/2003	11.2	1.6
4	NEW HILL NEAR 1ST BAPTIST CH	11/15/2003	11	0.6
5	PITTSBORO - CONTROL	2/15/2003	14.8	0.7
5	PITTSBORO - CONTROL	5/15/2003	14.1	0.6
5	PITTSBORO - CONTROL	8/15/2003	14.5	0.9
5	PITTSBORO - CONTROL	11/15/2003	14.5	1.3
6	INT OF SR 1134 AND 1135	2/15/2003	11	0.8

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
6	INT OF SR 1134 AND 1135	5/15/2003	10.3	1
6	INT OF SR 1134 AND 1135	8/15/2003	11.4	1.4
6	INT OF SR 1134 AND 1135	11/15/2003	10.5	1.1
7	HOUSE RUINS ON SR 1134	2/15/2003	10.3	1.2
7	HOUSE RUINS ON SR 1134	5/15/2003	9	1
7	HOUSE RUINS ON SR 1134	8/15/2003	10	1.7
7	HOUSE RUINS ON SR 1134	11/15/2003	9.9	0.7
8	DEAD END OF SR 1134	2/15/2003	14	1.6
8	DEAD END OF SR 1134	5/15/2003	11.2	0.9
8	DEAD END OF SR 1134	8/15/2003	13.9	1.3
8	DEAD END OF SR 1134	11/15/2003	12	0.8
9	1 MI SW OF HOLLEMANS XRDS ON SR 1130	2/15/2003	9.3	1
9	1 MI SW OF HOLLEMANS XRDS ON SR 1130	5/15/2003	9.5	1.3
9	1 MI SW OF HOLLEMANS XRDS ON SR 1130	8/15/2003	10.2	1.2
9	1 MI SW OF HOLLEMANS XRDS ON SR 1130	11/15/2003	9.7	1.2
10	2.0 MI SW OF HOLLEMANS XRDS ON SR 1130	2/15/2003	10.7	0.8
10	2.0 MI SW OF HOLLEMANS XRDS ON SR 1130	5/15/2003	10.9	2
10	2.0 MI SW OF HOLLEMANS XRDS ON SR 1130	8/15/2003	11.5	1.6
10	2.0 MI SW OF HOLLEMANS XRDS ON SR 1130	11/15/2003	10.5	0.8
11	EARTHEN DAM AT HARRIS PLANT	2/15/2003	10.2	0.7
11	EARTHEN DAM AT HARRIS PLANT	5/15/2003	10.1	1
11	EARTHEN DAM AT HARRIS PLANT	8/15/2003	10.5	0.8
11	EARTHEN DAM AT HARRIS PLANT	11/15/2003	10.9	1.5
12	1 MI S ON DIRT RD FROM TLD 13	2/15/2003	10.2	0.7

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
12	1 MI S ON DIRT RD FROM TLD 13	5/15/2003	10.2	1.3
12	1 MI S ON DIRT RD FROM TLD 13	8/15/2003	9.8	0.9
12	1 MI S ON DIRT RD FROM TLD 13	11/15/2003	10.5	1.3
13	DIRT RD INT BETWEEN PLANT AND AUX RES	2/15/2003	10.7	0.5
13	DIRT RD INT BETWEEN PLANT AND AUX RES	5/15/2003	10.3	0.9
13	DIRT RD INT BETWEEN PLANT AND AUX RES	8/15/2003	10.4	1.7
13	DIRT RD INT BETWEEN PLANT AND AUX RES	11/15/2003	11	1
14	DEAD END OF SR 1911	2/15/2003	9.9	0.9
14	DEAD END OF SR 1911	5/15/2003	9.3	1
14	DEAD END OF SR 1911	8/15/2003	10.3	1.4
14	DEAD END OF SR 1911	11/15/2003	9.8	0.8
15	CEMETERY ON SR 1911	2/15/2003	10.1	1
15	CEMETERY ON SR 1911	5/15/2003	9.9	0.9
15	CEMETERY ON SR 1911	8/15/2003	9.8	0.8
15	CEMETERY ON SR 1911	11/15/2003	9.6	0.7
16	US 1 AT CHATHAM-WAKE CO LINE	2/15/2003	11.1	1.1
16	US 1 AT CHATHAM-WAKE CO LINE	5/15/2003	11.4	0.8
16	US 1 AT CHATHAM-WAKE CO LINE	8/15/2003	11.5	1.4
16	US 1 AT CHATHAM-WAKE CO LINE	11/15/2003	11.8	0.8
17	INT OF US 1 AND AUX RES	2/15/2003	10.9	0.6
17	INT OF US 1 AND AUX RES	5/15/2003	10.6	0.7
17	INT OF US 1 AND AUX RES	8/15/2003	11.3	1.5
17	INT OF US 1 AND AUX RES	11/15/2003	11.4	1.2
18	0.6 MI N ON US 1 FROM TLD 17	2/15/2003	11.4	0.8

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	5/15/2003	11.7	1.1
18	0.6 MI N ON US 1 FROM TLD 17	8/15/2003	12.5	1.5
18	0.6 MI N ON US 1 FROM TLD 17	11/15/2003	11.9	1.4
19	SR 1142 - OLIVES DAIRY	2/15/2003	10.6	0.8
19	SR 1142 - OLIVES DAIRY	5/15/2003	10.7	1
19	SR 1142 - OLIVES DAIRY	8/15/2003	11.1	1.3
19	SR 1142 - OLIVES DAIRY	11/15/2003	10.9	1.6
20	INT OF SR 1149 AND US 1	2/15/2003	14.1	1
20	INT OF SR 1149 AND US 1	5/15/2003	13.8	0.8
20	INT OF SR 1149 AND US 1	8/15/2003	14.1	1.5
20	INT OF SR 1149 AND US 1	11/15/2003	14	0.6
21	1.3 MI ON SR 1152 FROM INT SR 1153	2/15/2003	12	0.8
21	1.3 MI ON SR 1152 FROM INT SR 1153	5/15/2003	9.7	1.2
21	1.3 MI ON SR 1152 FROM INT SR 1153	8/15/2003	11.4	0.8
21	1.3 MI ON SR 1152 FROM INT SR 1153	11/15/2003	9.3	1.2
22	2.0 MI E OF HOLLEMANS XRDS ON SR 1115	2/15/2003	9.8	0.7
22	2.0 MI E OF HOLLEMANS XRDS ON SR 1115	5/15/2003	10.5	0.7
22	2.0 MI E OF HOLLEMANS XRDS ON SR 1115	8/15/2003	9.8	1
22	2.0 MI E OF HOLLEMANS XRDS ON SR 1115	11/15/2003	10.3	0.6
23	INT SR 1116 AND SR 1127	2/15/2003	11.6	1.1
23	INT SR 1116 AND SR 1127	5/15/2003	11.5	1.2
23	INT SR 1116 AND SR 1127	8/15/2003	12.3	1.8
23	INT SR 1116 AND SR 1127	11/15/2003	11.5	1.2
24	SWEET SPRINGS CHURCH ON SR 1116	2/15/2003	11.2	0.9

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
24	SWEET SPRINGS CHURCH ON SR 1116	5/15/2003	10.9	1.3
24	SWEET SPRINGS CHURCH ON SR 1116	8/15/2003	11.4	1.4
24	SWEET SPRINGS CHURCH ON SR 1116	11/15/2003	10.9	1.4
25	0.2 MI W OF INT OF SR 1401 AND SR 1402	2/15/2003	13.5	0.5
25	0.2 MI W OF INT OF SR 1401 AND SR 1402	5/15/2003	10.4	1
25	0.2 MI W OF INT OF SR 1401 AND SR 1402	8/15/2003	13	1.1
25	0.2 MI W OF INT OF SR 1401 AND SR 1402	11/15/2003	11.7	1
26	SPILLWAY ON MAIN RES	2/15/2003	10.7	0.7
26	SPILLWAY ON MAIN RES	5/15/2003	10.1	0.8
26	SPILLWAY ON MAIN RES	8/15/2003	10.7	1
26	SPILLWAY ON MAIN RES	11/15/2003	10.9	1.4
27	BUCKHORN UNITED METHODIST CH ON NC 42	2/15/2003	9.2	0.9
27	BUCKHORN UNITED METHODIST CH ON NC 42	5/15/2003	9.2	0.6
27	BUCKHORN UNITED METHODIST CH ON NC 42	8/15/2003	9.1	1.6
27	BUCKHORN UNITED METHODIST CH ON NC 42	11/15/2003	9.7	1
28	0.6 MI FROM INT SR 1916 AND SR 1924	2/15/2003	10.2	0.8
28	0.6 MI FROM INT SR 1916 AND SR 1924	5/15/2003	10.1	0.9
28	0.6 MI FROM INT SR 1916 AND SR 1924	8/15/2003	10.8	0.9
28	0.6 MI FROM INT SR 1916 AND SR 1924	11/15/2003	9.8	1
29	NESTE RESIN CORP ON SR 1916	2/15/2003	12.8	0.7
29	NESTE RESIN CORP ON SR 1916	5/15/2003	12.5	1.1
29	NESTE RESIN CORP ON SR 1916	8/15/2003	12.9	1
29	NESTE RESIN CORP ON SR 1916	11/15/2003	12.7	1
30	INT OF SR 1972 AND US 1	2/15/2003	9.9	0.6

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
30	INT OF SR 1972 AND US 1	5/15/2003	10.2	1.7
30	INT OF SR 1972 AND US 1	8/15/2003	9.6	0.8
30	INT OF SR 1972 AND US 1	11/15/2003	10.1	1.2
31	INT OF SR 1910	2/15/2003	11.7	0.6
31	INT OF SR 1910	5/15/2003	9.7	0.9
31	INT OF SR 1910	8/15/2003	12	1.8
31	INT OF SR 1910	11/15/2003	9.6	1.4
32	3 MI ON SR 1008 FROM INT SR 1011	2/15/2003	11.7	0.9
32	3 MI ON SR 1008 FROM INT SR 1011	8/15/2003	11.7	1.7
32	3 MI ON SR 1008 FROM INT SR 1011	11/15/2003	12.6	1.6
33	SR 1142 AT BARRICADE	2/15/2003	10.4	0.7
33	SR 1142 AT BARRICADE	5/15/2003	10.8	0.9
33	SR 1142 AT BARRICADE	8/15/2003	10.8	1.5
33	SR 1142 AT BARRICADE	11/15/2003	11	1.9
34	APEX AT JONES PARK	2/15/2003	14.4	1.1
34	APEX AT JONES PARK	5/15/2003	14.1	1.2
34	APEX AT JONES PARK	8/15/2003	14.6	1.3
34	APEX AT JONES PARK	11/15/2003	14.4	1.1
35	HOLLY SPRINGS ON EARP STREET	2/15/2003	12	0.6
35	HOLLY SPRINGS ON EARP STREET	5/15/2003	12.2	1.1
35	HOLLY SPRINGS ON EARP STREET	8/15/2003	12.8	0.9
35	HOLLY SPRINGS ON EARP STREET	11/15/2003	12.4	1.4
36	INT OF SR 1393 AND SR 1421	2/15/2003	11.3	0.6
36	INT OF SR 1393 AND SR 1421	5/15/2003	10.7	0.6

Dose: mR/std. qtr.

TLD	TLD Location Description	Sample Date	Dose	2 Sigma Error
36	INT OF SR 1393 AND SR 1421	8/15/2003	11.4	1
36	INT OF SR 1393 AND SR 1421	11/15/2003	11.1	0.7
37	FUQUAY VARINA AT OLD CP&L OFFICE	2/15/2003	16.1	1.8
37	FUQUAY VARINA AT OLD CP&L OFFICE	5/15/2003	15.1	1.2
37	FUQUAY VARINA AT OLD CP&L OFFICE	8/15/2003	15.4	1.1
37	FUQUAY VARINA AT OLD CP&L OFFICE	11/15/2003	15.8	1.1
48	SR 1142 AT UNDERGROUND CABLE SIGN	2/15/2003	12.9	1.3
48	SR 1142 AT UNDERGROUND CABLE SIGN	5/15/2003	13.4	1.2
48	SR 1142 AT UNDERGROUND CABLE SIGN	8/15/2003	12.9	1.8
48	SR 1142 AT UNDERGROUND CABLE SIGN	11/15/2003	13.4	1.4
49	SR 1127 AT WAKE CO TRASH COLLECTION AREA	2/15/2003	14.1	0.7
49	SR 1127 AT WAKE CO TRASH COLLECTION AREA	5/15/2003	13.8	1.4
49	SR 1127 AT WAKE CO TRASH COLLECTION AREA	8/15/2003	13.8	1.1
49	SR 1127 AT WAKE CO TRASH COLLECTION AREA	11/15/2003	14	1.5
50	HOLLEMANS CROSSROADS	2/15/2003	10.7	1.1
50	HOLLEMANS CROSSROADS	5/15/2003	9.6	0.5
50	HOLLEMANS CROSSROADS	8/15/2003	11.2	1.6
50	HOLLEMANS CROSSROADS	11/15/2003	10	1.3
53	INTERSECTION OF SR 1972 AND SR 1907	2/15/2003	10.2	1.2
53	INTERSECTION OF SR 1972 AND SR 1907	5/15/2003	10	1.2
53	INTERSECTION OF SR 1972 AND SR 1907	8/15/2003	10.1	1.5
53	INTERSECTION OF SR 1972 AND SR 1907	11/15/2003	10.2	0.6
56	2.8 MI WSW OF THE SITE	2/15/2003	11.4	1
56	2.8 MI WSW OF THE SITE	5/15/2003	10.6	1

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
56	2.8 MI WSW OF THE SITE	8/15/2003	11.4	1.6
56	2.8 MI WSW OF THE SITE	11/15/2003	11.2	0.6
63	0.7 MI SW SECTOR ON (POWER POLE COJ85)	2/15/2003	13.2	0.5
63	0.7 MI SW SECTOR ON (POWER POLE COJ85)	5/15/2003	12.8	1.7
63	0.7 MI SW SECTOR ON (POWER POLE COJ85)	8/15/2003	14	1.9
63	0.7 MI SW SECTOR ON (POWER POLE COJ85)	11/15/2003	12.8	1
67	1.2 MI FROM HNP IN ENE SECTOR	2/15/2003	11.8	1.2
67	1.2 MI FROM HNP IN ENE SECTOR	5/15/2003	12.3	1.1
67	1.2 MI FROM HNP IN ENE SECTOR	8/15/2003	11.8	0.9
67	1.2 MI FROM HNP IN ENE SECTOR	11/15/2003	12.7	0.8

2003 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	1/6/2003	255.4	1.36E-02	3.15E-03	3.66E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	1/13/2003	254.2	1.60E-02	3.46E-03	4.06E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	1/20/2003	258.2	2.21E-02	3.53E-03	3.47E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	1/27/2003	257.3	1.85E-02	3.62E-03	4.14E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/3/2003	253.6	1.89E-02	3.46E-03	3.68E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/10/2003	252.3	1.29E-02	3.22E-03	3.88E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/17/2003	256.9	1.53E-02	3.39E-03	3.99E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/24/2003	248.5	1.05E-02	3.15E-03	4.03E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/3/2003	253.4	1.02E-02	3.09E-03	3.95E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/10/2003	250.7	1.56E-02	3.49E-03	4.14E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/17/2003	251.4	1.71E-02	3.56E-03	4.13E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/24/2003	246.6	1.32E-02	3.29E-03	3.97E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/31/2003	244.7	1.18E-02	3.27E-03	4.09E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/7/2003	303.2	1.49E-02	2.84E-03	3.06E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/14/2003	307.6	1.06E-02	2.49E-03	2.84E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/21/2003	305.8	1.89E-02	2.97E-03	2.86E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/28/2003	260.1	8.75E-03	2.90E-03	3.78E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/5/2003	260.5	1.62E-02	3.34E-03	3.80E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/12/2003	260.1	2.03E-02	3.60E-03	3.92E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/19/2003	261	1.38E-02	3.26E-03	3.91E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/27/2003	299	8.94E-03	2.56E-03	3.19E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/2/2003	222.8	1.31E-02	3.51E-03	4.31E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/9/2003	262.4	1.25E-02	3.12E-03	3.77E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/16/2003	257.6	1.44E-02	3.36E-03	4.04E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/23/2003	260.2	1.34E-02	3.30E-03	4.06E-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	6/30/2003	257.6	2.53E-02	3.96E-03	4.19E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/7/2003	260.9	1.15E-02	3.03E-03	3.71E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/14/2003	258.7	1.36E-02	3.27E-03	3.95E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/21/2003	258.8	1.78E-02	3.49E-03	3.93E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/28/2003	259.6	1.66E-02	3.39E-03	3.85E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/11/2003	216.7	1.29E-02	3.56E-03	4.38E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/18/2003	214.7	1.50E-02	3.86E-03	4.76E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/25/2003	215.2	1.93E-02	4.00E-03	4.53E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/2/2003	244.7	2.82E-02	4.14E-03	4.13E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/8/2003	182.2	1.32E-02	4.12E-03	5.24E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/15/2003	212.9	2.20E-02	4.32E-03	4.94E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/22/2003	215.2	2.58E-02	4.45E-03	4.81E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/29/2003	214.3	2.23E-02	4.25E-03	4.74E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	10/6/2003	273	2.31E-02	3.61E-03	3.70E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	10/13/2003	280.2	3.47E-02	4.12E-03	3.77E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	10/20/2003	290.9	2.19E-02	3.27E-03	3.10E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	10/27/2003	273	2.60E-02	3.60E-03	3.28E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/3/2003	273.2	2.27E-02	3.62E-03	3.78E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/10/2003	275.9	1.34E-02	3.03E-03	3.53E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/17/2003	279.9	1.71E-02	3.24E-03	3.56E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/24/2003	276.4	1.99E-02	3.35E-03	3.45E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/1/2003	285.9	1.86E-02	3.18E-03	3.27E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/8/2003	292.3	1.47E-02	2.94E-03	3.24E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/15/2003	292.3	1.67E-02	3.12E-03	3.41E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/22/2003	291.6	2.89E-02	3.81E-03	3.74E-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	12/29/2003	288.6	1.68E-02	3.07E-03	3.26E-03
2	SR 1134	1/6/2003	290.4	1.16E-02	2.75E-03	3.22E-03
2	SR 1134	1/13/2003	289.4	1.29E-02	2.98E-03	3.56E-03
2	SR 1134	1/20/2003	292.8	1.95E-02	3.11E-03	3.06E-03
2	SR 1134	1/27/2003	291.4	1.94E-02	3.34E-03	3.66E-03
2	SR 1134	2/3/2003	290.8	1.54E-02	2.96E-03	3.21E-03
2	SR 1134	2/10/2003	287.3	1.06E-02	2.78E-03	3.40E-03
2	SR 1134	2/17/2003	292	8.92E-03	2.72E-03	3.51E-03
2	SR 1134	2/24/2003	276.8	1.14E-02	2.95E-03	3.62E-03
2	SR 1134	3/3/2003	283.3	8.61E-03	2.73E-03	3.54E-03
2	SR 1134	3/10/2003	280.5	1.20E-02	3.01E-03	3.70E-03
2	SR 1134	3/17/2003	279.8	1.45E-02	3.15E-03	3.71E-03
2	SR 1134	3/24/2003	276.5	8.91E-03	2.76E-03	3.54E-03
2	SR 1134	3/31/2003	275.6	1.13E-02	2.95E-03	3.64E-03
2	SR 1134	4/7/2003	277.1	1.64E-02	3.11E-03	3.35E-03
2	SR 1134	4/14/2003	279.1	1.03E-02	2.66E-03	3.13E-03
2	SR 1134	4/21/2003	277.6	1.91E-02	3.18E-03	3.15E-03
2	SR 1134	4/28/2003	274.9	1.08E-02	2.90E-03	3.58E-03
2	SR 1134	5/5/2003	274.4	1.45E-02	3.13E-03	3.61E-03
2	SR 1134	5/12/2003	273.4	1.81E-02	3.37E-03	3.73E-03
2	SR 1134	5/19/2003	273.8	1.24E-02	3.06E-03	3.72E-03
2	SR 1134	5/27/2003	313.5	8.76E-03	2.45E-03	3.04E-03
2	SR 1134	6/2/2003	233.7	1.47E-02	3.48E-03	4.11E-03
2	SR 1134	6/9/2003	275.2	1.22E-02	2.99E-03	3.60E-03
2	SR 1134	6/16/2003	269.4	1.10E-02	3.05E-03	3.86E-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	6/23/2003	271.9	1.08E-02	3.05E-03	3.89E-03
2	SR 1134	6/30/2003	268.4	2.05E-02	3.63E-03	4.02E-03
2	SR 1134	7/7/2003	271.7	1.02E-02	2.87E-03	3.56E-03
2	SR 1134	7/14/2003	269.1	1.33E-02	3.16E-03	3.80E-03
2	SR 1134	7/21/2003	268.7	1.34E-02	3.16E-03	3.78E-03
2	SR 1134	7/28/2003	267.5	1.57E-02	3.26E-03	3.73E-03
2	SR 1134	8/4/2003	267.4	1.28E-02	3.23E-03	4.02E-03
2	SR 1134	8/11/2003	266.4	1.32E-02	3.05E-03	3.56E-03
2	SR 1134	8/18/2003	262.4	1.40E-02	3.26E-03	3.90E-03
2	SR 1134	8/25/2003	260.9	2.06E-02	3.54E-03	3.73E-03
2	SR 1134	9/2/2003	296.3	2.68E-02	3.58E-03	3.41E-03
2	SR 1134	9/8/2003	219.7	1.41E-02	3.61E-03	4.35E-03
2	SR 1134	9/15/2003	256.6	1.73E-02	3.54E-03	4.10E-03
2	SR 1134	9/22/2003	259.8	2.47E-02	3.85E-03	3.98E-03
2	SR 1134	9/29/2003	254.2	2.14E-02	3.72E-03	4.00E-03
2	SR 1134	10/6/2003	283.8	1.97E-02	3.35E-03	3.56E-03
2	SR 1134	10/13/2003	288.3	3.08E-02	3.88E-03	3.67E-03
2	SR 1134	10/20/2003	297.1	2.44E-02	3.34E-03	3.04E-03
2	SR 1134	10/27/2003	299.8	2.16E-02	3.18E-03	2.99E-03
2	SR 1134	11/3/2003	306.2	2.14E-02	3.29E-03	3.38E-03
2	SR 1134	11/10/2003	312.1	1.39E-02	2.79E-03	3.12E-03
2	SR 1134	11/17/2003	326	1.73E-02	2.91E-03	3.06E-03
2	SR 1134	11/24/2003	273.6	1.70E-02	3.22E-03	3.49E-03
2	SR 1134	12/1/2003	281.9	1.33E-02	2.92E-03	3.32E-03
2	SR 1134	12/8/2003	286.6	1.33E-02	2.90E-03	3.31E-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	12/15/2003	287.2	1.98E-02	3.31E-03	3.47E-03
2	SR 1134	12/22/2003	287.4	1.84E-02	3.37E-03	3.80E-03
2	SR 1134	12/29/2003	284.8	1.96E-02	3.25E-03	3.31E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/6/2003	280.5	1.88E-02	3.22E-03	3.33E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/13/2003	280.2	1.98E-02	3.41E-03	3.68E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/20/2003	286.1	2.21E-02	3.29E-03	3.13E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/27/2003	285.1	1.85E-02	3.35E-03	3.74E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/3/2003	287.1	1.67E-02	3.06E-03	3.25E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/10/2003	282.9	1.63E-02	3.13E-03	3.46E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/17/2003	287.1	1.25E-02	2.96E-03	3.57E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/24/2003	277.8	1.06E-02	2.89E-03	3.61E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/3/2003	284.1	9.66E-03	2.79E-03	3.53E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/10/2003	282.6	1.80E-02	3.31E-03	3.67E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/17/2003	286.3	1.52E-02	3.14E-03	3.62E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/24/2003	287	1.18E-02	2.85E-03	3.41E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/31/2003	286.7	1.49E-02	3.06E-03	3.49E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/7/2003	283.9	1.62E-02	3.05E-03	3.27E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/14/2003	285.4	1.03E-02	2.62E-03	3.06E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/21/2003	284	2.28E-02	3.32E-03	3.08E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/28/2003	281.2	1.34E-02	3.00E-03	3.50E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/5/2003	281.3	1.66E-02	3.18E-03	3.52E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/12/2003	279.5	1.59E-02	3.20E-03	3.65E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/19/2003	280.1	1.38E-02	3.08E-03	3.64E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/27/2003	319.3	8.74E-03	2.42E-03	2.98E-03
4	NEW HILL NEAR 1ST BAPTIST CH	6/2/2003	239.8	1.47E-02	3.41E-03	4.00E-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	6/9/2003	281.1	1.12E-02	2.88E-03	3.52E-03
4	NEW HILL NEAR 1ST BAPTIST CH	6/16/2003	274.7	1.37E-02	3.16E-03	3.79E-03
4	NEW HILL NEAR 1ST BAPTIST CH	6/23/2003	277.3	1.50E-02	3.23E-03	3.81E-03
4	NEW HILL NEAR 1ST BAPTIST CH	6/30/2003	274.7	2.47E-02	3.76E-03	3.93E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/7/2003	295.1	1.15E-02	2.76E-03	3.28E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/14/2003	258.2	1.38E-02	3.29E-03	3.96E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/21/2003	277	2.21E-02	3.53E-03	3.67E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/28/2003	278.7	1.84E-02	3.31E-03	3.58E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/4/2003	280.6	1.46E-02	3.21E-03	3.83E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/11/2003	281.8	1.32E-02	2.93E-03	3.37E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/18/2003	250	1.49E-02	3.43E-03	4.09E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/25/2003	277.2	2.36E-02	3.54E-03	3.51E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/2/2003	318.8	2.60E-02	3.37E-03	3.17E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/8/2003	236.5	1.71E-02	3.58E-03	4.04E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/15/2003	278.8	2.02E-02	3.47E-03	3.77E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/22/2003	280.3	2.53E-02	3.67E-03	3.69E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/29/2003	268.4	2.30E-02	3.65E-03	3.79E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/6/2003	296.7	2.18E-02	3.35E-03	3.40E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/13/2003	300.4	3.32E-02	3.88E-03	3.52E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/20/2003	308.6	2.22E-02	3.16E-03	2.92E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/27/2003	256.8	2.54E-02	3.72E-03	3.49E-03
4	NEW HILL NEAR 1ST BAPTIST CH	11/3/2003	255.7	2.45E-02	3.88E-03	4.04E-03
4	NEW HILL NEAR 1ST BAPTIST CH	11/10/2003	257.5	1.52E-02	3.29E-03	3.78E-03
4	NEW HILL NEAR 1ST BAPTIST CH	11/17/2003	260.6	1.92E-02	3.52E-03	3.83E-03
4	NEW HILL NEAR 1ST BAPTIST CH	11/24/2003	258.2	2.05E-02	3.54E-03	3.70E-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	12/1/2003	263.7	2.06E-02	3.47E-03	3.55E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/8/2003	271.3	1.38E-02	3.05E-03	3.49E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/15/2003	269.4	1.80E-02	3.37E-03	3.70E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/22/2003	269.2	2.95E-02	4.05E-03	4.05E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/29/2003	266.2	1.64E-02	3.23E-03	3.54E-03
5	PITTSBORO - CONTROL	1/6/2003	278.3	1.53E-02	3.05E-03	3.36E-03
5	PITTSBORO - CONTROL	1/13/2003	281.9	1.81E-02	3.31E-03	3.66E-03
5	PITTSBORO - CONTROL	1/20/2003	286.2	2.51E-02	3.44E-03	3.13E-03
5	PITTSBORO - CONTROL	1/27/2003	285.5	1.89E-02	3.37E-03	3.73E-03
5	PITTSBORO - CONTROL	2/3/2003	286.8	1.69E-02	3.07E-03	3.26E-03
5	PITTSBORO - CONTROL	2/10/2003	279.1	1.36E-02	3.02E-03	3.50E-03
5	PITTSBORO - CONTROL	2/17/2003	287.5	1.21E-02	2.94E-03	3.57E-03
5	PITTSBORO - CONTROL	2/24/2003	279.8	7.29E-03	2.68E-03	3.58E-03
5	PITTSBORO - CONTROL	3/3/2003	283.5	9.68E-03	2.79E-03	3.53E-03
5	PITTSBORO - CONTROL	3/10/2003	282.2	1.66E-02	3.24E-03	3.68E-03
5	PITTSBORO - CONTROL	3/17/2003	285.2	1.82E-02	3.29E-03	3.64E-03
5	PITTSBORO - CONTROL	3/24/2003	281.1	1.20E-02	2.91E-03	3.48E-03
5	PITTSBORO - CONTROL	3/31/2003	283	1.18E-02	2.92E-03	3.54E-03
5	PITTSBORO - CONTROL	4/7/2003	290.7	1.57E-02	2.97E-03	3.19E-03
5	PITTSBORO - CONTROL	4/14/2003	275.3	1.03E-02	2.69E-03	3.18E-03
5	PITTSBORO - CONTROL	4/21/2003	275.9	2.07E-02	3.28E-03	3.17E-03
5	PITTSBORO - CONTROL	4/28/2003	280.8	1.33E-02	3.02E-03	3.54E-03
5	PITTSBORO - CONTROL	5/5/2003	279.4	1.51E-02	3.14E-03	3.58E-03
5	PITTSBORO - CONTROL	5/12/2003	279.5	1.66E-02	3.26E-03	3.69E-03
5	PITTSBORO - CONTROL	5/19/2003	277.1	1.35E-02	3.09E-03	3.68E-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	5/27/2003	317.9	7.67E-03	2.34E-03	2.97E-03
5	PITTSBORO - CONTROL	6/2/2003	238.4	1.53E-02	3.46E-03	4.02E-03
5	PITTSBORO - CONTROL	6/9/2003	279.7	1.14E-02	2.91E-03	3.54E-03
5	PITTSBORO - CONTROL	6/16/2003	273.7	1.47E-02	3.22E-03	3.80E-03
5	PITTSBORO - CONTROL	6/23/2003	277.5	1.23E-02	3.08E-03	3.81E-03
5	PITTSBORO - CONTROL	6/30/2003	275.2	2.42E-02	3.73E-03	3.92E-03
5	PITTSBORO - CONTROL	7/7/2003	272.8	8.36E-03	2.74E-03	3.55E-03
5	PITTSBORO - CONTROL	7/14/2003	273.6	1.42E-02	3.17E-03	3.74E-03
5	PITTSBORO - CONTROL	7/21/2003	268.8	2.12E-02	3.56E-03	3.78E-03
5	PITTSBORO - CONTROL	7/28/2003	272.9	1.96E-02	3.42E-03	3.66E-03
5	PITTSBORO - CONTROL	8/4/2003	271.1	1.52E-02	3.32E-03	3.96E-03
5	PITTSBORO - CONTROL	8/11/2003	273.6	1.20E-02	2.93E-03	3.47E-03
5	PITTSBORO - CONTROL	8/18/2003	263.2	1.35E-02	3.22E-03	3.88E-03
5	PITTSBORO - CONTROL	8/25/2003	262.5	2.31E-02	3.66E-03	3.71E-03
5	PITTSBORO - CONTROL	9/8/2003	229.3	1.59E-02	3.59E-03	4.17E-03
5	PITTSBORO - CONTROL	9/15/2003	270.8	2.13E-02	3.60E-03	3.88E-03
5	PITTSBORO - CONTROL	9/22/2003	275.7	2.69E-02	3.79E-03	3.75E-03
5	PITTSBORO - CONTROL	9/29/2003	275.3	1.85E-02	3.37E-03	3.69E-03
5	PITTSBORO - CONTROL	10/6/2003	282.7	2.43E-02	3.58E-03	3.57E-03
5	PITTSBORO - CONTROL	10/13/2003	284.5	3.03E-02	3.89E-03	3.71E-03
5	PITTSBORO - CONTROL	10/20/2003	288.3	2.45E-02	3.41E-03	3.13E-03
5	PITTSBORO - CONTROL	10/27/2003	290.2	2.49E-02	3.41E-03	3.08E-03
5	PITTSBORO - CONTROL	11/3/2003	290.3	2.20E-02	3.44E-03	3.56E-03
5	PITTSBORO - CONTROL	11/10/2003	290.2	1.35E-02	2.92E-03	3.35E-03
5	PITTSBORO - CONTROL	11/17/2003	292.3	1.85E-02	3.21E-03	3.41E-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	11/24/2003	297.7	1.66E-02	3.01E-03	3.21E-03
5	PITTSBORO - CONTROL	12/1/2003	297.9	1.71E-02	3.01E-03	3.14E-03
5	PITTSBORO - CONTROL	12/8/2003	306	1.40E-02	2.80E-03	3.10E-03
5	PITTSBORO - CONTROL	12/15/2003	304.3	1.82E-02	3.10E-03	3.28E-03
5	PITTSBORO - CONTROL	12/22/2003	302.8	2.71E-02	3.64E-03	3.60E-03
5	PITTSBORO - CONTROL	12/29/2003	299.5	2.03E-02	3.17E-03	3.14E-03
26	SPILLWAY ON MAIN RES	1/6/2003	282.6	1.55E-02	3.03E-03	3.31E-03
26	SPILLWAY ON MAIN RES	1/13/2003	283.2	1.46E-02	3.12E-03	3.64E-03
26	SPILLWAY ON MAIN RES	1/20/2003	290.8	2.03E-02	3.17E-03	3.08E-03
26	SPILLWAY ON MAIN RES	1/27/2003	290.8	1.98E-02	3.37E-03	3.66E-03
26	SPILLWAY ON MAIN RES	2/3/2003	286.6	1.68E-02	3.07E-03	3.26E-03
26	SPILLWAY ON MAIN RES	2/10/2003	282	1.57E-02	3.11E-03	3.47E-03
26	SPILLWAY ON MAIN RES	2/17/2003	290.5	1.36E-02	3.00E-03	3.53E-03
26	SPILLWAY ON MAIN RES	2/24/2003	282	9.40E-03	2.79E-03	3.55E-03
26	SPILLWAY ON MAIN RES	3/3/2003	287.2	8.99E-03	2.72E-03	3.49E-03
26	SPILLWAY ON MAIN RES	3/10/2003	283.7	1.46E-02	3.13E-03	3.66E-03
26	SPILLWAY ON MAIN RES	3/17/2003	285.7	1.88E-02	3.32E-03	3.63E-03
26	SPILLWAY ON MAIN RES	3/24/2003	285.8	1.19E-02	2.87E-03	3.42E-03
26	SPILLWAY ON MAIN RES	3/31/2003	286.8	1.24E-02	2.93E-03	3.49E-03
26	SPILLWAY ON MAIN RES	4/7/2003	280.3	1.74E-02	3.14E-03	3.31E-03
26	SPILLWAY ON MAIN RES	4/14/2003	289.1	1.07E-02	2.62E-03	3.03E-03
26	SPILLWAY ON MAIN RES	4/21/2003	281.9	2.16E-02	3.28E-03	3.10E-03
26	SPILLWAY ON MAIN RES	4/28/2003	284.2	1.17E-02	2.88E-03	3.46E-03
26	SPILLWAY ON MAIN RES	5/5/2003	279.5	1.80E-02	3.27E-03	3.54E-03
26	SPILLWAY ON MAIN RES	5/12/2003	279.9	1.74E-02	3.28E-03	3.64E-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	5/19/2003	285.2	1.31E-02	3.03E-03	3.61E-03
26	SPILLWAY ON MAIN RES	5/27/2003	324	1.06E-02	2.50E-03	2.94E-03
26	SPILLWAY ON MAIN RES	6/2/2003	242.9	1.46E-02	3.37E-03	3.95E-03
26	SPILLWAY ON MAIN RES	6/9/2003	283.6	1.31E-02	2.97E-03	3.49E-03
26	SPILLWAY ON MAIN RES	6/16/2003	278.2	1.29E-02	3.09E-03	3.74E-03
26	SPILLWAY ON MAIN RES	6/23/2003	281.9	1.40E-02	3.14E-03	3.75E-03
26	SPILLWAY ON MAIN RES	6/30/2003	280.2	2.34E-02	3.65E-03	3.85E-03
26	SPILLWAY ON MAIN RES	7/7/2003	281	1.19E-02	2.89E-03	3.45E-03
26	SPILLWAY ON MAIN RES	7/14/2003	282.1	1.24E-02	3.00E-03	3.62E-03
26	SPILLWAY ON MAIN RES	7/21/2003	279.4	1.94E-02	3.38E-03	3.64E-03
26	SPILLWAY ON MAIN RES	7/28/2003	282.5	1.76E-02	3.23E-03	3.53E-03
26	SPILLWAY ON MAIN RES	8/4/2003	280.8	1.35E-02	3.15E-03	3.82E-03
26	SPILLWAY ON MAIN RES	8/11/2003	282.6	1.13E-02	2.82E-03	3.36E-03
26	SPILLWAY ON MAIN RES	8/18/2003	278.2	1.81E-02	3.33E-03	3.68E-03
26	SPILLWAY ON MAIN RES	8/25/2003	281.9	2.11E-02	3.38E-03	3.46E-03
26	SPILLWAY ON MAIN RES	9/2/2003	321	2.48E-02	3.31E-03	3.15E-03
26	SPILLWAY ON MAIN RES	9/8/2003	241.3	1.16E-02	3.21E-03	3.96E-03
26	SPILLWAY ON MAIN RES	9/15/2003	284.7	1.78E-02	3.30E-03	3.69E-03
26	SPILLWAY ON MAIN RES	9/22/2003	282.8	2.40E-02	3.59E-03	3.66E-03
26	SPILLWAY ON MAIN RES	9/29/2003	279.4	2.48E-02	3.64E-03	3.64E-03
26	SPILLWAY ON MAIN RES	10/6/2003	289.7	2.26E-02	3.44E-03	3.49E-03
26	SPILLWAY ON MAIN RES	10/13/2003	316.2	3.23E-02	3.71E-03	3.34E-03
26	SPILLWAY ON MAIN RES	10/20/2003	340.2	2.27E-02	2.98E-03	2.65E-03
26	SPILLWAY ON MAIN RES	10/27/2003	271.4	2.51E-02	3.57E-03	3.30E-03
26	SPILLWAY ON MAIN RES	11/3/2003	275.7	2.41E-02	3.67E-03	3.75E-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	11/10/2003	276.8	1.48E-02	3.10E-03	3.52E-03
26	SPILLWAY ON MAIN RES	11/17/2003	280.2	1.98E-02	3.37E-03	3.56E-03
26	SPILLWAY ON MAIN RES	11/24/2003	280	2.23E-02	3.44E-03	3.41E-03
26	SPILLWAY ON MAIN RES	12/1/2003	279	1.94E-02	3.27E-03	3.35E-03
26	SPILLWAY ON MAIN RES	12/8/2003	287.1	1.30E-02	2.88E-03	3.30E-03
26	SPILLWAY ON MAIN RES	12/15/2003	286.3	1.94E-02	3.30E-03	3.49E-03
26	SPILLWAY ON MAIN RES	12/22/2003	286.2	2.94E-02	3.88E-03	3.81E-03
26	SPILLWAY ON MAIN RES	12/29/2003	281.5	1.63E-02	3.10E-03	3.34E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/6/2003	308	1.93E-02	3.04E-03	3.03E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/13/2003	314.6	1.66E-02	2.99E-03	3.28E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/20/2003	320.2	2.57E-02	3.23E-03	2.79E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/27/2003	322.6	2.08E-02	3.17E-03	3.30E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/3/2003	321.2	1.59E-02	2.78E-03	2.91E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/10/2003	266.8	1.81E-02	3.36E-03	3.67E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/17/2003	280	1.09E-02	2.93E-03	3.66E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/24/2003	268	9.80E-03	2.93E-03	3.74E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/3/2003	272.7	1.01E-02	2.90E-03	3.67E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/10/2003	271.3	1.14E-02	3.05E-03	3.82E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/17/2003	273	1.76E-02	3.37E-03	3.80E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/24/2003	267.4	1.17E-02	3.00E-03	3.66E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/31/2003	269.1	1.23E-02	3.07E-03	3.72E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/7/2003	286.7	1.59E-02	3.01E-03	3.24E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/14/2003	293.3	7.44E-03	2.38E-03	2.98E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/21/2003	285.2	1.81E-02	3.07E-03	3.07E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/28/2003	287.6	1.01E-02	2.76E-03	3.42E-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	5/5/2003	286	1.58E-02	3.10E-03	3.46E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/12/2003	284.6	1.79E-02	3.26E-03	3.58E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/19/2003	284.3	1.16E-02	2.93E-03	3.59E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/27/2003	328.2	9.15E-03	2.39E-03	2.90E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/2/2003	246.2	1.35E-02	3.28E-03	3.90E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/9/2003	287.5	1.18E-02	2.87E-03	3.44E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/16/2003	282.3	1.53E-02	3.18E-03	3.68E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/23/2003	286	1.32E-02	3.06E-03	3.70E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/30/2003	284.3	2.00E-02	3.46E-03	3.80E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/7/2003	285.1	1.14E-02	2.83E-03	3.40E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/14/2003	286.5	1.14E-02	2.91E-03	3.57E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/21/2003	283.3	1.66E-02	3.20E-03	3.59E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/28/2003	286.2	1.78E-02	3.22E-03	3.49E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/4/2003	283.8	1.28E-02	3.08E-03	3.78E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/11/2003	285.2	1.46E-02	2.98E-03	3.33E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/18/2003	280	1.25E-02	3.02E-03	3.65E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/25/2003	283.1	2.29E-02	3.46E-03	3.44E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/2/2003	321.4	2.30E-02	3.22E-03	3.14E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/8/2003	240.6	1.59E-02	3.47E-03	3.97E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/15/2003	282.4	1.78E-02	3.32E-03	3.72E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/22/2003	269.2	2.31E-02	3.67E-03	3.84E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/29/2003	269.9	2.10E-02	3.54E-03	3.77E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/6/2003	271	2.53E-02	3.73E-03	3.73E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/13/2003	274.5	3.28E-02	4.10E-03	3.85E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/20/2003	278.1	2.70E-02	3.61E-03	3.24E-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	10/27/2003	280.5	1.87E-02	3.17E-03	3.19E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/3/2003	284.2	2.10E-02	3.45E-03	3.64E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/10/2003	285.2	1.48E-02	3.03E-03	3.41E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/17/2003	290.2	2.09E-02	3.34E-03	3.44E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/24/2003	288	1.81E-02	3.16E-03	3.31E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/1/2003	289.3	1.90E-02	3.17E-03	3.23E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/8/2003	297.9	1.44E-02	2.88E-03	3.18E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/15/2003	297.7	1.87E-02	3.17E-03	3.35E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/22/2003	296.7	1.95E-02	3.35E-03	3.68E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/29/2003	292.5	1.61E-02	3.00E-03	3.22E-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	1/31/2003	1.00	3.04E+00	7.75E-01	8.71E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/28/2003	1.00	3.22E+00	8.43E-01	9.76E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/31/2003	1.00	2.37E+00	7.15E-01	8.51E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/15/2003	1.00	3.23E+00	7.64E-01	8.25E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/15/2003	1.00	4.44E+00	8.52E-01	8.07E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/15/2003	1.00	3.22E+00	8.48E-01	9.94E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2003	1.00	4.34E+00	8.90E-01	8.80E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2003	1.00	3.22E+00	7.80E-01	8.53E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/12/2003	1.00	4.09E+00	8.37E-01	8.41E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/14/2003	1.00	5.16E+00	9.51E-01	9.34E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2003	1.00	3.51E+00	8.24E-01	8.97E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/19/2003	1.00	4.48E+00	9.27E-01	9.82E-01
40	LILLINGTON - CAPE FEAR RIVER	1/31/2003	1.00	2.55E+00	7.33E-01	8.58E-01
40	LILLINGTON - CAPE FEAR RIVER	2/28/2003	1.00	2.74E+00	7.97E-01	9.55E-01
40	LILLINGTON - CAPE FEAR RIVER	3/31/2003	1.00	2.16E+00	6.98E-01	8.48E-01
40	LILLINGTON - CAPE FEAR RIVER	4/15/2003	1.00	3.06E+00	7.66E-01	8.44E-01
40	LILLINGTON - CAPE FEAR RIVER	5/15/2003	1.00	4.87E+00	9.16E-01	8.59E-01
40	LILLINGTON - CAPE FEAR RIVER	6/15/2003	1.00	3.71E+00	8.77E-01	9.91E-01
40	LILLINGTON - CAPE FEAR RIVER	7/14/2003	1.00	3.76E+00	8.29E-01	8.48E-01
40	LILLINGTON - CAPE FEAR RIVER	8/11/2003	1.00	4.79E+00	8.98E-01	8.79E-01
40	LILLINGTON - CAPE FEAR RIVER	9/12/2003	1.00	4.78E+00	8.96E-01	8.64E-01
40	LILLINGTON - CAPE FEAR RIVER	10/14/2003	1.00	4.67E+00	9.14E-01	9.22E-01
40	LILLINGTON - CAPE FEAR RIVER	11/10/2003	1.00	4.14E+00	9.27E-01	9.90E-01
40	LILLINGTON - CAPE FEAR RIVER	12/19/2003	1.00	4.53E+00	9.14E-01	9.58E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/31/2003	1.00	3.30E+00	8.12E-01	9.00E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/28/2003	1.00	3.42E+00	8.59E-01	9.79E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/31/2003	1.00	2.65E+00	7.74E-01	9.11E-01

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	4/15/2003	1.00	3.40E+00	8.23E-01	8.97E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/15/2003	1.00	2.61E+00	7.31E-01	8.17E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/15/2003	1.00	2.40E+00	7.85E-01	9.82E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/14/2003	1.00	2.98E+00	7.92E-01	8.75E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/11/2003	1.00	2.82E+00	8.07E-01	9.38E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/12/2003	1.00	2.87E+00	8.22E-01	9.45E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/14/2003	1.00	3.08E+00	8.34E-01	9.58E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/10/2003	1.00	1.86E+00	7.16E-01	9.13E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/19/2003	1.00	2.47E+00	7.68E-01	9.38E-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*
26	SPILLWAY ON MAIN RES	1/31/2003	1.00	3.56E+00	7.96E-01	8.51E-01
26	SPILLWAY ON MAIN RES	2/28/2003	1.00	3.58E+00	8.24E-01	9.11E-01
26	SPILLWAY ON MAIN RES	3/31/2003	1.00	2.82E+00	7.44E-01	8.46E-01
26	SPILLWAY ON MAIN RES	4/15/2003	1.00	3.40E+00	7.74E-01	8.22E-01
26	SPILLWAY ON MAIN RES	5/15/2003	1.00	3.76E+00	7.71E-01	7.54E-01
26	SPILLWAY ON MAIN RES	6/15/2003	1.00	2.32E+00	7.35E-01	9.11E-01
26	SPILLWAY ON MAIN RES	7/14/2003	1.00	3.25E+00	7.44E-01	7.73E-01
26	SPILLWAY ON MAIN RES	8/11/2003	1.00	2.17E+00	6.70E-01	7.97E-01
26	SPILLWAY ON MAIN RES	9/12/2003	1.00	2.59E+00	6.99E-01	7.87E-01
26	SPILLWAY ON MAIN RES	10/14/2003	1.00	3.21E+00	7.70E-01	8.46E-01
26	SPILLWAY ON MAIN RES	11/10/2003	1.00	3.91E+00	8.09E-01	8.36E-01
26	SPILLWAY ON MAIN RES	12/19/2003	1.00	3.43E+00	7.98E-01	8.85E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/31/2003	1.00	3.04E+00	7.75E-01	8.71E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/28/2003	1.00	3.22E+00	8.43E-01	9.76E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/31/2003	1.00	2.37E+00	7.15E-01	8.51E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/15/2003	1.00	3.23E+00	7.64E-01	8.25E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/15/2003	1.00	4.44E+00	8.52E-01	8.07E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/15/2003	1.00	3.22E+00	8.48E-01	9.94E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2003	1.00	4.34E+00	8.90E-01	8.80E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2003	1.00	3.22E+00	7.80E-01	8.53E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/12/2003	1.00	4.09E+00	8.37E-01	8.41E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/14/2003	1.00	5.16E+00	9.51E-01	9.34E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2003	1.00	3.51E+00	8.24E-01	8.97E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/19/2003	1.00	4.48E+00	9.27E-01	9.82E-01
40	LILLINGTON - CAPE FEAR RIVER	1/31/2003	1.00	2.55E+00	7.33E-01	8.58E-01
40	LILLINGTON - CAPE FEAR RIVER	2/28/2003	1.00	2.74E+00	7.97E-01	9.55E-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	3/31/2003	1.00	2.16E+00	6.98E-01	8.48E-01
40	LILLINGTON - CAPE FEAR RIVER	4/15/2003	1.00	3.06E+00	7.66E-01	8.44E-01
40	LILLINGTON - CAPE FEAR RIVER	5/15/2003	1.00	4.87E+00	9.16E-01	8.59E-01
40	LILLINGTON - CAPE FEAR RIVER	6/15/2003	1.00	3.71E+00	8.77E-01	9.91E-01
40	LILLINGTON - CAPE FEAR RIVER	7/14/2003	1.00	3.76E+00	8.29E-01	8.48E-01
40	LILLINGTON - CAPE FEAR RIVER	8/11/2003	1.00	4.79E+00	8.98E-01	8.79E-01
40	LILLINGTON - CAPE FEAR RIVER	9/12/2003	1.00	4.78E+00	8.96E-01	8.64E-01
40	LILLINGTON - CAPE FEAR RIVER	10/14/2003	1.00	4.67E+00	9.14E-01	9.22E-01
40	LILLINGTON - CAPE FEAR RIVER	11/10/2003	1.00	4.14E+00	9.27E-01	9.90E-01
40	LILLINGTON - CAPE FEAR RIVER	12/19/2003	1.00	4.53E+00	9.14E-01	9.58E-01

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	1/6/2003	255.40	<LLD		4.03E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	1/13/2003	254.20	<LLD		1.98E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	1/20/2003	258.20	<LLD		3.67E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	1/27/2003	257.30	<LLD		2.74E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/3/2003	253.60	<LLD		4.34E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/10/2003	252.30	<LLD		3.41E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/17/2003	256.90	<LLD		3.20E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	2/24/2003	248.50	<LLD		3.04E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/3/2003	253.40	<LLD		2.04E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/10/2003	250.70	<LLD		2.20E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/17/2003	251.40	<LLD		2.83E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/24/2003	246.60	<LLD		2.03E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	3/31/2003	244.70	<LLD		3.07E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/7/2003	303.20	<LLD		2.55E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/14/2003	307.60	<LLD		2.57E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/21/2003	305.80	<LLD		2.52E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	4/28/2003	260.10	<LLD		3.02E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/5/2003	260.50	<LLD		2.41E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/12/2003	260.10	<LLD		2.83E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/19/2003	261.00	<LLD		3.81E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/27/2003	299.00	<LLD		3.36E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/2/2003	222.80	<LLD		3.38E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/9/2003	262.40	<LLD		2.97E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/16/2003	257.60	<LLD		4.84E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/23/2003	260.20	<LLD		2.80E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	6/30/2003	257.60	<LLD		2.82E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/7/2003	260.90	<LLD		2.12E-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	7/14/2003	258.70	<LLD		2.34E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/21/2003	258.80	<LLD		2.71E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	7/28/2003	259.60	<LLD		2.52E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/4/2003	237.00	<LLD		3.04E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/11/2003	216.70	<LLD		3.17E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/18/2003	214.70	<LLD		2.65E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/25/2003	215.20	<LLD		4.76E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/2/2003	244.70	<LLD		4.03E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/8/2003	182.20	<LLD		3.77E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/15/2003	212.90	<LLD		3.45E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/22/2003	215.20	<LLD		3.64E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	9/29/2003	214.30	<LLD		3.68E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	10/6/2003	273.00	<LLD		2.41E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	10/13/2003	280.20	<LLD		2.73E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	10/20/2003	290.90	<LLD		2.64E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	10/27/2003	273.00	<LLD		4.83E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/3/2003	273.20	<LLD		2.80E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/10/2003	275.90	<LLD		2.84E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/17/2003	279.90	<LLD		2.79E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/24/2003	276.40	<LLD		2.48E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/1/2003	285.90	<LLD		2.83E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/8/2003	292.30	<LLD		3.00E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/15/2003	292.30	<LLD		2.67E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/22/2003	291.60	<LLD		2.68E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	12/29/2003	288.60	<LLD		3.30E-02
2	SR 1134	1/6/2003	290.40	<LLD		3.21E-02
2	SR 1134	1/13/2003	289.40	<LLD		3.53E-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	1/20/2003	292.80	<LLD		4.26E-02
2	SR 1134	1/27/2003	291.40	<LLD		3.45E-02
2	SR 1134	2/3/2003	290.80	<LLD		4.97E-02
2	SR 1134	2/10/2003	287.30	<LLD		4.68E-02
2	SR 1134	2/17/2003	292.00	<LLD		4.35E-02
2	SR 1134	2/24/2003	276.80	<LLD		4.34E-02
2	SR 1134	3/3/2003	283.30	<LLD		3.10E-02
2	SR 1134	3/10/2003	280.50	<LLD		2.73E-02
2	SR 1134	3/17/2003	279.80	<LLD		2.79E-02
2	SR 1134	3/24/2003	276.50	<LLD		3.18E-02
2	SR 1134	3/31/2003	275.60	<LLD		3.76E-02
2	SR 1134	4/7/2003	277.10	<LLD		2.95E-02
2	SR 1134	4/14/2003	279.10	<LLD		3.64E-02
2	SR 1134	4/21/2003	277.60	<LLD		3.15E-02
2	SR 1134	4/28/2003	274.90	<LLD		3.26E-02
2	SR 1134	5/5/2003	274.40	<LLD		3.12E-02
2	SR 1134	5/12/2003	273.40	<LLD		3.18E-02
2	SR 1134	5/19/2003	273.80	<LLD		3.93E-02
2	SR 1134	5/27/2003	313.50	<LLD		3.77E-02
2	SR 1134	6/2/2003	233.70	<LLD		3.80E-02
2	SR 1134	6/9/2003	275.20	<LLD		3.19E-02
2	SR 1134	6/16/2003	269.40	<LLD		4.38E-02
2	SR 1134	6/23/2003	271.90	<LLD		2.92E-02
2	SR 1134	6/30/2003	268.40	<LLD		2.91E-02
2	SR 1134	7/7/2003	271.70	<LLD		3.44E-02
2	SR 1134	7/14/2003	269.10	<LLD		3.66E-02
2	SR 1134	7/21/2003	268.70	<LLD		3.98E-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	7/28/2003	267.50	<LLD		3.08E-02
2	SR 1134	8/4/2003	267.40	<LLD		4.02E-02
2	SR 1134	8/11/2003	266.40	<LLD		3.25E-02
2	SR 1134	8/18/2003	262.40	<LLD		3.82E-02
2	SR 1134	8/25/2003	260.90	<LLD		3.44E-02
2	SR 1134	9/2/2003	296.30	<LLD		4.43E-02
2	SR 1134	9/8/2003	233.70	<LLD		4.22E-02
2	SR 1134	9/15/2003	256.60	<LLD		3.76E-02
2	SR 1134	9/22/2003	259.80	<LLD		4.40E-02
2	SR 1134	9/29/2003	254.20	<LLD		4.09E-02
2	SR 1134	10/6/2003	283.80	<LLD		1.43E-02
2	SR 1134	10/13/2003	288.30	<LLD		3.83E-02
2	SR 1134	10/20/2003	297.10	<LLD		2.86E-02
2	SR 1134	10/27/2003	299.80	<LLD		2.84E-02
2	SR 1134	11/3/2003	306.20	<LLD		3.48E-02
2	SR 1134	11/10/2003	312.10	<LLD		2.80E-02
2	SR 1134	11/17/2003	326.00	<LLD		3.13E-02
2	SR 1134	11/24/2003	273.60	<LLD		3.38E-02
2	SR 1134	12/1/2003	281.90	<LLD		2.82E-02
2	SR 1134	12/8/2003	286.60	<LLD		2.42E-02
2	SR 1134	12/15/2003	287.20	<LLD		3.43E-02
2	SR 1134	12/22/2003	287.40	<LLD		3.52E-02
2	SR 1134	12/29/2003	284.80	<LLD		3.90E-02
4	NEW HILL NEAR 1ST BAPTIST CH	1/6/2003	280.50	<LLD		3.87E-02
4	NEW HILL NEAR 1ST BAPTIST CH	1/13/2003	280.20	<LLD		4.80E-02
4	NEW HILL NEAR 1ST BAPTIST CH	1/20/2003	286.10	<LLD		2.73E-02
4	NEW HILL NEAR 1ST BAPTIST CH	1/27/2003	285.10	<LLD		3.86E-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	2/3/2003	287.10	<LLD		2.33E-02
4	NEW HILL NEAR 1ST BAPTIST CH	2/10/2003	282.90	<LLD		3.31E-02
4	NEW HILL NEAR 1ST BAPTIST CH	2/17/2003	287.10	<LLD		4.13E-02
4	NEW HILL NEAR 1ST BAPTIST CH	2/24/2003	277.80	<LLD		3.12E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/3/2003	284.10	<LLD		4.98E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/10/2003	282.60	<LLD		4.65E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/17/2003	286.30	<LLD		3.71E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/24/2003	287.00	<LLD		3.80E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/31/2003	286.70	<LLD		3.89E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/7/2003	283.90	<LLD		3.46E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/14/2003	285.40	<LLD		4.88E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/21/2003	284.00	<LLD		3.90E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/28/2003	281.20	<LLD		4.82E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/5/2003	281.30	<LLD		3.95E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/12/2003	279.50	<LLD		4.23E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/19/2003	280.10	<LLD		2.28E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/27/2003	319.30	<LLD		1.63E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/2/2003	239.80	<LLD		5.04E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/9/2003	281.10	<LLD		5.58E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/16/2003	274.70	<LLD		3.27E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/23/2003	277.30	<LLD		2.72E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/30/2003	274.70	<LLD		3.01E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/7/2003	295.10	<LLD		3.35E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/14/2003	258.20	<LLD		2.94E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/21/2003	277.00	<LLD		2.45E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/28/2003	278.70	<LLD		4.24E-02
4	NEW HILL NEAR 1ST BAPTIST CH	8/4/2003	280.60	<LLD		2.90E-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	8/11/2003	281.80	<LLD		4.66E-02
4	NEW HILL NEAR 1ST BAPTIST CH	8/18/2003	250.00	<LLD		6.29E-02
4	NEW HILL NEAR 1ST BAPTIST CH	8/25/2003	277.20	<LLD		3.65E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/2/2003	318.80	<LLD		2.39E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/8/2003	236.50	<LLD		3.21E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/15/2003	278.80	<LLD		4.74E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/22/2003	280.30	<LLD		2.41E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/29/2003	268.40	<LLD		5.57E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/6/2003	296.70	<LLD		4.31E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/13/2003	300.40	<LLD		4.47E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/20/2003	308.60	<LLD		4.89E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/27/2003	256.80	<LLD		2.67E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/3/2003	255.70	<LLD		3.83E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/10/2003	257.50	<LLD		3.79E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/17/2003	260.60	<LLD		3.72E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/24/2003	258.20	<LLD		5.63E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/1/2003	263.70	<LLD		3.77E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/8/2003	271.30	<LLD		4.38E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/15/2003	269.40	<LLD		5.75E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/22/2003	269.20	<LLD		3.59E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/29/2003	266.20	<LLD		2.59E-02
5	PITTSBORO - CONTROL	1/6/2003	278.30	<LLD		3.49E-02
5	PITTSBORO - CONTROL	1/13/2003	281.90	<LLD		2.14E-02
5	PITTSBORO - CONTROL	1/20/2003	286.20	<LLD		2.55E-02
5	PITTSBORO - CONTROL	1/27/2003	285.50	<LLD		2.75E-02
5	PITTSBORO - CONTROL	2/3/2003	286.80	<LLD		4.14E-02
5	PITTSBORO - CONTROL	2/10/2003	279.10	<LLD		4.13E-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	2/17/2003	287.50	<LLD		3.49E-02
5	PITTSBORO - CONTROL	2/24/2003	279.80	<LLD		3.46E-02
5	PITTSBORO - CONTROL	3/3/2003	283.50	<LLD		2.84E-02
5	PITTSBORO - CONTROL	3/10/2003	282.20	<LLD		2.23E-02
5	PITTSBORO - CONTROL	3/17/2003	285.20	<LLD		2.24E-02
5	PITTSBORO - CONTROL	3/24/2003	281.10	<LLD		3.00E-02
5	PITTSBORO - CONTROL	3/31/2003	283.00	<LLD		2.35E-02
5	PITTSBORO - CONTROL	4/7/2003	290.70	<LLD		2.51E-02
5	PITTSBORO - CONTROL	4/14/2003	275.30	<LLD		2.04E-02
5	PITTSBORO - CONTROL	4/21/2003	278.80	<LLD		2.31E-02
5	PITTSBORO - CONTROL	4/28/2003	280.80	<LLD		2.68E-02
5	PITTSBORO - CONTROL	5/5/2003	279.40	<LLD		2.75E-02
5	PITTSBORO - CONTROL	5/12/2003	279.50	<LLD		2.58E-02
5	PITTSBORO - CONTROL	5/19/2003	280.00	<LLD		4.57E-02
5	PITTSBORO - CONTROL	5/27/2003	321.20	<LLD		3.13E-02
5	PITTSBORO - CONTROL	6/2/2003	238.40	<LLD		5.50E-02
5	PITTSBORO - CONTROL	6/9/2003	279.70	<LLD		3.36E-02
5	PITTSBORO - CONTROL	6/16/2003	273.70	<LLD		4.93E-02
5	PITTSBORO - CONTROL	6/23/2003	277.50	<LLD		4.31E-02
5	PITTSBORO - CONTROL	6/30/2003	275.20	<LLD		4.14E-02
5	PITTSBORO - CONTROL	7/7/2003	272.80	<LLD		5.26E-02
5	PITTSBORO - CONTROL	7/14/2003	273.60	<LLD		2.58E-02
5	PITTSBORO - CONTROL	7/21/2003	268.80	<LLD		2.56E-02
5	PITTSBORO - CONTROL	7/28/2003	272.90	<LLD		4.58E-02
5	PITTSBORO - CONTROL	8/4/2003	271.10	<LLD		4.27E-02
5	PITTSBORO - CONTROL	8/11/2003	273.60	<LLD		2.20E-02
5	PITTSBORO - CONTROL	8/18/2003	263.20	<LLD		3.41E-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	8/25/2003	262.50	<LLD		5.95E-02
5	PITTSBORO - CONTROL	9/2/2003	345.00	<LLD		2.67E-02
5	PITTSBORO - CONTROL	9/8/2003	229.30	<LLD		6.30E-02
5	PITTSBORO - CONTROL	9/15/2003	270.80	<LLD		2.71E-02
5	PITTSBORO - CONTROL	9/22/2003	275.70	<LLD		3.04E-02
5	PITTSBORO - CONTROL	9/29/2003	275.30	<LLD		3.02E-02
5	PITTSBORO - CONTROL	10/6/2003	282.70	<LLD		1.56E-02
5	PITTSBORO - CONTROL	10/13/2003	284.50	<LLD		3.06E-02
5	PITTSBORO - CONTROL	10/20/2003	288.30	<LLD		3.25E-02
5	PITTSBORO - CONTROL	10/27/2003	290.20	<LLD		2.62E-02
5	PITTSBORO - CONTROL	11/3/2003	290.30	<LLD		5.08E-02
5	PITTSBORO - CONTROL	11/10/2003	290.20	<LLD		3.42E-02
5	PITTSBORO - CONTROL	11/17/2003	292.30	<LLD		2.32E-02
5	PITTSBORO - CONTROL	11/24/2003	297.70	<LLD		1.40E-02
5	PITTSBORO - CONTROL	12/1/2003	297.90	<LLD		3.00E-02
5	PITTSBORO - CONTROL	12/8/2003	306.00	<LLD		2.82E-02
5	PITTSBORO - CONTROL	12/15/2003	304.30	<LLD		2.98E-02
5	PITTSBORO - CONTROL	12/22/2003	302.80	<LLD		1.85E-02
5	PITTSBORO - CONTROL	12/29/2003	299.50	<LLD		2.31E-02
26	SPILLWAY ON MAIN RES	1/6/2003	282.60	<LLD		3.75E-02
26	SPILLWAY ON MAIN RES	1/13/2003	283.20	<LLD		3.31E-02
26	SPILLWAY ON MAIN RES	1/20/2003	290.80	<LLD		2.97E-02
26	SPILLWAY ON MAIN RES	1/27/2003	290.80	<LLD		2.93E-02
26	SPILLWAY ON MAIN RES	2/3/2003	286.60	<LLD		3.99E-02
26	SPILLWAY ON MAIN RES	2/10/2003	282.00	<LLD		3.60E-02
26	SPILLWAY ON MAIN RES	2/17/2003	290.50	<LLD		4.82E-02
26	SPILLWAY ON MAIN RES	2/24/2003	282.00	<LLD		3.44E-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	3/3/2003	287.20	<LLD		2.57E-02
26	SPILLWAY ON MAIN RES	3/10/2003	283.70	<LLD		3.67E-02
26	SPILLWAY ON MAIN RES	3/17/2003	285.70	<LLD		3.03E-02
26	SPILLWAY ON MAIN RES	3/24/2003	285.80	<LLD		3.50E-02
26	SPILLWAY ON MAIN RES	3/31/2003	286.80	<LLD		2.51E-02
26	SPILLWAY ON MAIN RES	4/7/2003	280.30	<LLD		3.22E-02
26	SPILLWAY ON MAIN RES	4/14/2003	289.10	<LLD		2.87E-02
26	SPILLWAY ON MAIN RES	4/21/2003	281.90	<LLD		3.65E-02
26	SPILLWAY ON MAIN RES	4/28/2003	284.20	<LLD		2.61E-02
26	SPILLWAY ON MAIN RES	5/5/2003	279.50	<LLD		2.87E-02
26	SPILLWAY ON MAIN RES	5/12/2003	279.90	<LLD		2.78E-02
26	SPILLWAY ON MAIN RES	5/19/2003	285.20	<LLD		2.62E-02
26	SPILLWAY ON MAIN RES	5/27/2003	327.50	<LLD		3.14E-02
26	SPILLWAY ON MAIN RES	6/2/2003	242.90	<LLD		2.54E-02
26	SPILLWAY ON MAIN RES	6/9/2003	283.60	<LLD		4.40E-02
26	SPILLWAY ON MAIN RES	6/16/2003	278.20	<LLD		5.05E-02
26	SPILLWAY ON MAIN RES	6/23/2003	281.90	<LLD		2.14E-02
26	SPILLWAY ON MAIN RES	6/30/2003	280.20	<LLD		1.89E-02
26	SPILLWAY ON MAIN RES	7/7/2003	281.00	<LLD		1.70E-02
26	SPILLWAY ON MAIN RES	7/14/2003	282.10	<LLD		3.42E-02
26	SPILLWAY ON MAIN RES	7/21/2003	279.40	<LLD		2.93E-02
26	SPILLWAY ON MAIN RES	7/28/2003	282.50	<LLD		2.33E-02
26	SPILLWAY ON MAIN RES	8/4/2003	280.80	<LLD		1.63E-02
26	SPILLWAY ON MAIN RES	8/11/2003	282.60	<LLD		3.62E-02
26	SPILLWAY ON MAIN RES	8/18/2003	278.20	<LLD		3.02E-02
26	SPILLWAY ON MAIN RES	8/25/2003	281.90	<LLD		2.76E-02
26	SPILLWAY ON MAIN RES	9/2/2003	321.00	<LLD		3.46E-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	9/8/2003	241.30	<LLD		3.54E-02
26	SPILLWAY ON MAIN RES	9/15/2003	284.70	<LLD		3.26E-02
26	SPILLWAY ON MAIN RES	9/22/2003	282.80	<LLD		3.63E-02
26	SPILLWAY ON MAIN RES	9/29/2003	279.40	<LLD		3.83E-02
26	SPILLWAY ON MAIN RES	10/6/2003	289.70	<LLD		2.92E-02
26	SPILLWAY ON MAIN RES	10/13/2003	316.20	<LLD		2.64E-02
26	SPILLWAY ON MAIN RES	10/20/2003	340.20	<LLD		2.04E-02
26	SPILLWAY ON MAIN RES	10/27/2003	271.40	<LLD		4.45E-02
26	SPILLWAY ON MAIN RES	11/3/2003	275.70	<LLD		3.17E-02
26	SPILLWAY ON MAIN RES	11/10/2003	276.80	<LLD		2.13E-02
26	SPILLWAY ON MAIN RES	11/17/2003	280.20	<LLD		3.64E-02
26	SPILLWAY ON MAIN RES	11/24/2003	280.00	<LLD		3.81E-02
26	SPILLWAY ON MAIN RES	12/1/2003	279.00	<LLD		1.90E-02
26	SPILLWAY ON MAIN RES	12/8/2003	287.10	<LLD		3.04E-02
26	SPILLWAY ON MAIN RES	12/15/2003	286.30	<LLD		3.01E-02
26	SPILLWAY ON MAIN RES	12/22/2003	286.20	<LLD		3.70E-02
26	SPILLWAY ON MAIN RES	12/29/2003	281.50	<LLD		3.84E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/6/2003	308.00	<LLD		3.53E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/13/2003	314.60	<LLD		3.13E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/20/2003	320.20	<LLD		2.28E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/27/2003	322.60	<LLD		3.31E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/3/2003	321.20	<LLD		3.70E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/10/2003	266.80	<LLD		5.08E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/17/2003	280.00	<LLD		2.79E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/24/2003	268.00	<LLD		5.59E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/3/2003	272.70	<LLD		4.34E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/10/2003	271.30	<LLD		5.08E-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	3/17/2003	273.00	<LLD		4.34E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/24/2003	267.40	<LLD		5.22E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/31/2003	269.10	<LLD		4.61E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/7/2003	286.70	<LLD		4.50E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/14/2003	293.30	<LLD		3.69E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/21/2003	285.20	<LLD		3.32E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/28/2003	287.60	<LLD		5.66E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/5/2003	286.00	<LLD		3.30E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/12/2003	284.60	<LLD		4.24E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/19/2003	284.30	<LLD		2.87E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/27/2003	328.20	<LLD		3.88E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/2/2003	246.20	<LLD		3.64E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/9/2003	287.50	<LLD		4.73E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/16/2003	282.30	<LLD		2.66E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/23/2003	286.00	<LLD		3.27E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/30/2003	284.30	<LLD		2.52E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/7/2003	285.10	<LLD		3.33E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/14/2003	286.50	<LLD		3.83E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/21/2003	283.30	<LLD		3.82E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/28/2003	286.20	<LLD		3.60E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/4/2003	283.80	<LLD		3.50E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/11/2003	285.20	<LLD		4.35E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/18/2003	280.00	<LLD		5.13E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/25/2003	283.10	<LLD		2.89E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/2/2003	321.40	<LLD		4.31E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/8/2003	240.60	<LLD		4.06E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/15/2003	282.40	<LLD		4.78E-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	9/22/2003	269.20	<LLD		3.26E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/29/2003	269.90	<LLD		4.43E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/6/2003	271.00	<LLD		3.75E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/13/2003	274.50	<LLD		5.24E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/20/2003	278.10	<LLD		4.54E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/27/2003	280.50	<LLD		2.49E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/3/2003	284.20	<LLD		3.52E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/10/2003	285.20	<LLD		2.38E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/17/2003	290.20	<LLD		4.05E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/24/2003	288.00	<LLD		4.99E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/1/2003	289.30	<LLD		5.32E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/8/2003	297.90	<LLD		4.22E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/15/2003	297.70	<LLD		4.79E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/22/2003	296.70	<LLD		3.97E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/29/2003	292.50	<LLD		2.87E-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	1/6/2003	4.00			5.57E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/20/2003	4.00			4.13E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/3/2003	4.00			4.47E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/17/2003	4.00			3.70E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/3/2003	4.00			4.26E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/17/2003	4.00			4.49E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/31/2003	4.00			3.05E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/14/2003	4.00			4.59E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/28/2003	4.00			4.56E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/12/2003	4.00			4.36E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/27/2003	4.00			7.82E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/2/2003	4.00			9.18E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/16/2003	4.00			6.29E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/30/2003	4.00			8.05E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2003	4.00			7.81E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/28/2003	4.00			8.57E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2003	4.00			8.56E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/25/2003	4.00			1.07E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/9/2003	4.00			9.88E-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*
38	CAPE FEAR PLANT INTAKE - CONTROL	9/22/2003	4.00			5.28E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/6/2003	4.00			6.50E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/20/2003	4.00			6.35E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/3/2003	4.00			8.28E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/17/2003	4.00			9.16E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/1/2003	4.00			4.67E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/15/2003	4.00			4.49E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/29/2003	4.00	1.11E+00	9.57E-01	
40	LILLINGTON - CAPE FEAR RIVER	1/6/2003	4.00			5.43E-01
40	LILLINGTON - CAPE FEAR RIVER	1/20/2003	4.00			4.04E-01
40	LILLINGTON - CAPE FEAR RIVER	2/3/2003	4.00			5.40E-01
40	LILLINGTON - CAPE FEAR RIVER	2/17/2003	4.00			4.38E-01
40	LILLINGTON - CAPE FEAR RIVER	3/3/2003	4.00			4.52E-01
40	LILLINGTON - CAPE FEAR RIVER	3/17/2003	4.00			4.19E-01
40	LILLINGTON - CAPE FEAR RIVER	3/31/2003	4.00			4.02E-01
40	LILLINGTON - CAPE FEAR RIVER	4/14/2003	4.00			4.61E-01
40	LILLINGTON - CAPE FEAR RIVER	4/28/2003	4.00			4.68E-01
40	LILLINGTON - CAPE FEAR RIVER	5/12/2003	4.00			4.49E-01
40	LILLINGTON - CAPE FEAR RIVER	5/27/2003	4.00			7.22E-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	6/2/2003	4.00			7.25E-01
40	LILLINGTON - CAPE FEAR RIVER	6/16/2003	4.00			8.44E-01
40	LILLINGTON - CAPE FEAR RIVER	6/30/2003	4.00			8.67E-01
40	LILLINGTON - CAPE FEAR RIVER	7/14/2003	4.00			7.53E-01
40	LILLINGTON - CAPE FEAR RIVER	7/28/2003	4.00			8.50E-01
40	LILLINGTON - CAPE FEAR RIVER	8/11/2003	4.00			8.28E-01
40	LILLINGTON - CAPE FEAR RIVER	8/25/2003	4.00			9.07E-01
40	LILLINGTON - CAPE FEAR RIVER	9/9/2003	4.00			7.01E-01
40	LILLINGTON - CAPE FEAR RIVER	9/22/2003	4.00			6.76E-01
40	LILLINGTON - CAPE FEAR RIVER	10/6/2003	4.00			8.06E-01
40	LILLINGTON - CAPE FEAR RIVER	10/20/2003	4.00			8.34E-01
40	LILLINGTON - CAPE FEAR RIVER	11/3/2003	4.00			8.09E-01
40	LILLINGTON - CAPE FEAR RIVER	11/17/2003	4.00			8.19E-01
40	LILLINGTON - CAPE FEAR RIVER	12/1/2003	4.00			6.01E-01
40	LILLINGTON - CAPE FEAR RIVER	12/15/2003	4.00			6.00E-01
40	LILLINGTON - CAPE FEAR RIVER	12/29/2003	4.00			9.48E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/6/2003	4.00			5.79E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/20/2003	4.00			4.99E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/3/2003	4.00			4.67E-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	2/17/2003	4.00			4.48E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/3/2003	4.00			5.29E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/17/2003	4.00			5.61E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/31/2003	4.00			4.00E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/14/2003	4.00			5.80E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/28/2003	4.00			6.10E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/12/2003	4.00			5.39E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/27/2003	4.00			8.84E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/2/2003	4.00			9.61E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/16/2003	4.00			7.89E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/30/2003	4.00			1.24E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/14/2003	4.00			1.10E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/28/2003	4.00			1.31E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/11/2003	4.00			1.21E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/25/2003	4.00			6.07E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/9/2003	4.00			8.34E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/22/2003	4.00			9.41E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/6/2003	4.00			6.28E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/20/2003	4.00			6.75E-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	11/3/2003	4.00			9.80E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/17/2003	4.00			9.42E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/1/2003	4.00			8.89E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/15/2003	4.00			7.96E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/29/2003	4.00			5.83E-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	1/6/2003	4.00	<LLD		3.86E-01
5	PITTSBORO - CONTROL	1/20/2003	4.00	<LLD		3.29E-01
5	PITTSBORO - CONTROL	2/3/2003	4.00	<LLD		4.24E-01
5	PITTSBORO - CONTROL	2/17/2003	4.00	<LLD		5.53E-01
5	PITTSBORO - CONTROL	3/3/2003	4.00	<LLD		3.57E-01
5	PITTSBORO - CONTROL	3/17/2003	4.00	<LLD		3.34E-01
5	PITTSBORO - CONTROL	4/14/2003	4.00	<LLD		3.76E-01
5	PITTSBORO - CONTROL	4/28/2003	4.00	<LLD		3.94E-01
5	PITTSBORO - CONTROL	5/12/2003	4.00	<LLD		3.51E-01
5	PITTSBORO - CONTROL	5/27/2003	4.00	<LLD		4.30E-01
5	PITTSBORO - CONTROL	6/9/2003	4.00	<LLD		3.20E-01
5	PITTSBORO - CONTROL	6/23/2003	4.00	<LLD		5.56E-01
5	PITTSBORO - CONTROL	7/7/2003	4.00	<LLD		3.41E-01
5	PITTSBORO - CONTROL	7/21/2003	4.00	<LLD		3.35E-01
5	PITTSBORO - CONTROL	8/4/2003	4.00	<LLD		3.63E-01
5	PITTSBORO - CONTROL	8/18/2003	4.00	<LLD		3.47E-01
5	PITTSBORO - CONTROL	9/2/2003	4.00	<LLD		4.50E-01
5	PITTSBORO - CONTROL	9/15/2003	4.00	<LLD		4.43E-01
5	PITTSBORO - CONTROL	10/13/2003	4.00	<LLD		7.26E-01
5	PITTSBORO - CONTROL	10/27/2003	4.00	<LLD		4.63E-01
5	PITTSBORO - CONTROL	11/10/2003	4.00	<LLD		3.37E-01
5	PITTSBORO - CONTROL	11/24/2003	4.00	<LLD		5.04E-01
5	PITTSBORO - CONTROL	12/8/2003	4.00	<LLD		4.69E-01
5	PITTSBORO - CONTROL	12/21/2003	4.00	<LLD		4.09E-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	1/6/2003	4.00			5.57E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/20/2003	4.00			4.13E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/3/2003	4.00			4.47E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/17/2003	4.00			3.70E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/3/2003	4.00			4.26E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/17/2003	4.00			4.49E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/31/2003	4.00			3.05E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/14/2003	4.00			4.59E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/28/2003	4.00			4.56E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/12/2003	4.00			4.36E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/27/2003	4.00			7.82E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/2/2003	4.00			9.18E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/16/2003	4.00			6.29E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/30/2003	4.00			8.05E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2003	4.00			7.81E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/28/2003	4.00			8.57E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2003	4.00			8.56E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/25/2003	4.00			1.07E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/9/2003	4.00			9.88E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/22/2003	4.00			5.28E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/6/2003	4.00			6.50E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/20/2003	4.00			6.35E-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	11/3/2003	4.00			8.28E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/17/2003	4.00			9.16E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/1/2003	4.00			4.67E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/15/2003	4.00			4.49E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/29/2003	4.00	1.11E+00	9.57E-01	
40	LILLINGTON - CAPE FEAR RIVER	1/6/2003	4.00			5.43E-01
40	LILLINGTON - CAPE FEAR RIVER	1/20/2003	4.00			4.04E-01
40	LILLINGTON - CAPE FEAR RIVER	2/3/2003	4.00			5.40E-01
40	LILLINGTON - CAPE FEAR RIVER	2/17/2003	4.00			4.38E-01
40	LILLINGTON - CAPE FEAR RIVER	3/3/2003	4.00			4.52E-01
40	LILLINGTON - CAPE FEAR RIVER	3/17/2003	4.00			4.19E-01
40	LILLINGTON - CAPE FEAR RIVER	3/31/2003	4.00			4.02E-01
40	LILLINGTON - CAPE FEAR RIVER	4/14/2003	4.00			4.61E-01
40	LILLINGTON - CAPE FEAR RIVER	4/28/2003	4.00			4.68E-01
40	LILLINGTON - CAPE FEAR RIVER	5/12/2003	4.00			4.49E-01
40	LILLINGTON - CAPE FEAR RIVER	5/27/2003	4.00			7.22E-01
40	LILLINGTON - CAPE FEAR RIVER	6/2/2003	4.00			7.25E-01
40	LILLINGTON - CAPE FEAR RIVER	6/16/2003	4.00			8.44E-01
40	LILLINGTON - CAPE FEAR RIVER	6/30/2003	4.00			8.67E-01
40	LILLINGTON - CAPE FEAR RIVER	7/14/2003	4.00			7.53E-01
40	LILLINGTON - CAPE FEAR RIVER	7/28/2003	4.00			8.50E-01
40	LILLINGTON - CAPE FEAR RIVER	8/11/2003	4.00			8.28E-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	8/25/2003	4.00			9.07E-01
40	LILLINGTON - CAPE FEAR RIVER	9/9/2003	4.00			7.01E-01
40	LILLINGTON - CAPE FEAR RIVER	9/22/2003	4.00			6.76E-01
40	LILLINGTON - CAPE FEAR RIVER	10/6/2003	4.00			8.06E-01
40	LILLINGTON - CAPE FEAR RIVER	10/20/2003	4.00			8.24E-01
40	LILLINGTON - CAPE FEAR RIVER	11/3/2003	4.00			8.09E-01
40	LILLINGTON - CAPE FEAR RIVER	11/17/2003	4.00			8.19E-01
40	LILLINGTON - CAPE FEAR RIVER	12/1/2003	4.00			6.01E-01
40	LILLINGTON - CAPE FEAR RIVER	12/15/2003	4.00			6.00E-01
40	LILLINGTON - CAPE FEAR RIVER	12/29/2003	4.00			9.48E-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	1/31/2003	0.005	<LLD		3.03E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	2/28/2003	0.005	<LLD		2.99E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	3/31/2003	0.005	<LLD		3.15E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	4/15/2003	0.005	<LLD		3.04E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	5/15/2003	0.005	<LLD		2.91E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	6/15/2003	0.005	<LLD		3.01E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2003	0.005	<LLD		3.08E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2003	0.005	<LLD		3.05E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	9/12/2003	0.005	<LLD		3.06E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	10/14/2003	0.005	<LLD		3.01E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2003	0.005	<LLD		3.00E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	12/19/2003	0.005	<LLD		3.11E+02
40	LILLINGTON - CAPE FEAR RIVER	1/31/2003	0.005	<LLD		3.03E+02
40	LILLINGTON - CAPE FEAR RIVER	2/28/2003	0.005	<LLD		2.99E+02
40	LILLINGTON - CAPE FEAR RIVER	3/31/2003	0.005	<LLD		3.15E+02
40	LILLINGTON - CAPE FEAR RIVER	4/15/2003	0.005	<LLD		3.04E+02
40	LILLINGTON - CAPE FEAR RIVER	5/15/2003	0.005	<LLD		3.04E+02
40	LILLINGTON - CAPE FEAR RIVER	6/15/2003	0.005	<LLD		3.01E+02
40	LILLINGTON - CAPE FEAR RIVER	7/14/2003	0.005	<LLD		3.08E+02
40	LILLINGTON - CAPE FEAR RIVER	8/11/2003	0.005	<LLD		3.05E+02
40	LILLINGTON - CAPE FEAR RIVER	9/12/2003	0.005	<LLD		3.06E+02
40	LILLINGTON - CAPE FEAR RIVER	10/14/2003	0.005	<LLD		3.02E+02
40	LILLINGTON - CAPE FEAR RIVER	11/10/2003	0.005	<LLD		3.02E+02
40	LILLINGTON - CAPE FEAR RIVER	12/19/2003	0.005	<LLD		3.10E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/31/2003	0.005	2.29E+03	2.15E+02	3.03E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/28/2003	0.005	2.26E+03	2.12E+02	2.99E+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	3/31/2003	0.005	1.31E+03	2.08E+02	3.13E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/15/2003	0.005	2.30E+03	3.31E+02	4.62E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/15/2003	0.005	2.18E+03	2.08E+02	2.91E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/15/2003	0.005	2.59E+03	2.18E+02	3.00E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/14/2003	0.005	2.98E+03	2.27E+02	3.09E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/11/2003	0.005	2.20E+03	2.15E+02	3.05E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/12/2003	0.005	2.64E+03	2.20E+02	3.05E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/14/2003	0.005	2.70E+03	2.19E+02	3.00E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/10/2003	0.005	2.76E+03	2.19E+02	3.00E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/19/2003	0.005	2.58E+03	2.23E+02	3.10E+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	2/13/2003	0.005	<LLD		2.98E+02
39	DEEP WELL NEAR DIABASE DIKES	5/14/2003	0.005	<LLD		2.91E+02
39	DEEP WELL NEAR DIABASE DIKES	8/28/2003	0.005	<LLD		3.04E+02
39	DEEP WELL NEAR DIABASE DIKES	11/11/2003	0.005	<LLD		3.10E+02
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	2/13/2003	0.005	<LLD		2.99E+02
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	5/14/2003	0.005	<LLD		2.90E+02
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	8/28/2003	0.005	<LLD		3.04E+02
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	11/11/2003	0.005	<LLD		3.09E+02
58	0.5 MI WSW SECTOR N BANK ESW INTAKE	2/13/2003	0.005	9.05E+02	1.94E+02	2.98E+02
58	0.5 MI WSW SECTOR N BANK ESW INTAKE	5/14/2003	0.005	9.12E+02	1.90E+02	2.91E+02
58	0.5 MI WSW SECTOR N BANK ESW INTAKE	8/28/2003	0.005	5.64E+02	1.93E+02	3.05E+02
58	0.5 MI WSW SECTOR N BANK ESW INTAKE	11/11/2003	0.005	7.15E+02	1.98E+02	3.10E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	2/13/2003	0.005	<LLD		2.98E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	5/14/2003	0.005	<LLD		2.91E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	8/28/2003	0.005	<LLD		3.03E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	11/11/2003	0.005	<LLD		3.10E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	2/13/2003	0.005	<LLD		2.98E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	5/14/2003	0.005	<LLD		2.91E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	8/28/2003	0.005	<LLD		3.05E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	11/11/2003	0.005	<LLD		3.09E+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	1/31/2003	0.005	2.84E+03	2.21E+02	3.02E+02
26	SPILLWAY ON MAIN RES	2/28/2003	0.005	2.52E+03	2.16E+02	2.99E+02
26	SPILLWAY ON MAIN RES	3/31/2003	0.005	2.26E+03	2.21E+02	3.15E+02
26	SPILLWAY ON MAIN RES	4/15/2003	0.005	2.88E+03	3.44E+02	4.64E+02
26	SPILLWAY ON MAIN RES	5/15/2003	0.005	2.51E+03	2.12E+02	2.91E+02
26	SPILLWAY ON MAIN RES	6/15/2003	0.005	2.62E+03	2.19E+02	3.01E+02
26	SPILLWAY ON MAIN RES	7/14/2003	0.005	2.72E+03	2.23E+02	3.08E+02
26	SPILLWAY ON MAIN RES	8/11/2003	0.005	2.39E+03	2.16E+02	3.03E+02
26	SPILLWAY ON MAIN RES	9/12/2003	0.005	2.68E+03	2.21E+02	3.05E+02
26	SPILLWAY ON MAIN RES	10/14/2003	0.005	3.12E+03	2.25E+02	3.01E+02
26	SPILLWAY ON MAIN RES	11/10/2003	0.005	2.87E+03	2.21E+02	3.00E+02
26	SPILLWAY ON MAIN RES	12/19/2003	0.005	2.66E+03	2.24E+02	3.11E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	1/31/2003	0.005	<LLD		3.03E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	2/28/2003	0.005	<LLD		2.99E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	3/31/2003	0.005	<LLD		3.15E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	4/15/2003	0.005	<LLD		3.04E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	5/15/2003	0.005	<LLD		2.91E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	6/15/2003	0.005	<LLD		3.01E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2003	0.005	<LLD		3.08E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2003	0.005	<LLD		3.05E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	9/12/2003	0.005	<LLD		3.06E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	10/14/2003	0.005	<LLD		3.01E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2003	0.005	<LLD		3.00E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	12/19/2003	0.005	<LLD		3.11E+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	1/31/2003	0.005	<LLD		3.03E+02
40	LILLINGTON - CAPE FEAR RIVER	2/28/2003	0.005	<LLD		2.99E+02
40	LILLINGTON - CAPE FEAR RIVER	3/31/2003	0.005	<LLD		3.15E+02
40	LILLINGTON - CAPE FEAR RIVER	4/15/2003	0.005	<LLD		3.04E+02
40	LILLINGTON - CAPE FEAR RIVER	5/15/2003	0.005	<LLD		3.04E+02
40	LILLINGTON - CAPE FEAR RIVER	6/15/2003	0.005	<LLD		3.01E+02
40	LILLINGTON - CAPE FEAR RIVER	7/14/2003	0.005	<LLD		3.08E+02
40	LILLINGTON - CAPE FEAR RIVER	8/11/2003	0.005	<LLD		3.05E+02
40	LILLINGTON - CAPE FEAR RIVER	9/12/2003	0.005	<LLD		3.06E+02
40	LILLINGTON - CAPE FEAR RIVER	10/14/2003	0.005	<LLD		3.02E+02
40	LILLINGTON - CAPE FEAR RIVER	11/10/2003	0.005	<LLD		3.02E+02
40	LILLINGTON - CAPE FEAR RIVER	12/19/2003	0.005	<LLD		3.10E+02

2003 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	2/15/2003	3283.2	BE-7	7.46E-02	2.59E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	5/16/2003	3517.9	BE-7	9.63E-02	1.82E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/15/2003	2990.9	PB-214	5.10E-03	2.76E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/15/2003	2990.9	BE-7	1.09E-01	2.73E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	8/15/2003	2990.9	K-40	3.42E-02	2.30E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/15/2003	3673.2	PB-214	4.43E-03	1.40E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/15/2003	3673.2	PB-212	1.33E-03	1.40E-03
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/15/2003	3673.2	K-40	1.68E-02	1.08E-02
1	SR 1134 AT INT SR 1011 - DIXIE PIPELINE	11/15/2003	3673.2	BE-7	9.47E-02	1.55E-02
2	SR 1134	2/15/2003	3706.6	BE-7	8.26E-02	3.31E-02
2	SR 1134	5/16/2003	3562.4	BE-7	1.08E-01	1.82E-01
2	SR 1134	8/15/2003	3420.7	BE-7	1.04E-01	3.01E-02
2	SR 1134	11/15/2003	3814.8	PB-214	2.16E-03	1.54E-03
2	SR 1134	11/15/2003	3814.8	BE-7	7.74E-02	1.78E-02
4	NEW HILL NEAR 1ST BAPTIST CH	2/15/2003	3693.5	PB-214	4.55E-03	1.88E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/15/2003	3693.5	BE-7	1.15E-01	2.17E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/16/2003	3642.3	BE-7	1.02E-01	1.77E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/16/2003	3642.3	PB-214	2.44E-03	1.39E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/15/2003	3581.4	BE-7	1.06E-01	3.25E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/15/2003	3534.3	K-40	6.93E-02	2.39E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/15/2003	3534.3	BE-7	1.06E-01	2.03E-02
5	PITTSBORO - CONTROL	2/15/2003	3680.1	BE-7	1.24E-01	3.05E-02
5	PITTSBORO - CONTROL	5/16/2003	3729.7	BE-7	1.11E-01	1.92E-02
5	PITTSBORO - CONTROL	8/15/2003	3267.3	BE-7	1.15E-01	2.51E-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	11/15/2003	3826.7	K-40	8.81E-02	1.76E-02
5	PITTSBORO - CONTROL	11/15/2003	3826.7	BE-7	1.05E-01	2.16E-02
26	SPILLWAY ON MAIN RES	2/15/2003	3717.7	PB-214	4.48E-03	2.80E-03
26	SPILLWAY ON MAIN RES	2/15/2003	3717.7	BE-7	7.95E-02	2.40E-02
26	SPILLWAY ON MAIN RES	5/16/2003	3667.9	K-40	2.56E-02	9.71E-03
26	SPILLWAY ON MAIN RES	5/16/2003	3667.9	BE-7	8.30E-02	1.57E-02
26	SPILLWAY ON MAIN RES	8/15/2003	3657.7	BE-7	1.17E-01	2.98E-02
26	SPILLWAY ON MAIN RES	11/15/2003	3750.3	PB-214	4.85E-03	1.55E-03
26	SPILLWAY ON MAIN RES	11/15/2003	3750.3	BE-7	8.66E-02	1.57E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/15/2003	3754.9	BE-7	8.01E-02	2.79E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/16/2003	3722.2	BE-7	8.77E-02	1.71E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/15/2003	3656.7	BE-7	1.10E-01	4.41E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/15/2003	3656.7	K-40	7.95E-02	2.86E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/15/2003	3725.8	BE-7	1.15E-01	2.08E-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	11/12/2003	526.6	AC-228	6.44E-02	4.36E-02
26	SPILLWAY ON MAIN RES	11/12/2003	526.6	K-40	2.71E+00	2.47E-01
26	SPILLWAY ON MAIN RES	11/12/2003	526.6	BE-7	1.79E-01	8.71E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/12/2003	720.4	K-40	3.52E+00	2.28E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/12/2003	720.4	BE-7	2.42E-01	6.58E-02
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/12/2003	624.5	K-40	3.18E+00	2.56E-01
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/12/2003	624.5	BE-7	2.83E-01	8.73E-02

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	5/19/2003	508.2	PB-214	4.61E-02	3.62E-02
44	SITE VARIES WITHIN HARRIS LAKE	5/19/2003	508.2	K-40	2.54E+00	6.41E-01
44	SITE VARIES WITHIN HARRIS LAKE	11/17/2003	553.9	K-40	2.57E+00	6.12E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/19/2003	463.3	K-40	3.65E+00	8.26E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/17/2003	585.5	K-40	2.61E+00	5.97E-01

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	1/29/2003	1138.1	CS-137	2.07E-01	7.93E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/29/2003	1138.1	CO-60	1.48E+00	1.40E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/29/2003	1138.1	PB-214	4.00E-01	1.06E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/29/2003	1138.1	PB-212	5.30E-01	8.71E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/29/2003	1138.1	TL-208	2.56E-01	6.44E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/29/2003	1138.1	K-40	7.34E+00	9.52E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/16/2003	859.2	CS-137	3.49E-01	1.13E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/16/2003	859.2	CO-60	3.55E+00	2.42E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/16/2003	859.2	RA-226	1.15E+00	1.01E+00
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/16/2003	859.2	PB-214	5.28E-01	1.62E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/16/2003	859.2	PB-212	6.66E-01	1.15E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/16/2003	859.2	TL-208	3.43E-01	1.14E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/16/2003	859.2	K-40	8.90E+00	1.31E+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	5/29/2003	349.2	K-40	2.04E+00	4.77E-01
65	1.36 MI S SECTOR	5/29/2003	349.2	PB-212	5.19E-02	3.06E-02
65	1.36 MI S SECTOR	5/29/2003	349.2	BE-7	6.35E-01	2.43E-01
65	1.36 MI S SECTOR	6/30/2003	370	BE-7	1.32E+00	2.98E-01
65	1.36 MI S SECTOR	6/30/2003	370	K-40	2.08E+00	5.54E-01
65	1.36 MI S SECTOR	6/30/2003	370	BI-214	1.71E-01	6.18E-02
65	1.36 MI S SECTOR	6/30/2003	370	PB-214	9.82E-02	6.68E-02
65	1.36 MI S SECTOR	7/29/2003	268.8	K-40	3.13E+00	6.40E-01
65	1.36 MI S SECTOR	7/29/2003	268.8	BE-7	1.83E+00	3.28E-01
65	1.36 MI S SECTOR	8/27/2003	335.7	BI-214	9.18E-02	6.68E-02
65	1.36 MI S SECTOR	8/27/2003	335.7	BE-7	2.58E+00	3.80E-01
65	1.36 MI S SECTOR	8/27/2003	335.7	K-40	3.16E+00	6.49E-01
65	1.36 MI S SECTOR	9/24/2003	301.4	K-40	4.51E+00	6.56E-01
65	1.36 MI S SECTOR	9/24/2003	301.4	BE-7	2.12E+00	4.37E-01
66	1.33 MI SSW SECTOR	5/29/2003	388.2	BE-7	1.08E+00	2.70E-01
66	1.33 MI SSW SECTOR	5/29/2003	388.2	K-40	3.95E+00	5.55E-01
66	1.33 MI SSW SECTOR	6/30/2003	380.2	K-40	2.48E+00	4.32E-01
66	1.33 MI SSW SECTOR	6/30/2003	380.2	BE-7	1.44E+00	2.29E-01
66	1.33 MI SSW SECTOR	7/29/2003	361.5	K-40	2.67E+00	6.49E-01
66	1.33 MI SSW SECTOR	7/29/2003	361.5	RA-226	7.41E-01	6.44E-01
66	1.33 MI SSW SECTOR	7/29/2003	361.5	BE-7	2.77E+00	3.51E-01
66	1.33 MI SSW SECTOR	8/27/2003	338.8	BE-7	2.62E+00	3.91E-01
66	1.33 MI SSW SECTOR	8/27/2003	338.8	K-40	1.67E+00	5.24E-01
66	1.33 MI SSW SECTOR	9/24/2003	350.4	K-40	4.25E+00	5.55E-01
66	1.33 MI SSW SECTOR	9/24/2003	350.4	BE-7	2.62E+00	3.76E-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	5/29/2003	411.7	K-40	2.77E+00	4.26E-01
65	1.36 MI S SECTOR	5/29/2003	411.7	BE-7	6.90E-01	1.76E-01
65	1.36 MI S SECTOR	6/30/2003	427.4	BE-7	1.20E+00	2.93E-01
65	1.36 MI S SECTOR	6/30/2003	427.4	K-40	3.13E+00	4.81E-01
65	1.36 MI S SECTOR	6/30/2003	427.4	BI-214	9.41E-02	6.05E-02
65	1.36 MI S SECTOR	6/30/2003	427.4	PB-214	5.80E-02	4.90E-02
65	1.36 MI S SECTOR	7/29/2003	306.9	BE-7	1.44E+00	3.06E-01
65	1.36 MI S SECTOR	7/29/2003	306.9	K-40	3.03E+00	6.12E-01
65	1.36 MI S SECTOR	8/27/2003	370.9	K-40	3.04E+00	5.04E-01
65	1.36 MI S SECTOR	8/27/2003	370.9	BE-7	3.14E+00	3.45E-01
65	1.36 MI S SECTOR	9/24/2003	413	BE-7	2.05E+00	2.26E-01
65	1.36 MI S SECTOR	9/24/2003	413	K-40	2.39E+00	4.09E-01
65	1.36 MI S SECTOR	10/30/2003	236.4	K-40	4.76E+00	8.80E-01
65	1.36 MI S SECTOR	10/30/2003	236.4	PB-214	1.69E-01	1.15E-01
65	1.36 MI S SECTOR	10/30/2003	236.4	TL-208	1.18E-01	4.82E-02
65	1.36 MI S SECTOR	10/30/2003	236.4	BE-7	2.08E+00	5.59E-01
66	1.33 MI SSW SECTOR	5/29/2003	343.1	K-40	2.88E+00	5.32E-01
66	1.33 MI SSW SECTOR	5/29/2003	343.1	BE-7	1.40E+00	3.71E-01
66	1.33 MI SSW SECTOR	6/30/2003	354.4	BE-7	2.48E+00	3.57E-01
66	1.33 MI SSW SECTOR	6/30/2003	354.4	K-40	2.32E+00	5.61E-01
66	1.33 MI SSW SECTOR	7/29/2003	350.1	K-40	2.57E+00	4.88E-01
66	1.33 MI SSW SECTOR	7/29/2003	350.1	BE-7	3.40E+00	3.86E-01
66	1.33 MI SSW SECTOR	8/27/2003	375.5	K-40	2.56E+00	5.02E-01
66	1.33 MI SSW SECTOR	8/27/2003	375.5	BE-7	5.26E+00	4.63E-01
66	1.33 MI SSW SECTOR	9/24/2003	380	BE-7	5.98E+00	5.05E-01
66	1.33 MI SSW SECTOR	9/24/2003	380	K-40	3.04E+00	4.99E-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*
66	1.33 MI SSW SECTOR	10/30/2003	239.3	PB-214	3.25E-01	8.83E-02
66	1.33 MI SSW SECTOR	10/30/2003	239.3	BE-7	2.07E+00	3.77E-01
66	1.33 MI SSW SECTOR	10/30/2003	239.3	K-40	3.12E+00	5.72E-01
66	1.33 MI SSW SECTOR	10/30/2003	239.3	PB-212	1.02E-01	4.73E-02
66	1.33 MI SSW SECTOR	10/30/2003	239.3	BI-214	3.72E-01	9.32E-02

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	5/29/2003	333.9	K-40	2.34E+00	6.42E-01
65	1.36 MI S SECTOR	6/30/2003	419.7	BE-7	2.82E-01	2.27E-01
65	1.36 MI S SECTOR	6/30/2003	419.7	K-40	3.70E+00	4.66E-01
65	1.36 MI S SECTOR	7/29/2003	336.6	BE-7	1.47E+00	3.67E-01
65	1.36 MI S SECTOR	7/29/2003	336.6	K-40	2.75E+00	6.50E-01
65	1.36 MI S SECTOR	8/27/2003	463.7	K-40	2.77E+00	4.96E-01
65	1.36 MI S SECTOR	8/27/2003	463.7	BE-7	2.15E+00	2.75E-01
65	1.36 MI S SECTOR	9/24/2003	359.3	K-40	2.22E+00	5.67E-01
65	1.36 MI S SECTOR	9/24/2003	359.3	BE-7	1.81E+00	3.34E-01
65	1.36 MI S SECTOR	10/30/2003	341.8	PB-212	1.66E-01	4.00E-02
65	1.36 MI S SECTOR	10/30/2003	341.8	TL-208	4.85E-02	2.42E-02
65	1.36 MI S SECTOR	10/30/2003	341.8	K-40	1.71E+00	4.84E-01
65	1.36 MI S SECTOR	10/30/2003	341.8	BE-7	2.38E+00	2.77E-01
65	1.36 MI S SECTOR	10/30/2003	341.8	BI-214	1.20E-01	5.10E-02
66	1.33 MI SSW SECTOR	5/29/2003	311.4	K-40	4.83E+00	6.71E-01
66	1.33 MI SSW SECTOR	5/29/2003	311.4	BE-7	1.18E+00	3.58E-01
66	1.33 MI SSW SECTOR	6/30/2003	361.8	PB-212	7.03E-02	3.28E-02
66	1.33 MI SSW SECTOR	6/30/2003	361.8	BE-7	7.77E-01	2.20E-01
66	1.33 MI SSW SECTOR	6/30/2003	361.8	K-40	1.96E+00	4.79E-01
66	1.33 MI SSW SECTOR	7/29/2003	429.9	K-40	1.30E+00	2.05E-01
66	1.33 MI SSW SECTOR	7/29/2003	429.9	BE-7	5.04E-01	1.15E-01
66	1.33 MI SSW SECTOR	8/27/2003	317.4	K-40	2.01E+00	7.32E-01
66	1.33 MI SSW SECTOR	8/27/2003	317.4	TL-208	4.74E-02	2.50E-02
66	1.33 MI SSW SECTOR	8/27/2003	317.4	BE-7	2.17E+00	4.33E-01
66	1.33 MI SSW SECTOR	9/24/2003	356.6	BE-7	2.31E+00	3.07E-01
66	1.33 MI SSW SECTOR	9/24/2003	356.6	K-40	1.90E+00	5.03E-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*
66	1.33 MI SSW SECTOR	10/30/2003	416.3	TL-208	3.12E-02	2.44E-02
66	1.33 MI SSW SECTOR	10/30/2003	416.3	BE-7	2.06E+00	3.07E-01
66	1.33 MI SSW SECTOR	10/30/2003	416.3	K-40	1.36E+00	4.23E-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	1/31/2003	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	2/28/2003	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	3/31/2003	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	4/15/2003	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	5/15/2003	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	6/15/2003	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2003	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2003	1.0	PB-212	3.06E+00	2.32E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/12/2003	1.0	RA-226	5.85E+01	5.16E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/14/2003	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2003	1.0	K-40	2.52E+02	3.32E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/19/2003	1.0	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	1/31/2003	1.0	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	2/28/2003	1.0	K-40	1.09E+02	5.48E+01
40	LILLINGTON - CAPE FEAR RIVER	3/31/2003	1.0	K-40	1.38E+02	5.04E+01
40	LILLINGTON - CAPE FEAR RIVER	4/15/2003	1.0	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	5/15/2003	1.0	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	6/15/2003	1.0	K-40	1.14E+02	4.51E+01
40	LILLINGTON - CAPE FEAR RIVER	7/14/2003	1.0	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	8/11/2003	1.0	K-40	1.39E+02	2.28E+01
40	LILLINGTON - CAPE FEAR RIVER	9/12/2003	1.0	TL-208	4.68E+00	2.79E+00
40	LILLINGTON - CAPE FEAR RIVER	10/14/2003	1.0	K-40	4.07E+02	5.42E+01
40	LILLINGTON - CAPE FEAR RIVER	11/10/2003	1.0	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	12/19/2003	1.0	NO-ACT		
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/31/2003	1.0	K-40	2.89E+02	6.89E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/28/2003	1.0	NO-ACT		

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	3/31/2003	1.0	NO-ACT		
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/15/2003	1.0	K-40	1.73E+02	8.05E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/15/2003	1.0	NO-ACT		
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/15/2003	1.0	NO-ACT		
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/14/2003	1.0	NO-ACT		
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/11/2003	1.0	NO-ACT		
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/12/2003	1.0	NO-ACT		
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/14/2003	1.0	NO-ACT		
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/10/2003	1.0	K-40	3.46E+02	3.35E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/19/2003	1.0	NO-ACT		

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
64	1.8 MI ENE SECTOR (MICHAEL)	6/30/2003	439.5	PB-212	8.15E-02	2.86E-02
64	1.8 MI ENE SECTOR (MICHAEL)	6/30/2003	439.5	K-40	4.11E+00	5.03E-01
64	1.8 MI ENE SECTOR (MICHAEL)	6/30/2003	439.5	BE-7	2.65E-01	1.19E-01
64	1.8 MI ENE SECTOR (MICHAEL)	7/28/2003	447.9	K-40	4.42E+00	4.76E-01
64	1.8 MI ENE SECTOR (MICHAEL)	7/28/2003	447.9	BE-7	2.91E-01	1.29E-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*
55	RD 1167 1.7 MI NNW (GOODWIN)	8/26/2003	488.5	BI-214	7.22E-02	3.70E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	8/26/2003	488.5	K-40	2.47E+00	4.68E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	8/26/2003	488.5	BE-7	3.13E-01	1.90E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	11/24/2003	564.6	K-40	1.62E+00	3.00E-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	2/26/2003	460.4	BE-7	3.53E-01	1.83E-01
5	PITTSBORO - CONTROL	2/26/2003	460.4	K-40	1.62E+00	4.72E-01
5	PITTSBORO - CONTROL	3/27/2003	503.9	TL-208	3.20E-02	1.83E-02
5	PITTSBORO - CONTROL	3/27/2003	503.9	K-40	3.41E+00	4.08E-01
5	PITTSBORO - CONTROL	4/30/2003	533.1	PB-212	2.83E-01	4.66E-02
5	PITTSBORO - CONTROL	4/30/2003	533.1	K-40	1.97E+00	4.01E-01
5	PITTSBORO - CONTROL	4/30/2003	533.1	TL-208	1.30E-01	2.53E-02
5	PITTSBORO - CONTROL	10/28/2003	475.7	K-40	3.78E+00	5.11E-01
5	PITTSBORO - CONTROL	10/28/2003	475.7	TL-208	3.46E-02	1.93E-02
5	PITTSBORO - CONTROL	11/24/2003	525.3	BE-7	2.91E-01	1.05E-01
5	PITTSBORO - CONTROL	11/24/2003	525.3	K-40	3.78E+00	4.55E-01
5	PITTSBORO - CONTROL	12/30/2003	349.4	K-40	2.60E+00	6.14E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	1/27/2003	535.4	BE-7	2.20E-01	1.44E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	1/27/2003	535.4	K-40	3.59E+00	4.43E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	2/26/2003	527.4	K-40	2.74E+00	3.63E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	3/27/2003	530.3	TL-208	1.82E-02	1.54E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	3/27/2003	530.3	PB-212	5.82E-02	2.31E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	3/27/2003	530.3	K-40	2.80E+00	4.22E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	7/28/2003	610.2	TL-208	2.40E-02	1.92E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	7/28/2003	610.2	K-40	3.04E+00	3.61E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	8/26/2003	503.1	K-40	2.13E+00	3.94E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	8/26/2003	503.1	BE-7	2.18E-01	1.72E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	9/24/2003	420.5	K-40	3.56E+00	4.81E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	10/28/2003	524.2	K-40	1.57E+00	3.63E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	10/28/2003	524.2	TL-208	1.90E-02	1.81E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	10/28/2003	524.2	PB-212	4.88E-02	2.42E-02

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)	11/24/2003	511.7	K-40	2.92E+00	4.56E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	12/30/2003	403.1	PB-212	1.52E-01	4.67E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	12/30/2003	403.1	BE-7	2.45E-01	1.73E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	12/30/2003	403.1	K-40	2.90E+00	6.24E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	12/30/2003	403.1	TL-208	4.79E-02	2.89E-02

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*
5	PITTSBORO - CONTROL	6/30/2003	567.3	PB-212	3.04E-02	1.82E-02
5	PITTSBORO - CONTROL	6/30/2003	567.3	K-40	1.48E+00	3.09E-01
5	PITTSBORO - CONTROL	7/28/2003	478.1	PB-212	2.27E-02	1.92E-02
5	PITTSBORO - CONTROL	7/28/2003	478.1	K-40	1.43E+00	3.28E-01
5	PITTSBORO - CONTROL	8/26/2003	551.4	K-40	1.69E+00	4.31E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	7/28/2003	753.1	K-40	8.68E-01	2.49E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	7/28/2003	768.8	K-40	1.16E+00	2.59E-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	8/26/2003	355.3	K-40	3.98E+00	6.64E-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	1/27/2003	650.1	K-40	4.58E+00	4.91E-01
5	PITTSBORO - CONTROL	1/27/2003	650.1	BE-7	3.18E-01	1.61E-01
5	PITTSBORO - CONTROL	2/26/2003	515.7	BE-7	1.60E-01	1.48E-01
5	PITTSBORO - CONTROL	2/26/2003	515.7	K-40	4.92E+00	5.38E-01
5	PITTSBORO - CONTROL	3/27/2003	473.5	BE-7	2.46E-01	1.09E-01
5	PITTSBORO - CONTROL	3/27/2003	473.5	K-40	3.04E+00	4.45E-01
5	PITTSBORO - CONTROL	3/27/2003	473.5	TL-208	3.46E-02	2.35E-02
5	PITTSBORO - CONTROL	9/24/2003	424.8	TL-208	4.74E-02	2.68E-02
5	PITTSBORO - CONTROL	9/24/2003	424.8	K-40	4.52E+00	5.29E-01
5	PITTSBORO - CONTROL	9/24/2003	424.8	BE-7	4.52E-01	2.22E-01
5	PITTSBORO - CONTROL	10/28/2003	615.6	BE-7	2.06E-01	1.57E-01
5	PITTSBORO - CONTROL	10/28/2003	615.6	K-40	2.71E+00	4.04E-01
5	PITTSBORO - CONTROL	10/28/2003	615.6	TL-208	2.63E-02	1.87E-02
5	PITTSBORO - CONTROL	11/24/2003	507.3	BE-7	2.54E-01	1.57E-01
5	PITTSBORO - CONTROL	11/24/2003	507.3	K-40	4.65E+00	5.43E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	10/28/2003	388.9	K-40	3.33E+00	5.72E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	11/24/2003	500.6	K-40	4.93E+00	5.72E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	11/24/2003	500.6	BE-7	2.20E-01	1.18E-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
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	8/26/2003	274.4	K-40	1.50E+00	5.05E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	8/26/2003	274.4	BE-7	4.65E-01	2.43E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	8/26/2003	326.9	K-40	2.25E+00	4.94E-01
64	1.8 MI ENE SECTOR (MICHAEL)	7/28/2003	432	K-40	2.95E+00	4.60E-01
64	1.8 MI ENE SECTOR (MICHAEL)	8/26/2003	460.3	K-40	3.08E+00	5.19E-01
64	1.8 MI ENE SECTOR (MICHAEL)	9/24/2003	396.1	K-40	6.62E+00	7.07E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: Pears

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	8/26/2003	766.9	K-40	8.94E-01	2.66E-01
5	PITTSBORO - CONTROL	9/24/2003	639.2	K-40	1.22E+00	3.20E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: Peppers

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	8/26/2003	285	K-40	2.16E+00	4.07E-01
64	1.8 MI ENE SECTOR (MICHAEL)	8/26/2003	240.9	PB-212	4.26E-02	2.63E-02
64	1.8 MI ENE SECTOR (MICHAEL)	8/26/2003	240.9	K-40	1.84E+00	4.54E-01
64	1.8 MI ENE SECTOR (MICHAEL)	9/24/2003	320.4	K-40	2.29E+00	6.69E-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	7/28/2003	704.7	K-40	2.03E+00	2.66E-01
5	PITTSBORO - CONTROL	8/26/2003	963.4	K-40	2.26E+00	2.56E-01
5	PITTSBORO - CONTROL	9/24/2003	716.6	K-40	2.45E+00	3.10E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	7/28/2003	486.3	K-40	3.37E+00	3.91E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	8/26/2003	919.4	K-40	2.36E+00	3.08E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	9/24/2003	781.7	K-40	2.26E+00	2.74E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	7/28/2003	902.6	K-40	1.82E+00	2.71E-01
64	1.8 MI ENE SECTOR (MICHAEL)	7/28/2003	836.9	K-40	2.03E+00	3.06E-01
64	1.8 MI ENE SECTOR (MICHAEL)	8/26/2003	955.5	K-40	2.30E+00	2.43E-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	1/27/2003	582.3	K-40	2.70E+00	3.92E-01
5	PITTSBORO - CONTROL	2/26/2003	595.3	BE-7	4.46E-01	1.47E-01
5	PITTSBORO - CONTROL	2/26/2003	595.3	K-40	3.14E+00	4.52E-01
5	PITTSBORO - CONTROL	3/27/2003	661.4	K-40	2.22E+00	3.64E-01
5	PITTSBORO - CONTROL	3/27/2003	661.4	PB-212	6.12E-02	2.60E-02
5	PITTSBORO - CONTROL	3/27/2003	661.4	TL-208	3.73E-02	2.15E-02
5	PITTSBORO - CONTROL	10/28/2003	624.5	BE-7	2.14E-01	1.15E-01
5	PITTSBORO - CONTROL	10/28/2003	624.5	K-40	3.35E+00	4.32E-01
5	PITTSBORO - CONTROL	10/28/2003	624.5	TL-208	3.76E-02	1.76E-02
5	PITTSBORO - CONTROL	11/24/2003	775	K-40	3.95E+00	4.07E-01
5	PITTSBORO - CONTROL	11/24/2003	775	BE-7	1.80E-01	1.18E-01
5	PITTSBORO - CONTROL	12/30/2003	434.2	K-40	5.10E+00	6.22E-01
5	PITTSBORO - CONTROL	12/30/2003	434.2	TL-208	3.50E-02	2.33E-02
5	PITTSBORO - CONTROL	12/30/2003	434.2	PB-212	5.81E-02	5.66E-02
5	PITTSBORO - CONTROL	12/30/2003	434.2	BI-214	1.32E-01	5.91E-02
5	PITTSBORO - CONTROL	12/30/2003	434.2	BE-7	4.26E-01	2.13E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	10/28/2003	605.5	TL-208	4.70E-02	1.81E-02
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	10/28/2003	605.5	K-40	3.75E+00	4.27E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	11/24/2003	545.1	BE-7	1.34E-01	8.95E-02
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	11/24/2003	545.1	K-40	3.23E+00	4.31E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	9/24/2003	473.4	BI-214	5.75E-02	3.92E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	9/24/2003	473.4	PB-212	6.68E-02	3.16E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	9/24/2003	473.4	TL-208	3.32E-02	2.18E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	9/24/2003	473.4	K-40	4.98E+00	5.15E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	9/24/2003	473.4	BE-7	3.45E-01	1.47E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	10/28/2003	549.9	K-40	2.93E+00	4.01E-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*
55	RD 1167 1.7 MI NNW (GOODWIN)	10/28/2003	549.9	TL-208	2.16E-02	1.79E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	10/28/2003	549.9	BE-7	1.82E-01	1.48E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	12/30/2003	384.1	TL-208	4.29E-02	3.06E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	12/30/2003	384.1	BE-7	6.42E-01	2.92E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	12/30/2003	384.1	K-40	4.50E+00	7.00E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: Watermelon

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	8/26/2003	910.9	K-40	9.33E-01	1.90E-01
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	9/24/2003	860.2	K-40	1.10E+00	2.34E-01

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	5/19/2003	528.3	K-40	2.62E+00	6.56E-01
44	SITE VARIES WITHIN HARRIS LAKE	11/17/2003	584	K-40	2.78E+00	6.46E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/19/2003	596.6	K-40	3.07E+00	7.18E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/17/2003	504.3	K-40	2.89E+00	8.01E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
44	SITE VARIES WITHIN HARRIS LAKE	5/19/2003	507.6	K-40	3.10E+00	7.21E-01
44	SITE VARIES WITHIN HARRIS LAKE	11/17/2003	565.3	K-40	2.00E+00	6.61E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/19/2003	502.7	K-40	2.87E+00	6.79E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/17/2003	613.5	K-40	1.60E+00	5.78E-01

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	2/13/2003	1	NO-ACT		
39	DEEP WELL NEAR DIABASE DIKES	5/14/2003	1	K-40	1.32E+02	4.96E+01
39	DEEP WELL NEAR DIABASE DIKES	8/28/2003	1	K-40	1.56E+02	8.01E+01
39	DEEP WELL NEAR DIABASE DIKES	11/11/2003	1	NO-ACT		
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	2/13/2003	1	K-40	9.76E+01	5.31E+01
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	5/14/2003	1	K-40	6.96E+01	5.52E+01
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	5/14/2003	1	TL-208	5.85E+00	3.43E+00
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	8/28/2003	1	PB-212	8.80E+00	3.34E+00
57	0.4 MI SSW SECTOR N BANK ESW INTAKE	11/11/2003	1	NO-ACT		
58	0.5 MI WSW SECTOR N BANK ESW INTAKE	2/13/2003	1	K-40	3.72E+02	7.98E+01
58	0.5 MI WSW SECTOR N BANK ESW INTAKE	5/14/2003	1	NO-ACT		
58	0.5 MI WSW SECTOR N BANK ESW INTAKE	8/28/2003	1	NO-ACT		
58	0.5 MI WSW SECTOR N BANK ESW INTAKE	11/11/2003	1	NO-ACT		
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	2/13/2003	1	NO-ACT		
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	5/14/2003	1	NO-ACT		
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	8/28/2003	1	K-40	1.22E+02	4.64E+01
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	11/11/2003	1	K-40	3.38E+02	8.30E+01
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	2/13/2003	1	NO-ACT		
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	5/14/2003	1	NO-ACT		
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	8/28/2003	1	K-40	1.56E+02	8.06E+01
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	11/11/2003	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	1/6/2003	1	K-40	1.51E+03	2.05E+02
5	PITTSBORO - CONTROL	1/20/2003	1	K-40	1.49E+03	1.97E+02
5	PITTSBORO - CONTROL	1/20/2003	1	PB-212	1.80E+01	9.62E+00
5	PITTSBORO - CONTROL	2/3/2003	1	K-40	1.26E+03	1.90E+02
5	PITTSBORO - CONTROL	2/17/2003	1	K-40	1.80E+03	1.74E+02
5	PITTSBORO - CONTROL	3/3/2003	1	K-40	1.42E+03	2.07E+02
5	PITTSBORO - CONTROL	3/17/2003	1	K-40	1.27E+03	1.97E+02
5	PITTSBORO - CONTROL	4/14/2003	1	K-40	1.36E+03	1.87E+02
5	PITTSBORO - CONTROL	4/28/2003	1	K-40	1.15E+03	2.00E+02
5	PITTSBORO - CONTROL	5/12/2003	1	K-40	1.37E+03	1.60E+02
5	PITTSBORO - CONTROL	5/27/2003	1	RA-226	2.61E+02	2.10E+02
5	PITTSBORO - CONTROL	5/27/2003	1	K-40	1.92E+03	1.93E+02
5	PITTSBORO - CONTROL	6/9/2003	1	K-40	2.21E+03	1.97E+02
5	PITTSBORO - CONTROL	6/23/2003	1	K-40	1.71E+03	1.83E+02
5	PITTSBORO - CONTROL	7/7/2003	1	K-40	1.79E+03	1.84E+02
5	PITTSBORO - CONTROL	7/21/2003	1	K-40	1.34E+03	2.09E+02
5	PITTSBORO - CONTROL	8/4/2003	1	K-40	1.76E+03	1.83E+02
5	PITTSBORO - CONTROL	8/18/2003	1	K-40	1.51E+03	2.14E+02
5	PITTSBORO - CONTROL	9/2/2003	1	K-40	1.23E+03	1.89E+02
5	PITTSBORO - CONTROL	9/15/2003	1	K-40	1.30E+03	1.63E+02
5	PITTSBORO - CONTROL	10/13/2003	1	K-40	1.20E+03	1.67E+02
5	PITTSBORO - CONTROL	10/27/2003	1	K-40	1.49E+03	1.67E+02
5	PITTSBORO - CONTROL	11/10/2003	1	K-40	1.79E+03	1.69E+02
5	PITTSBORO - CONTROL	11/24/2003	1	K-40	1.35E+03	1.91E+02
5	PITTSBORO - CONTROL	12/8/2003	1	K-40	1.27E+03	1.66E+02
5	PITTSBORO - CONTROL	12/21/2003	1	K-40	1.55E+03	2.25E+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	1/29/2003	1228.5	TL-208	8.68E-02	2.93E-02
26	SPILLWAY ON MAIN RES	1/29/2003	1228.5	PB-212	2.38E-01	6.20E-02
26	SPILLWAY ON MAIN RES	1/29/2003	1228.5	BI-214	1.95E-01	5.67E-02
26	SPILLWAY ON MAIN RES	1/29/2003	1228.5	PB-214	1.77E-01	6.38E-02
26	SPILLWAY ON MAIN RES	1/29/2003	1228.5	K-40	1.39E+01	1.10E+00
26	SPILLWAY ON MAIN RES	7/16/2003	1299.5	AC-228	3.21E-01	1.59E-01
26	SPILLWAY ON MAIN RES	7/16/2003	1299.5	RA-226	1.47E+00	6.18E-01
26	SPILLWAY ON MAIN RES	7/16/2003	1299.5	PB-214	1.78E-01	8.04E-02
26	SPILLWAY ON MAIN RES	7/16/2003	1299.5	TL-208	1.03E-01	3.65E-02
26	SPILLWAY ON MAIN RES	7/16/2003	1299.5	K-40	1.11E+01	1.05E+00
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/29/2003	1634.2	AC-228	3.80E-01	1.07E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/29/2003	1634.2	K-40	1.16E+01	9.70E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/29/2003	1634.2	TL-208	1.02E-01	4.05E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/29/2003	1634.2	PB-212	1.78E-01	6.13E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/29/2003	1634.2	PB-214	2.44E-01	7.61E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/29/2003	1634.2	BI-214	2.27E-01	8.11E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/16/2003	1621.5	AC-228	2.60E-01	1.26E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/16/2003	1621.5	K-40	1.04E+01	9.00E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/16/2003	1621.5	TL-208	8.38E-02	3.85E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/16/2003	1621.5	PB-214	2.66E-01	7.08E-02

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	1/31/2003	1	K-40	1.65E+02	4.89E+01
26	SPILLWAY ON MAIN RES	2/28/2003	1	NO-ACT		
26	SPILLWAY ON MAIN RES	3/31/2003	1	PB-212	4.40E+00	3.91E+00
26	SPILLWAY ON MAIN RES	4/15/2003	1	K-40	1.16E+02	5.36E+01
26	SPILLWAY ON MAIN RES	5/15/2003	1	RA-226	7.85E+01	4.45E+01
26	SPILLWAY ON MAIN RES	6/15/2003	1	NO-ACT		
26	SPILLWAY ON MAIN RES	7/14/2003	1	PB-212	5.00E+00	4.54E+00
26	SPILLWAY ON MAIN RES	8/11/2003	1	PB-212	4.11E+00	2.03E+00
26	SPILLWAY ON MAIN RES	8/11/2003	1	BI-212	7.32E+00	2.87E+00
26	SPILLWAY ON MAIN RES	8/11/2003	1	RA-226	5.54E+01	2.49E+01
26	SPILLWAY ON MAIN RES	9/12/2003	1	NO-ACT		
26	SPILLWAY ON MAIN RES	10/14/2003	1	NO-ACT		
26	SPILLWAY ON MAIN RES	11/10/2003	1	NO-ACT		
26	SPILLWAY ON MAIN RES	12/19/2003	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	1/31/2003	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	2/28/2003	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	3/31/2003	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	4/15/2003	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	5/15/2003	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	6/15/2003	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2003	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2003	1	PB-212	3.06E+00	2.32E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/12/2003	1	RA-226	5.85E+01	5.16E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/14/2003	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2003	1	K-40	2.52E+02	3.32E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/19/2003	1	NO-ACT		

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	1/31/2003	1	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	2/28/2003	1	K-40	1.09E+02	5.48E+01
40	LILLINGTON - CAPE FEAR RIVER	3/31/2003	1	K-40	1.38E+02	5.04E+01
40	LILLINGTON - CAPE FEAR RIVER	4/15/2003	1	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	5/15/2003	1	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	6/15/2003	1	K-40	1.14E+02	4.51E+01
40	LILLINGTON - CAPE FEAR RIVER	7/14/2003	1	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	8/11/2003	1	K-40	1.39E+02	2.28E+01
40	LILLINGTON - CAPE FEAR RIVER	9/12/2003	1	TL-208	4.68E+00	2.79E+00
40	LILLINGTON - CAPE FEAR RIVER	10/14/2003	1	K-40	4.07E+02	5.42E+01
40	LILLINGTON - CAPE FEAR RIVER	11/10/2003	1	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	12/19/2003	1	NO-ACT		