Progress Energy

APR 28 2009

SERIAL: HNP-09-040

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 2008.

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

Sincerely,

D. H. Corlett
Supervisor – Licensing/Regulatory Programs
Harris Nuclear Plant

DHC/mgw

Enclosure

c: Mr. J. D. Austin (NRC Senior Resident Inspector, HNP)
Mr. L. A. Reyes (NRC Regional Administrator, Region II)
Ms. M. G. Vaaler (NRC Project Manager, HNP)

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

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NRR

HARRIS ENERGY &

ENVIRONMENTAL CENTER

CAROLINA POWER & LIGHT COMPANY

DOING BUSINESS AS

PROGRESS ENERGY CAROLINAS, INC.

NEW HILL, NORTH CAROLINA

RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

FOR THE

SHEARON HARRIS NUCLEAR POWER PLANT

JANUARY 1 THROUGH DECEMBER 31, 2008

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EXECUTIVE SUMMARY

The Harris Nuclear Plant (HNP) is operated by Carolina Power & Light Company, doing business as Progress Energy Carolinas, Inc., 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, 2008, through December 31, 2008.

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 HNP. Using these control locations and data collected prior to operation allows comparison of data collected at locations near the HNP 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 the Harris Lake spillway 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 HNP 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 HNP, 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 HNP radiological monitoring program was established in 1982 and has continued to collect samples and evaluate them for over 25 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 net output of approximately 900 MWe (Megawatts electric). Commercial production was initiated on January 3, 1987. HNP 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.

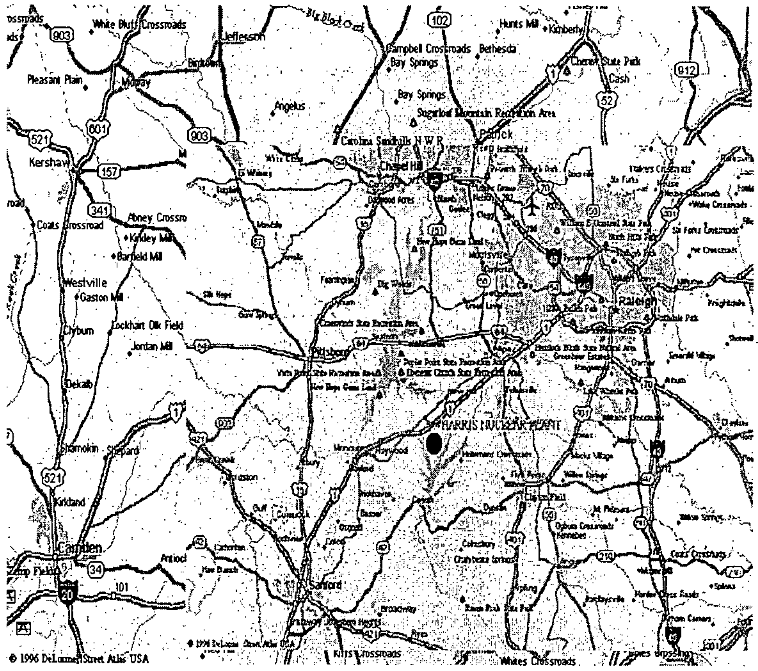


Figure 1: Location of Harris Nuclear Plant

Harris Lake is adjacent to the plant itself and is the source of cooling tower makeup water. The lake was impounded during 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 blowdown, and radiological waste process systems.

Fishing, boating, and swimming are popular activities on Harris Lake and other nearby lakes. Carolina Power & Light Company, doing business as 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.

Within a five mile radius most of the land is wooded with only a few residences and limited agricultural activity. There are no 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 with significant crops including 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 Eckert & Ziegler Analytics 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, Carolina Power & Light Company doing business as 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, 3a, and 3b. A description of each sample location may be found in Tables 2 and 3.

Radiological Environmental Sampling Locations

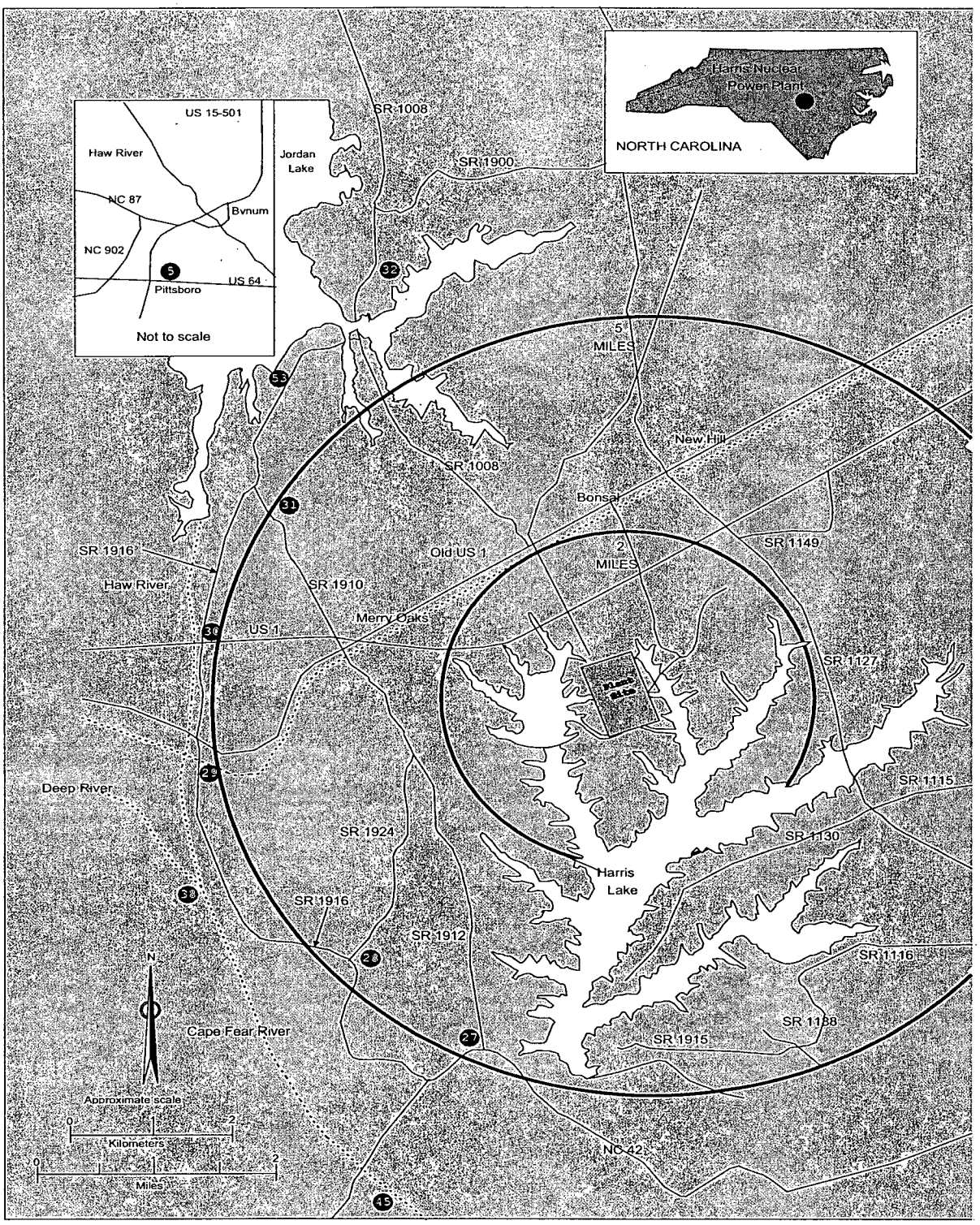


Figure 2a: Radiological Environmental Sampling Locations (Distant from Plant)

Radiological Environmental Sampling Locations

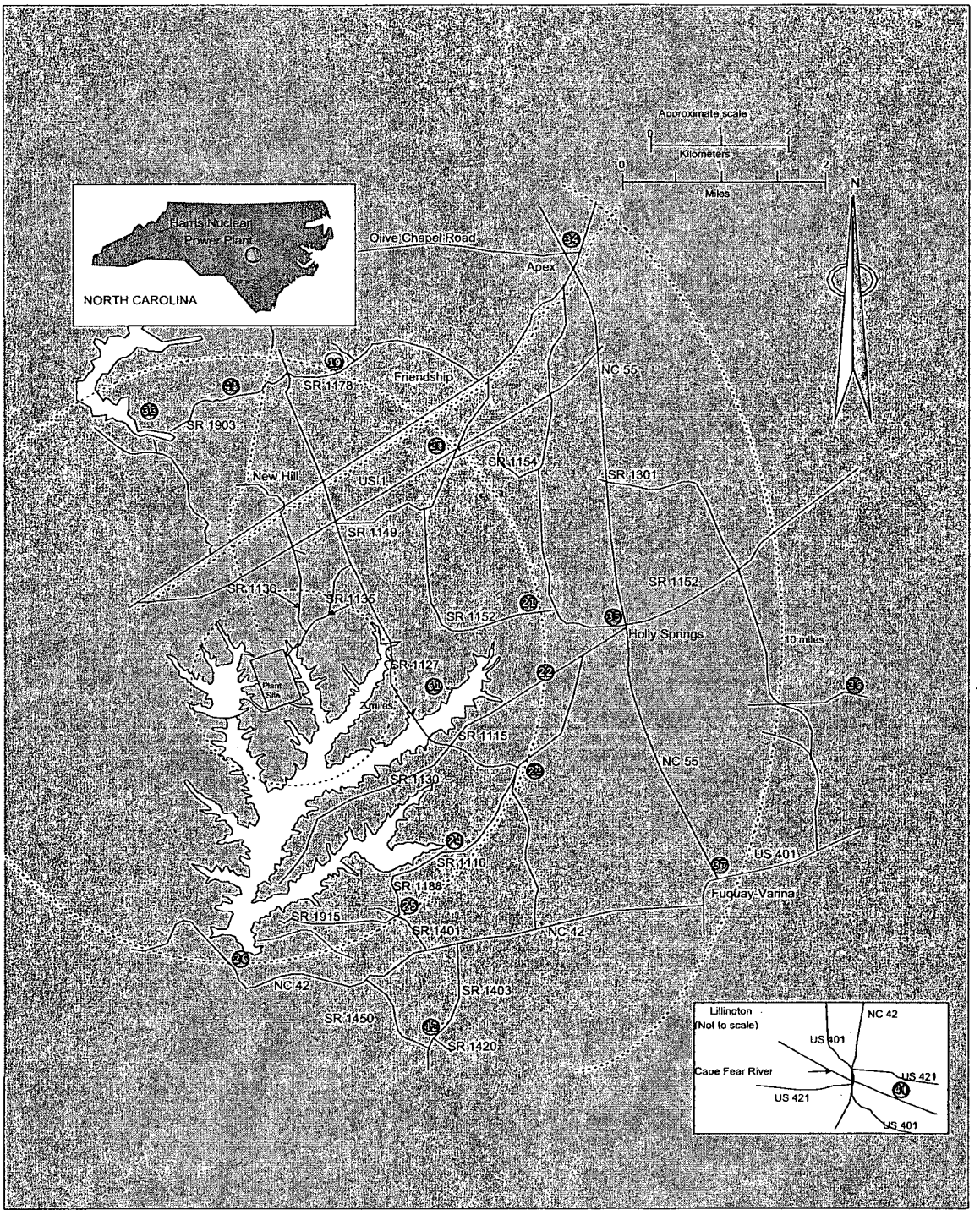


Figure 2b: Radiological Environmental Sampling Locations (Distant from Plant)

Radiological Environmental Sampling Locations

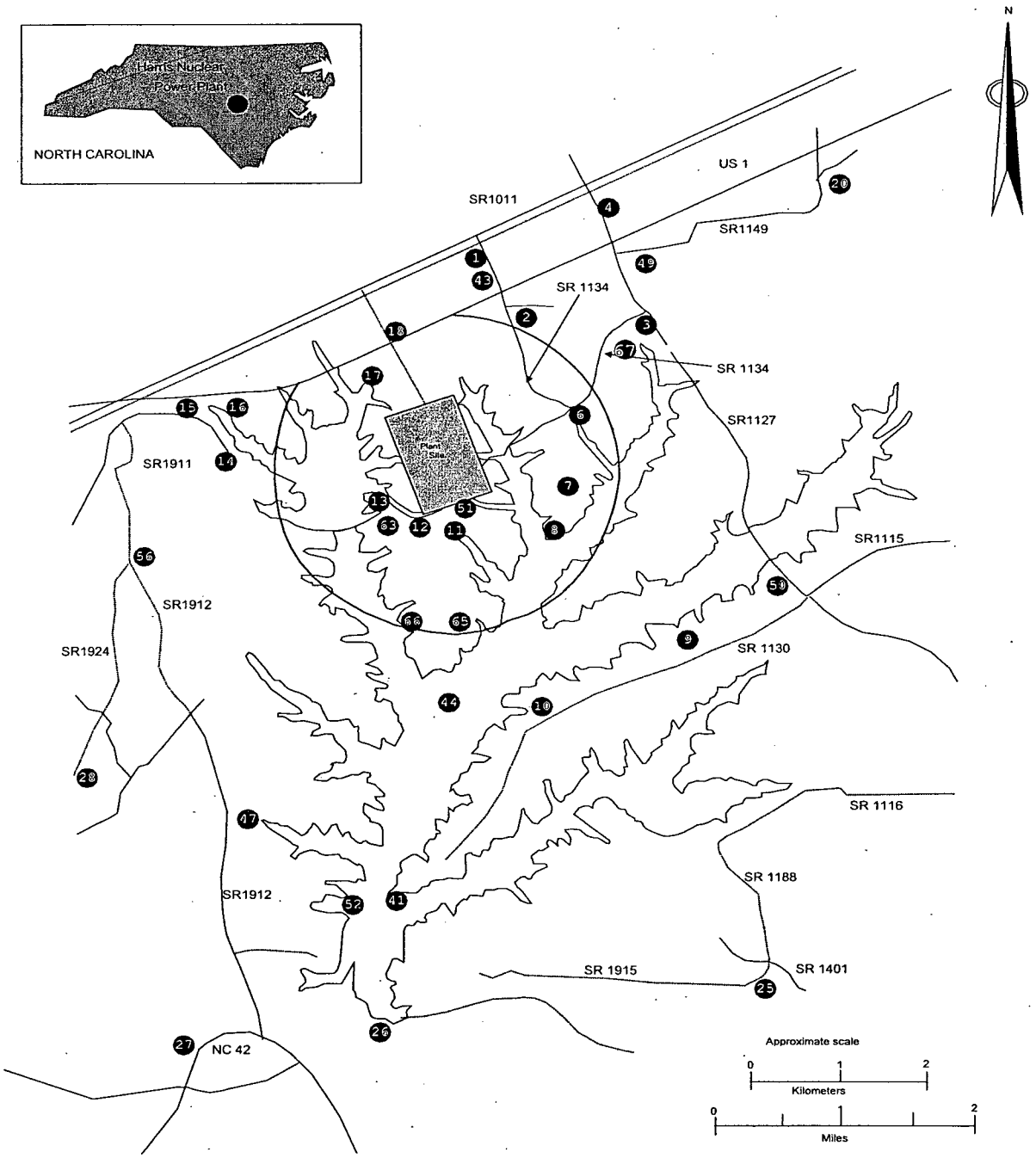


Figure 3a: Radiological Environmental Sampling Locations (Nearest Plant)

Radiological Environmental Sampling Locations

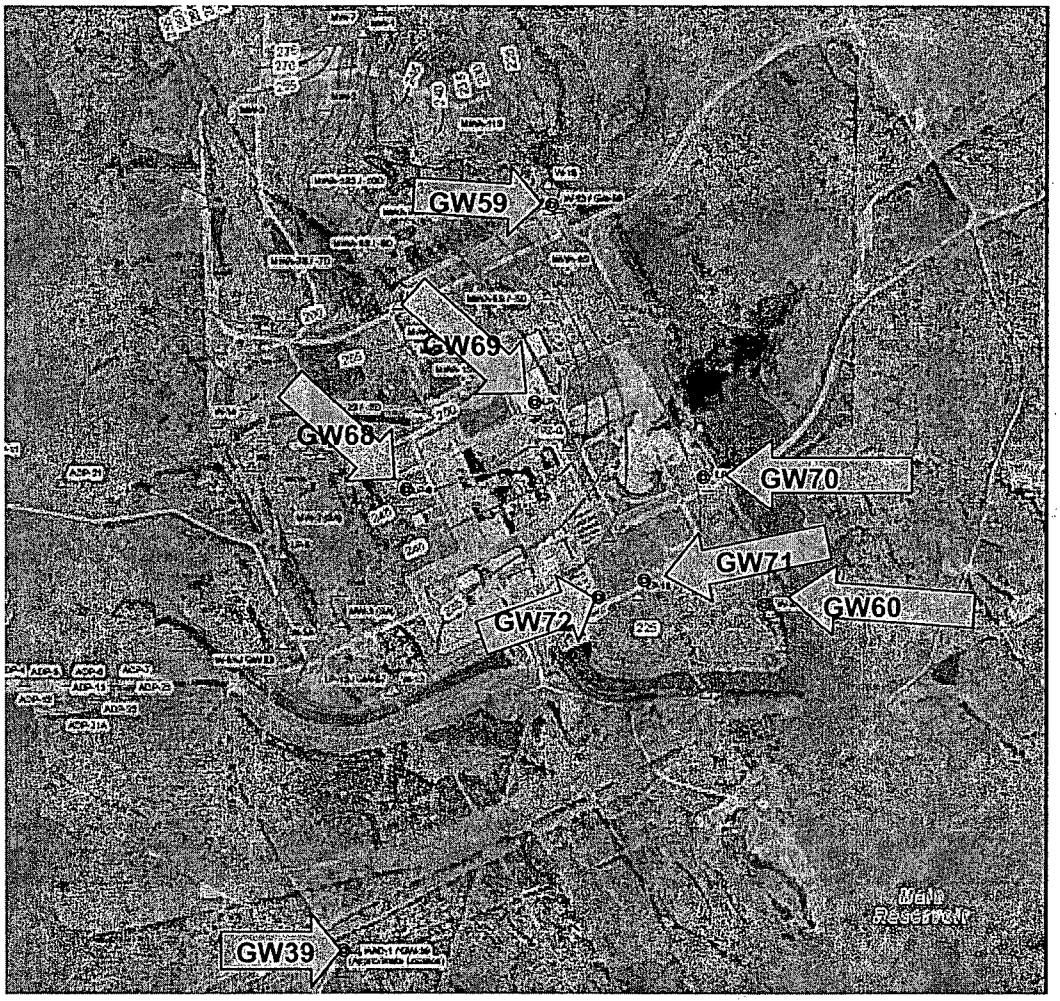


Figure 3b: Radiological Environmental Ground Water (GW) Sampling Locations

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

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)

Radiological Environmental Sampling Locations Legend

STATION NUMBER	SAMPLE TYPE	REFER TO FIGURE	STATION NUMBER	SAMPLE TYPE	REFER TO FIGURE
68	GW	3b			
69	GW	3b			
70	GW	3b			
71	GW	3b			
72	GW	3b			

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 3

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	(220 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	(250 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 59--0.5 miles NNE 60--0.5 miles ESE 68--0.2 miles W 69--0.2 miles NNE 70--0.4 miles E 71--0.3 miles SE 72--0.2 miles SE	Quarterly	4 liters	Gamma Tritium
Milk (MK)	5--18.2 miles WNW Manco Dairy*	Monthly	8 liters	I-131 Gamma
Shoreline Sediment (SS)	26--4.6 miles S 41--3.8 miles S	Semiannual	575 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	530 grams	Gamma
Bottom Sediment (SD)	52--3.8 miles S	Semiannual	575 grams	Gamma
Broadleaf Vegetation (BL)	65--1.36 miles S -- Site Boundary 66--1.33 miles SSW -- Site Boundary 5 -- > 12 miles NNW – Pittsboro*	Monthly	350 grams	Gamma
Food Crop (FC) or Food Products (FP) (Not required per ODCM)	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	350 grams	Gamma

* Control Stations

Table 3 (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 SSW** 28 -- 4.8 miles SW** 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
**Description information changed due to verification of sites.

SUMMARY OF RADIOLOGICAL MONITORING PROGRAM

This report presents the results of the Radiological Environmental Monitoring Program conducted during 2008 for the Harris Nuclear Plant 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 1125 total samples of 13 different media types from approximately 893 indicator samples were compared to approximately 232 control samples. 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 2008 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	6,680 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.	0.015 Total Body

The radiological environmental data indicates that HNP operations in 2008 had no significant impact on the environment or public health and safety.

A statistical summary of all the data for 2008 has been compiled and summarized in Table 4.

The plant-derived activity detected within the scope of the Radiological Environmental Monitoring Program can be seen in the Data Summary Table 4 for 2008. 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 4
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: 2008

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	6.24E-2	All less than LLD	N/A	All less than LLD	All less than LLD
Air Particulate (pCi/m^3)	Gross Beta 312	4.5E-3	2.12E-2 (260/260) 5.32E-3 – 3.50E-2	Near Prince's Chapel 3.4 miles SSW	2.25E-2 (52/52) 9.54E-3 – 3.43E-2	2.13E-2 (52/52) 9.70E-3 - 3.32E-2
	Gamma 24	Refer to Table 5	All less than LLD	N/A	All less than LLD	All less than LLD
Drinking Water[4] (pCi/l)	I-131 52	8.8E-1	6.19E-1 (1/26) Single Value	Lillington Cape Fear River 17.2 miles SSE	6.19E-1 (1/26) Single Value	8.33E-1 (2/26) 4.06E-1 – 1.26E+0
	Gross Beta 24	1.2E+0	4.92E+0 (12/12) 2.77E+0 – 6.86E+0	Lillington Cape Fear River 17.2 miles SSE	4.92E+0 (12/12) 2.77E+0 – 6.86E+0	5.40E+0 (12/12) 3.59E+0 – 7.27E+0
	Gamma 24	Refer to Table 5	All less than LLD	N/A	All less than LLD	All less than LLD
	Tritium 24	2.50E+2[6]	All less than LLD[7]	N/A	All less than LLD	All less than LLD

Table 4 (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: 2008

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 5	All less than LLD	N/A	All less than LLD	All less than LLD
Fish Free-Swimmers (pCi/g, wet)	Gamma 8	Refer to Table 5	All less than LLD	N/A	All less than LLD	All less than LLD
Food Crop (pCi/g, wet)	Gamma 18[3]	Refer to Table 5	All less than LLD	N/A	All less than LLD	All less than LLD
Broadleaf Vegetation (pCi/g, wet)	Gamma 54[3] Cs-137	5.0E-2	6.23E-2 (2/36) 4.90E-2 – 7.55E-2	Site Boundary 1.33 miles SSW	6.23E-2 (2/18) 4.90E-2 – 7.55E-2	All less than LLD
Aquatic Vegetation (pCi/g, wet)	Gamma 4	Refer to Table 5	All less than LLD	N/A	All less than LLD	No control

Table 4 (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: 2008

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	
Ground Water (pCi/l)	Gamma 32	Refer to Table 5	All less than LLD	N/A	All less than LLD	No control
	Tritium 32	2.50E+2[6]	All less than LLD	N/A	All less than LLD	No control
Milk (pCi/l)	I-131 12	9.3E-1	N/A	N/A	N/A	All less than LLD
	Gamma 12	Refer to Table 5	N/A	N/A	N/A	All less than LLD
Shoreline Sediments (pCi/g, dry)	Gamma 4	Refer to Table 5	All less than LLD	N/A	All less than LLD	No Control
Bottom Sediment (pCi/g, dry)	Gamma 2 Co-60	1.83E-1	1.15E+0 (2/2) 8.90E-1 – 1.40E+0	Harris Lake Cooling Tower Mixing Zone 3.8 miles S	1.15E+0 (2/2) 8.90E-1 – 1.40E+0	No Control
	Cs-137	1.10E-1	1.99E-1 (2/2) 9.25E-2 – 3.06E-1	Harris Lake Cooling Tower Mixing Zone 3.8 miles S	1.99E-1 (2/2) 9.25E-2 – 3.06E-1	No Control
	Co-58	1.69E-1	7.38E-2 (1/2) Single value	Harris Lake Cooling Tower Mixing Zone 3.8 miles S	7.38E-2 (1/2) Single value	No Control

Table 4 (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: 2008

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)	I-131 52	8.8E-1	6.19E-1 (1/26) Single Value	Lillington Cape Fear River 17.2 miles SSE	6.19E-1 (1/26) Single Value	8.33E-1 (2/26) 4.06E-1 – 1.26E+0
	Gross Beta 36	1.2 E+0	5.02E+0 (24/24) 2.77E+0 - 6.86E+0	Harris Lake Spillway 4.7 miles S	5.11E+0 (12/12) 3.97E+0 - 6.50E+0	5.40E+0 (12/12) 3.59E+0 – 7.27E+0
	Gamma 36	Refer to Table 5	All less than LLD	N/A	All less than LLD	All less than LLD
	Tritium 36	2.50E+2 [6]	6.68E+3 (12/24) 5.38E+3 – 9.44E+3	Harris Lake Spillway 4.7 miles S	6.68E+3 (12/12) 5.38E+3 – 9.44E+3	All less than LLD
Direct Radiation (mR/qtr) [5]	TLD 175 [3]		1.19E+1 (171/172) 9.00E+0 – 1.63E+1	Apex at Jones Park 8.7 miles NE	1.57E+1 (4/4) 1.43E+1 – 1.63E+1	1.49E+1 (4/4) 1.44E+1 – 1.53E+1

FOOTNOTES TO TABLE 4

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) is approximately 2.50E+2 pCi/L for samples that typically demonstrate activity less than the LLD. The LLD was lowered at the request of Carolina Power & Light Company doing business as 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 1.0E+3 pCi/L.

7. Drinking Water 51 (DW-51) is not included because it does not meet the EPA (Environmental Protection Agency) definition of a public drinking water supply.

INTERPRETATIONS AND CONCLUSIONS

Air Monitoring

All 312 air cartridge (AC) samples from indicator and control stations had I-131 concentrations less than the typical LLD of 6.24E-2 pCi/m^3. The air samplers operated for a total of 99.8% availability for the 2008 year. 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 2008, which is the entire operating history of the plant.

For the period of January 1, 2008, to December 31, 2008, the gross beta activity was detectable in all airborne particulate (AP) samples, with acceptable runtime, from the five indicator locations except for Location #4, which had 65.1 hours of downtime (NCR #303805). Review note in the Missed Surveillance Section. The 260 indicator samples had an average concentration of 2.12E-2 pCi/m^3, a value similar to the 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 2.13E-2 pCi/m^3 in 52 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 2008. AP samples that exhibit an elevated gross beta activity typically have a gamma isotopic analysis done and the results indicate all natural gamma activity. No plant-related gamma activity was observed for any air particulates during 2008. 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 5.

Drinking Water

The 26 drinking water samples collected at the Lillington Municipal water supply and the 26 control samples collected from the Cape Fear River above the Buckhorn Dam contained less than detectable I-131 activity (< 1.0E+0 pCi/L) during 2008, except for one control sample (DW/SW-38) during the January 21, 2008, to January 28, 2008, composite period (NCR # 264424).

During the time in question, the Control composite water sample taken from the Cape Fear River, at the Cape Fear Plant, indicated a small concentration of I-131 (approximately 1.26E+0 pCi/L). This location is upstream of the discharge of Harris Lake. There was no discharge of Harris Lake water (SW-26) to the Cape Fear River, no detectable I-131 in Harris Lake Spillway water (SW-26), and downstream of Harris Lake discharge at the Cape Fear River at the Lillington Water Treatment Plant (SW/DW-40) there was no I-131 detected during the same collection period. Therefore, the presence of I-131 would not be attributable to plant operations. This also occurred during the composite period March 10, 2008, to March 24, 2008, with a small concentration of I-131 detected (4.06E-1 pCi/L) and a similar sample was taken from downstream of the Harris Lake Spillway discharge with no detectable I-131 (NCR # 272325). This indicates that the I-131 detected at the control location for both collection periods is from a source other than the plant's effluents as discussed in a previous investigation (NCR # 189683). A composite indicator water sample (SW/DW-40), for collection period January 28, 2008, to February 11, 2008, taken from the Cape Fear River at the Lillington Water Treatment Plant downstream of the discharge of Harris Lake, indicated a small concentration of I-131 (approximately 6.19E-1 pCi/L) (NCR # 266186). Similar samples were taken from Harris Lake and upstream of the Harris Lake Spillway discharge during the same collection period with no detectable I-131 activity. This I-131 activity at SW/DW-40 (Lillington Water Treatment Plant on the Cape Fear River) is the result of the I-131 activity detected at the Control location (SW/DW-38) during the previous composite period. Since there had not been any water discharged from Harris Lake to the Cape Fear River during this time period due to the drought conditions, the source of the I-131 is not from plant operations. It has typically been the experience for all the I-131 drinking water samples to contain less than detectable activity (< 1.0E+0 pCi/L) for the preoperational and operational period with the exception of 1986 when the fallout from Chernobyl was detected. The water samplers operated for a total of 98.1% availability for the 2008 year. Refer to the Missed Surveillance Section on the missed drinking/surface water samples (NCR # 279064, 292240, 310146, and 312599).

The average annual gross beta concentrations at the indicator and control locations were similar with concentrations of 4.92E+0 pCi/L and 5.40E+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 drinking water gross beta activity during 2008 for Location 40 (Lillington) and Location 38 (control at Cape Fear).

Analyses for gamma-emitting radionuclides from plant operations indicated all concentrations were less than the lower limit of detection for drinking water. Table 5 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 (approximately 2.50E+2 pCi/L) (see Footnotes to Table 4, Footnote 6).

Fish

Analyses for gamma-emitting radionuclides in four samples of bottom-feeding species (catfish) and in eight samples of free-swimming species (sunfish and largemouth bass) from the indicator and control locations revealed no detectable activity for 2008, other than naturally occurring nuclides. This is consistent with the data for 1989-2007. During the Chernobyl period, Cs-134 and Cs-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 0.015 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	0.009	0.011	0.015

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 0.009, 0.011, and 0.015 mrem/year respectively.

Milk/Broadleaf Vegetation

During 2008, 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 consistently 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 1.13E+3 pCi/L-2.33E+3 pCi/L. Other natural occurring nuclides are identified in some of the milk samples.

In May of 1997, the Maple Knoll Dairy (indicator MK-42 - located in the SSE sector) ceased operations. In lieu of the monthly 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 locations at the site boundary (two indicator locations of the highest predicted annual average ground level D/Q) and at the control location (BL-5 in the NNW sector at greater than 12 miles). 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 control location

(BL-5) was introduced into the environmental sampling program for HNP in January 2004. The gamma analyses on the broadleaf vegetation did not detect any plant-related radioactivity in any of the broadleaf vegetation (Beech, Cherry, Dogwood, Fig Leaf, Maple, and Sweetgum) in 2008, except for Cs-137 on two broadleaf vegetation (Beech) samples for a mean of 6.23E-2 pCi/gm for BL-66 in August and September of 2008. Refer to the Missed Surveillance Section for the missed (unavailable) surveillances (NCR # 287731 and 329396).

Surface Water

Surface water samples were collected (weekly) and analyzed (bi-weekly) for I-131. Water samples collected contained less than detectable I-131 activity (< 1.0E+0 pCi/L) during 2008, except for one control sample (DW/SW-38) during the January 21, 2008, to January 28, 2008, composite period (NCR # 264424). During the time in question, the Control composite water sample taken from the Cape Fear River, at the Cape Fear Plant, indicated a small concentration of I-131 (approximately 1.26E+0 pCi/L). This location is upstream of the discharge of Harris Lake. There was no discharge of Harris Lake water (SW-26) to the Cape Fear River, no detectable I-131 in Harris Lake Spillway water (SW-26), and downstream of Harris Lake discharge at the Cape Fear River at the Lillington Water Treatment Plant (SW/DW-40) there was no I-131 detected during the same collection period. Therefore, the presence of I-131 would not be attributable to plant operations. This also occurred during the composite period March 10, 2008, to March 24, 2008, with a small concentration of I-131 detected (4.06E-1 pCi/L) and a similar sample was taken from downstream of the Harris Lake Spillway discharge with no detectable I-131 (NCR # 272325). This indicates that the I-131 detected at the control location for both collection periods is from a source other than the plant's effluents as discussed in a previous investigation (NCR # 189683). A composite indicator water sample (SW/DW-40), for collection period January 28, 2008, to February 11, 2008, taken from the Cape Fear River at the Lillington Water Treatment Plant downstream of the discharge of Harris Lake, indicated a small concentration of I-131 (approximately 6.19E-1 pCi/L) (NCR # 266186). Similar samples were taken from Harris Lake and upstream of the Harris Lake Spillway discharge during the same collection period with no detectable I-131 activity. This I-131 activity at SW/DW-40 (Lillington Water Treatment Plant on the Cape Fear River) is the result of the I-131 activity detected at the Control location (SW/DW-38) during the previous composite period. Since there had not been any water discharged from Harris Lake to the Cape Fear River during this time period due to the

drought conditions, the source of the I-131 is not from plant operations. The water samplers operated for a total of 98.1% availability for the 2008 year. Refer to the Missed Surveillance Section on the missed drinking/surface water samples (NCR # 279064, 292240, 310146, and 312599).

Average gross beta concentrations at the indicator and control locations were 5.02E+0 pCi/L and 5.40E+0 pCi/L, respectively, in 2008, 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 5).

The annual average tritium concentration in Harris Lake at the Spillway was 6.68E+3 pCi/L with minimum and maximum values of 5.38E+3 pCi/L and 9.44E+3 pCi/L, respectively (see Figure 11). The average Harris Lake Spillway tritium concentration showed an increase in tritium compared to the annual average of 5.26E+3 pCi/L in 2007. This concentration remains well below regulatory limits. 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. The increase in average tritium concentration from 2007 to 2008 is partially due to the drought conditions.

Ground Water

Ground water samples are collected on site at HNP for gamma and tritium analysis. The measured concentrations of the gamma analyses indicated concentrations 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 2008.

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 approximately 250 pCi/L, which is well below the requirements specified in the HNP ODCM.

The ground water tritium analysis determined that there was no detectable tritium concentration present based on the LLD specified in the HNP ODCM for 2008. The ground water wells, located on site at HNP, are all abandoned wells. Since they are not a water supply for drinking or irrigation, there is no radiological dose via this pathway.

Shoreline Sediment

Shoreline sediment samples were collected semiannually in 2008 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 2008. No long-term trends are readily observed in these samples.

Bottom Sediment

The 2008 data shows Cobalt (Co)-58 (7.38E-2 pCi/gm dry – single value), Cobalt (Co)-60 (8.90E-1 – 1.40E+0 pCi/gm dry), and Cesium (Cs)-137 (9.25E-2 - 3.06E-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 the 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 2008 included collards, egg plants, lettuce, mustard greens, okra, and tomatoes. Gamma analyses of the food

crops detected no plant-related activity in 10 samples from indicator locations and 8 samples from control locations collected in 2008.

Aquatic Vegetation

The 2008 data shows that there were four aquatic vegetation indicator 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 no plant-related activity in the four indicator samples collected during 2008. 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 11.9 mR and 14.9 mR, respectively. The highest indicator location was 8.7 miles NE of the plant (Apex at Jones Park) and its average was 15.7 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. These data illustrate that the quarterly inner ring TLD exposures are slightly less than the quarterly outer ring TLD exposures (differences range from 0.12 mR to 0.45 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 samples in 2008. The air samplers operated for a total of 99.8% availability in 2008.

Missed Samples:

- None in 2008

Missed Surveillances:

- APAC - 4; October 27, 2008 – Down time of 65.1 hours due to a loose connection of the ON/OFF switch. A replacement air sampler was installed and returned to service (NCR # 303805).

Food Crops

Food crops are no longer required to be collected as of July 27, 2006, Revision 18 of the HNP ODCM; therefore, any food crops collected is above and beyond requirements, but will appear in the current year's data report (NCR # 141151). Sampling of gardens goes above and beyond regulatory guidance since none of the gardens identified during the annual Land-Use Census are irrigated by water in which liquid plant wastes have been discharged. Therefore, the absence of food crops from these locations does not constitute a failure to monitor a pathway.

The farmers and individuals at each garden location sampled during 2008 did not plant or produce three (3) different kinds of food crops in 2008. This was mostly due to seasonal unavailability, lack of sufficient quantity planted or lack of a variety of crops planted, drought conditions, and crops being too small to harvest at the time of collection.

Drinking / Surface Water

SW-26 (May 5 – 12, 2008) had minimum volume needed (NCR # 279064).

The surface water environmental sample (Spillway at Harris Lake) for collection period May 5 through May 12, 2008, had the minimum volume collected during the collection period to support analyses; however, to ensure sufficient volume to archive was available a grab sample was collected and added to the composite. In so doing, the resulting mixture did not meet the ODCM definition of a composite sample. The effect on the analysis result is minimal.

DW/SW-40 (May 5 – 12, 2008) had minimum volume needed (NCR # 279064).

The surface water environmental sample (Spillway at Harris Lake) for collection period May 5 through May 12, 2008, had the minimum volume collected during the collection period to support analyses; however, to ensure sufficient volume to archive was available a grab sample was collected and added to the composite. In so doing, the resulting mixture did not meet the ODCM definition of a composite sample. The effect on the analysis result is minimal.

SW-26 (August 14, 2008) had missed surveillances (NCR # 292240).

The surface water environmental sample (Spillway at Harris Lake) for August 14, 2008, was not drawing a composite sample. The sampler was operating properly, but no sample was being pulled by the pump. A temporary suction line was installed and the water sampler was returned to service with an estimated down time of 59 hours. While sufficient volume was collected during the two week collection period to support analyses; sample aliquots were not able to be obtained each day as required by the ODCM.

DW/SW-38 (Dec. 1 - 8, 2008) had missed surveillances (NCR # 310146).

The drinking/surface water environmental sample (at Cape Fear Plant) for collection period Dec. 1 through 8, 2008, was found running, but it had only collected a fraction of the weekly composite. Upon closer examination, it was observed that the inner hose had cracked. The hose was replaced, sampler was reset, and returned to service. A grab sample was collected. It was determined that the down time for the sampler was 152 hours. While sufficient volume was collected during the two week collection period to

support analyses, sample aliquots were not able to be obtained each day as required by the ODCM.

DW/SW-38 (December 29, 2008) had missed surveillances (NCR # 312599).

The drinking/surface water environmental sample (Lillington – Cape Fear) for December 29, 2008, was found with insufficient sample being collected due to the lack of water in the area that the composite water sampler was located. This was due to maintenance work being done at the sampling location. A grab sample was taken. The area had sufficient water available for the operation of the water sampler the next day, so no further grab samples were required. While sufficient volume was collected during the two week collection period to support analyses, sample aliquots were not able to be obtained each day as required by the ODCM.

DW/SW-40 (December 29, 2008) had missed surveillances (NCR # 312599).

The drinking/surface water environmental sample (Lillington – Cape Fear) for December 29, 2008, was found with insufficient sample being collected due to the lack of water in the area that the composite water sampler was located. This was due to maintenance work being done at the sampling location. A grab sample was taken. The area had sufficient water available for the operation of the water sampler the next day, so no further grab samples were required. While sufficient volume was collected during the two week collection period to support analyses, sample aliquots were not able to be obtained each day as required by the ODCM.

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, November, and December of 2008 (NCR # 287731 and 329396).

TLDs

One TLD sample, out of a possible 176 TLD samples (indicator and control locations), was missing during 2008.

TLD # 20 Second Quarter 2008

TLD # 20 was missing in the field. The area was searched, but the TLD could not be located. The cage and TLD were replaced (NCR # 286926).

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 4.5E-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 1.2E+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 are counted for 315 minutes with an approximate LLD of approximately 2.50E+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 of 6.24E-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 1.0E+0 pCi/L using 25,000-second and 40,000-second count times respectively.

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 and the Canberra APEX Gamma Spectroscopy System. Table 5 summarizes LLD values derived from using the instrument with the worst sensitivity, typical sample volumes, typical count times, typical worst background count, and worst case on decay (from collection to counting).

Air particulate filter quarterly composites are placed in a Petri dish and analyzed directly for 7,000 seconds.

Liquid samples, milk and water, are transferred to Marinelli beakers and analyzed by gamma counting. One-liter ground water samples are gamma scanned directly in a 1-Liter Marinelli beaker for 8,400 seconds and the SW/DW samples for 40,000 seconds. One-liter milk samples are analyzed in a 1-liter Marinelli beaker for 12,600 seconds. The previous analysis method, which involved heated evaporation of the waters (non-drinking water samples) to concentrate the radioactive constituents was stopped in October 2008 and the direct gamma scan of all non-drinking water samples began (NCR # 303063). The analytical method being used prior to October 2008 for gamma activity in non-drinking water environmental samples for the Radiological Environmental Monitoring Program (REMP) produced non-conservative results with regard to I-131. This scenario does not present a public dose concern, since I-131 is monitored as part of the Radioactive Effluent Release Program and two of HNP surface water locations on the Cape Fear River are also sampled and analyzed as drinking water locations. Since the drinking water I-131 data (separation analysis method) are not impacted by the above problem, these drinking water data serve to validate that no I-131 went undetected in these two surface water locations. The third HNP surface water location (Harris Lake Spillway) is not routinely analyzed by the drinking water method; however, HNP potable water is analyzed by the drinking water method. The source of potable water is Harris Lake water; thus these analyses provide assurance that I-131 has not gone undetected in the Harris Lake Spillway water samples. Furthermore, in the case of ground water samples, it is unlikely that I-131 would be present in this water in the absence of other radionuclides such as Cs-137. Due to the fact that I-131 migrates through the ground much less efficiently than tritium, it is highly unlikely that I-131

would have been present in the absence of tritium. There was no tritium detected in the ground water samples in question.

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

Aquatic vegetation and broadleaf vegetation samples are weighed as sampled and analyzed in a Marinelli beaker for 7,500 seconds. If any food crop samples are collected they will be handled like the aquatic and broadleaf vegetation samples.

Fish samples are prepared by stuffing small raw, edible portions of the fish in a 1-liter Marinelli beaker for gamma analysis using a count time of 1,800 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 Carolina Power & Light Company's, doing

business as Progress Energy Carolinas, Inc., nuclear plant radiological environmental surveillance programs. In fulfillment of ODCM Operational Requirements, the laboratory is a participant in the Eckert & Ziegler Analytics 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 2008, 120 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 120 analyses have been received from Eckert & Ziegler Analytics. The results were compared to the criteria established in the NRC Inspection Manual (Procedure 84750) for Radioactive Waste Treatment, Effluent, and Environmental monitoring.

All of the 120 analyses were within the acceptance criteria. During 2008, the individual measurements were evaluated (NCR # 289134 and 302410). Any results falling outside the acceptable 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. However, the I-131 in non-drinking water environmental samples may not have met the LLD required by the ODCM due to the analytical method for gamma activity (I-131) producing non-conservative results (NCR # 303063).

Table 5
Typical Lower Limits of Detection (A Priori)
Gamma Spectrometry

Drinking Water/Surface Water Samples	
Isotope	**LLD (pCi/L)**
Mn-54	3
Co-58	4
Fe-59	10
Co-60	5
Zn-65	8
Zr-Nb-95	7 / 5
I-131	14.3
Cs-134	4
Cs-137	4
Ba-La-140	35 / 11
*I-131 (Separation Procedure)	*0.88
Air Particulates (Quarterly Composite)	
Isotope	**LLD (pCi/m^3)**
Cs-134	0.002
Cs-137	0.002
Milk	
Isotope	**LLD (pCi/L)**
Cs-134	11
Cs-137	12
Ba-La-140	44 / 13
*I-131 (Separation Procedure)	*0.93
Sediment	
Isotope	**LLD (pCi/kg dry)**
Cs-134	109
Cs-137	110
Fish	
Isotope	**LLD (pCi/kg wet)**
Mn-54	86
Co-58	91
Fe-59	242
Co-60	113
Zn-65	222
Cs-134	91
Cs-137	102

* Instrumental analysis of resin concentrates of samples.

Table 5 (Cont.)
Typical Lower Limits of Detection (A Priori)
Gamma Spectrometry

Food Products and Vegetation	
Isotope	**LLD (pCi/kg wet)**
I-131	54
Cs-134	35
Cs-137	50
Aquatic Vegetation	
Isotope	**LLD (pCi/kg wet)**
I-131	41
Cs-134	23
Cs-137	33
Ground Water	
Isotope	**LLD (pCi/L)**
Mn-54	7
Co-58	11
Fe-59	19
Co-60	11
Zn-65	17
Zr-Nb-95	13 / 10
I-131	12
Cs-134	7
Cs-137	7
Ba-La-140	42 / 13

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 than 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.

2008 Land-Use Census Results

The 2007 and 2008 results of the survey for the nearest resident, garden, milk and meat animals in each sector are compared in Table 6.

The nearest resident in each sector remained the same from 2007 to 2008. No gardens were located within 5 miles of the plant for the NE, S, and WNW sectors. All the gardens located in 2008 were the same as 2007, except where the previous year's survey did find a garden in the SSE sector at 4.2 miles, the 2008 survey did not locate a garden and a garden was located in a closer proximity to the plant in the ENE sector in 2008 at 1.6 miles by the same resident. All meat animals located in 2008 were the same as 2007, except for the NNE, SSE, and W sectors. No meat animals were found in the NNE, NE, SSE, S, SSW, W, WNW, and NW sectors in 2008. 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 2008 survey, even though there are not yet permanent residents on site. There are plans in the future for rangers and a campground.

Table 6

Land-Use Census Comparison (2007-2008)
Nearest Pathway (Miles)

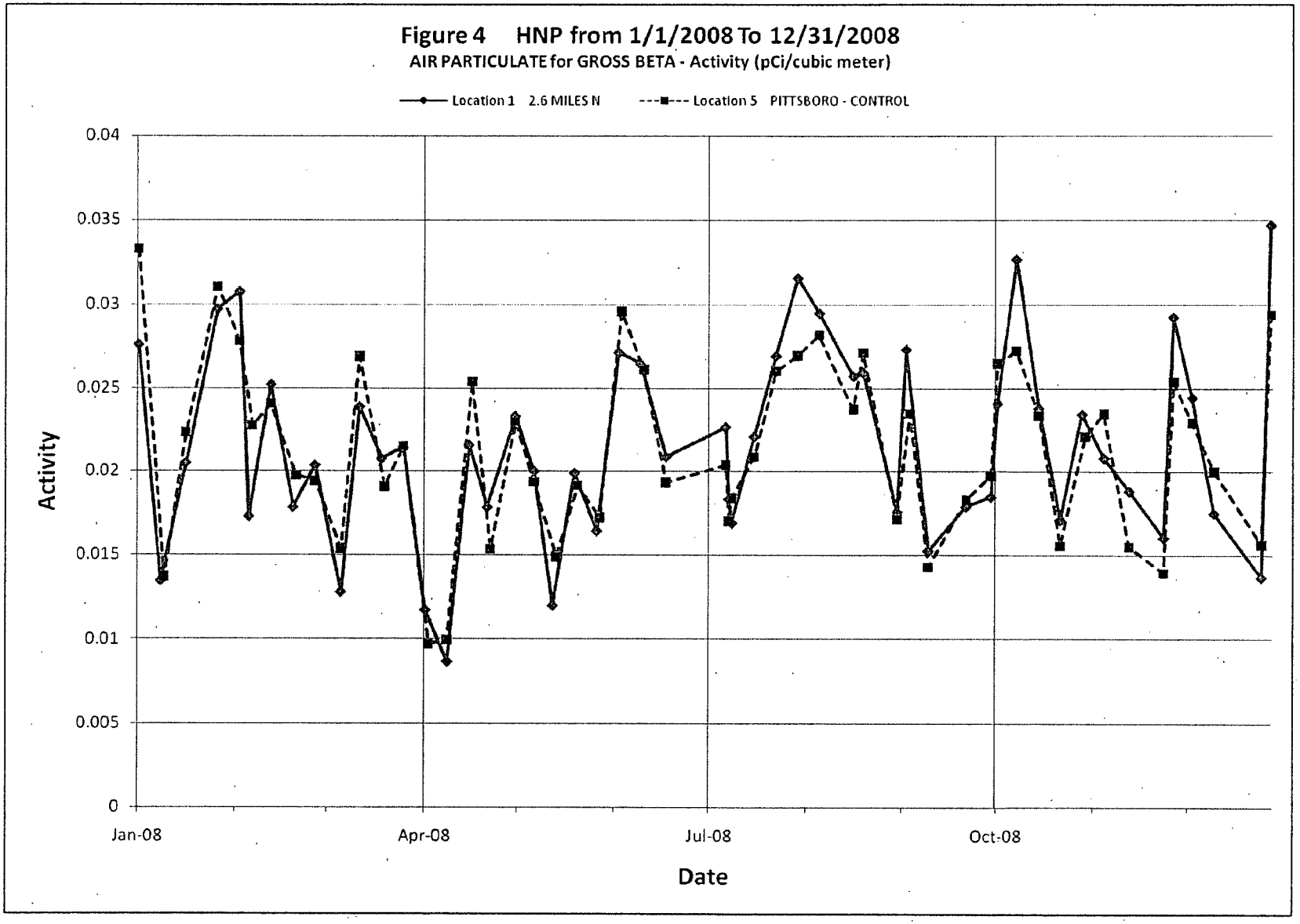
SECTOR	RESIDENT		GARDEN		MEAT ANIMAL		MILK ANIMAL	
	2008	2007	2008	2007	2008	2007	2008	2007
N	2.2	2.2	2.2	2.2	2.2	2.2	---	---
NNE	1.9	1.9	1.9	1.9	---*	1.9	---	---
NE	2.3	2.3	---	---	---	---	---	---
ENE	1.6	1.6	1.6*	1.8	1.8	1.8	---	---
E	1.7	1.7	1.7	1.7	1.7	1.7	---	---
ESE	2.6	2.6	4.6	4.6	4.6	4.6	---	---
SE	2.6	2.6	2.6	2.6	2.6	2.6	---	---
SSE	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	4.5	4.5	---	---
W	3.0	3.0	3.1	3.1	---*	3.1	---	---
WNW	2.5	2.5	---	---	---	---	---	---
NW	2.4	2.4	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 1/1/2008 To 12/31/2008

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



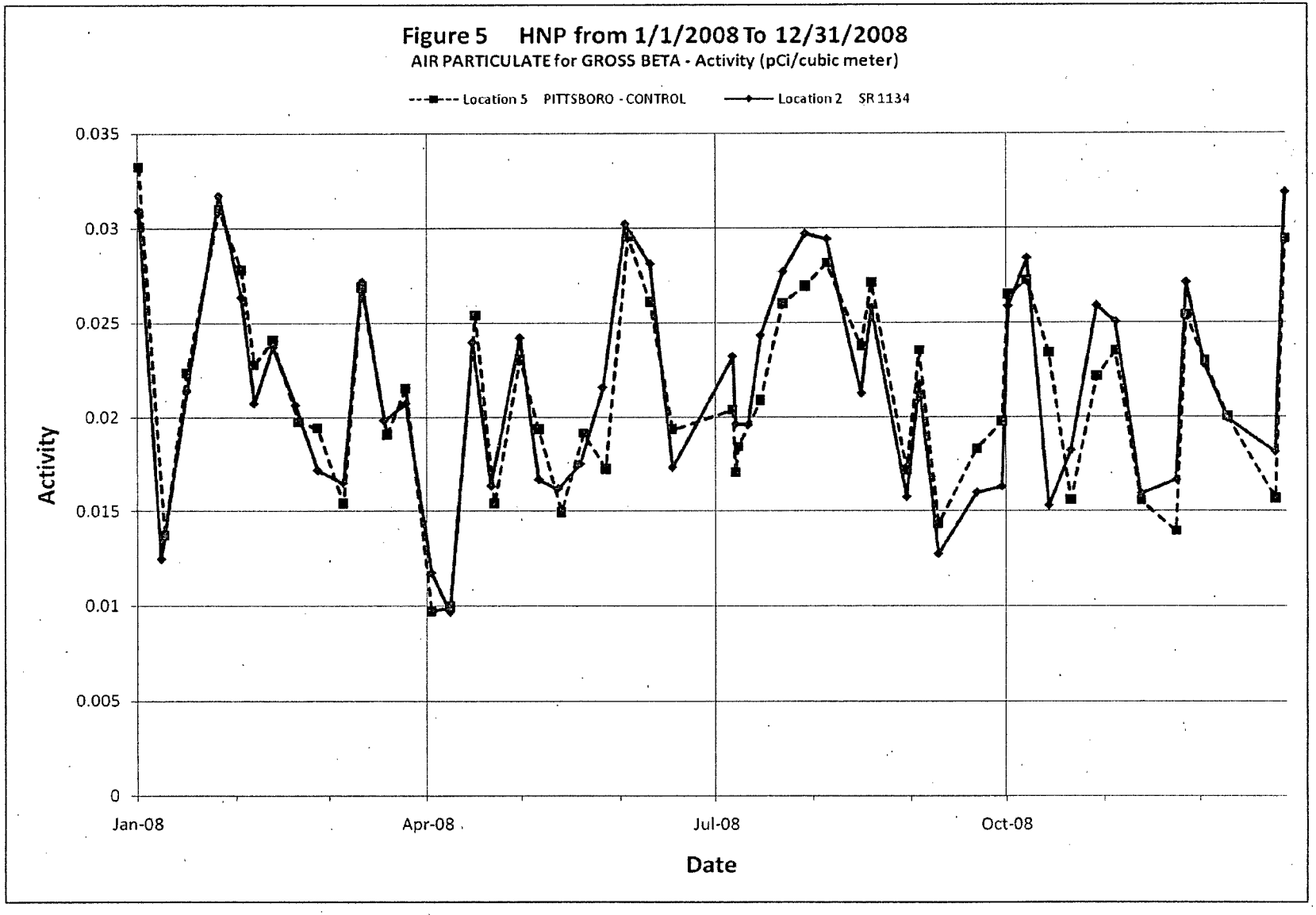


Figure 5 HNP from 1/1/2008 To 12/31/2008
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)
Location 5 PITTSBORO - CONTROL
Location 2 SR 1134
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
Activity
Jan-08
Apr-08
Jul-08
Oct-08
Date

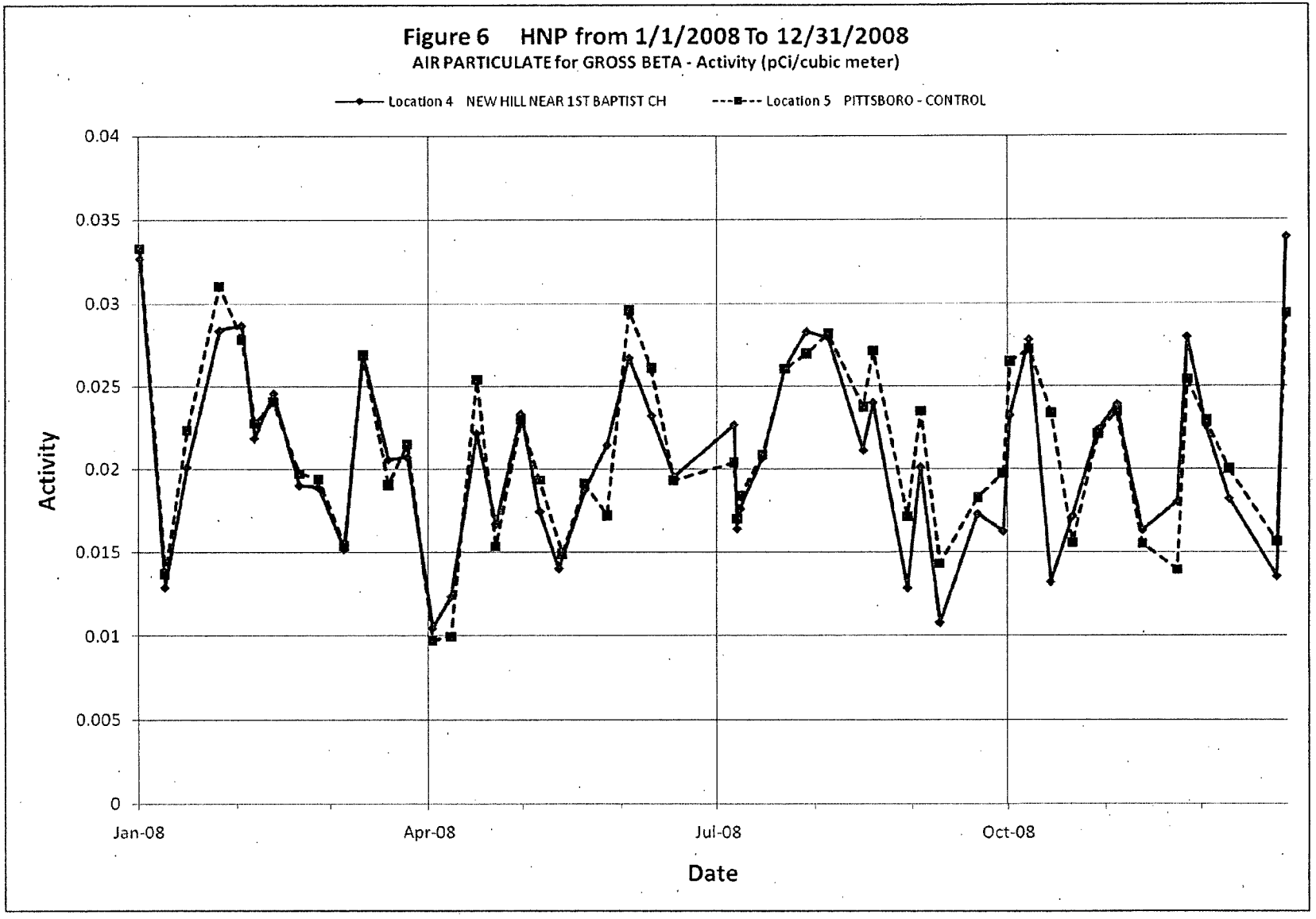


Figure 6 HNP from 1/1/2008 To 12/31/2008
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)
Location 4 NEW HILL NEAR 1ST BAPTIST CH
Location 5 PITTSBORO - CONTROL
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
Activity
Jan-08
Apr-08
Jul-08
Oct-08
Date

Figure 7 HNP from 1/1/2008 To 12/31/2008

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

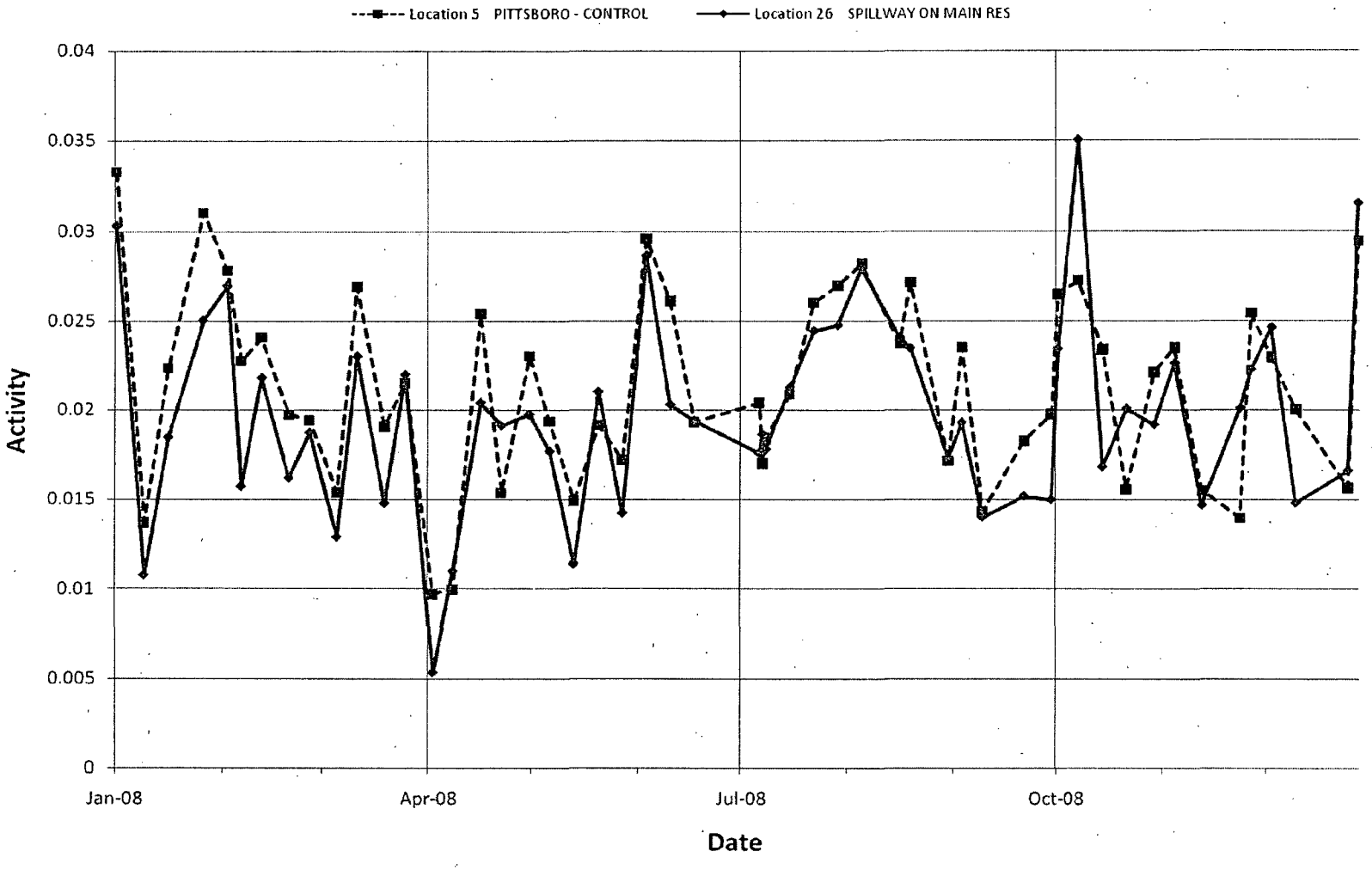
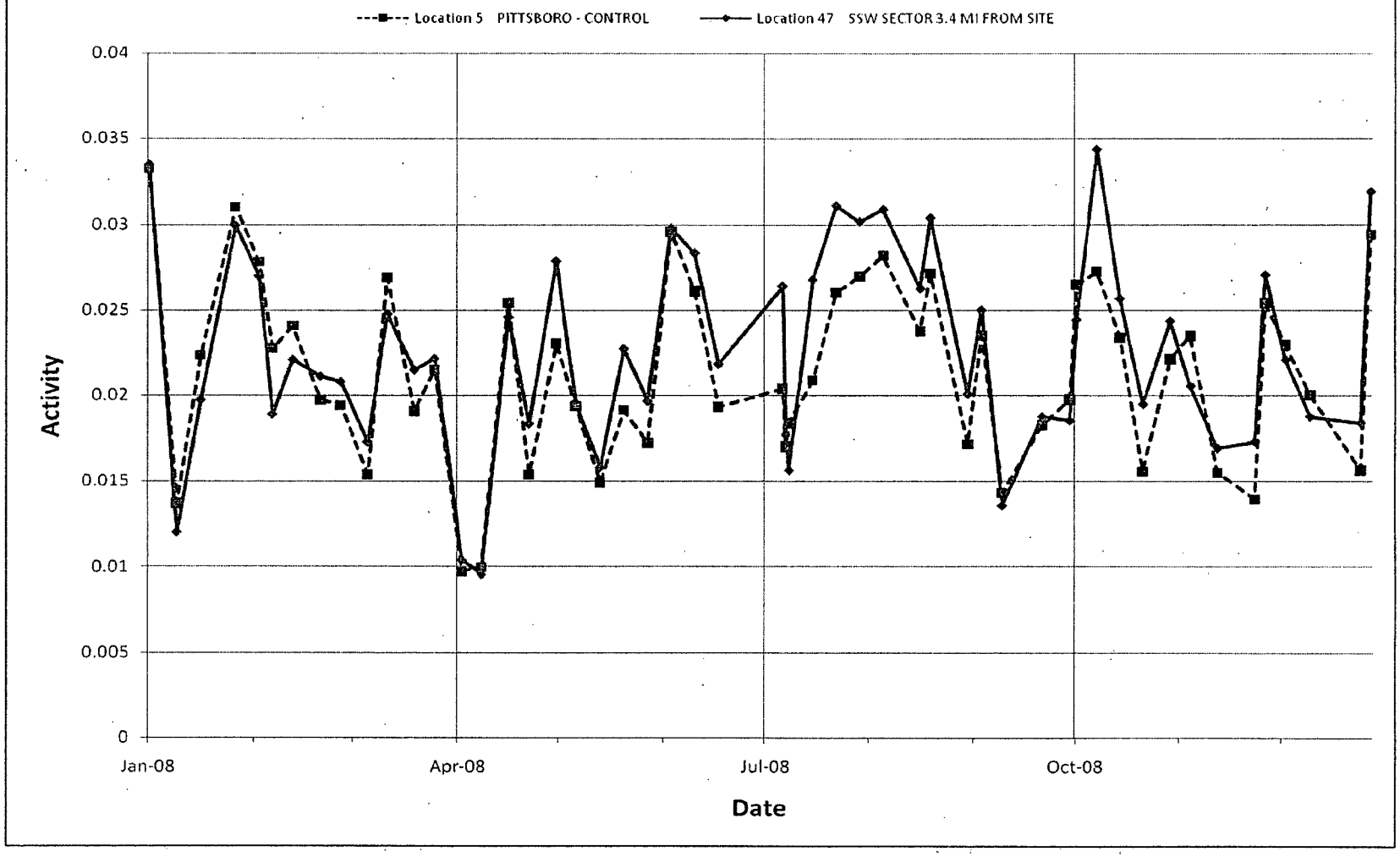


Figure 8 HNP from 1/1/2008 To 12/31/2008

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



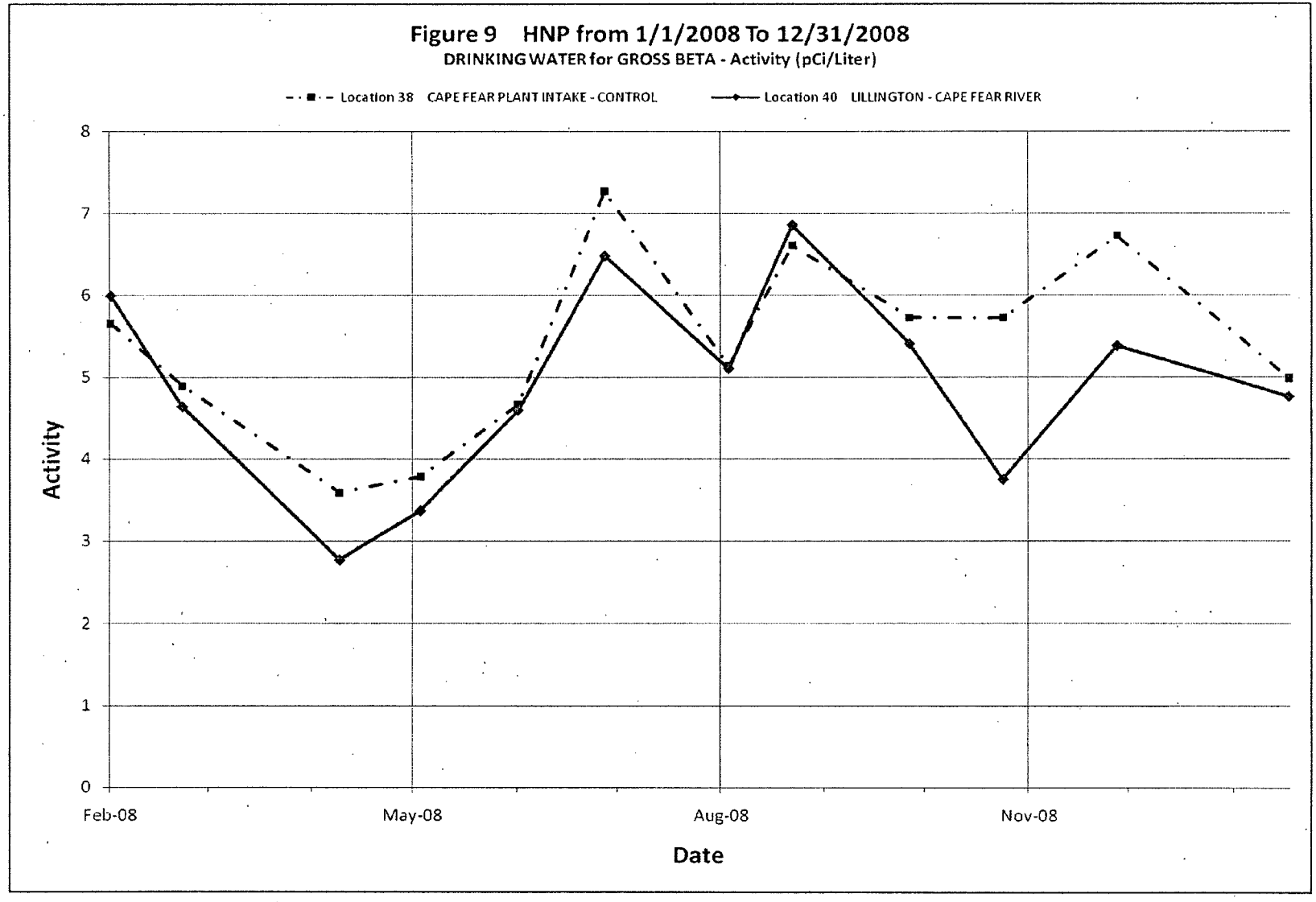


Figure 9 HNP from 1/1/2008 To 12/31/2008
DRINKING WATER for GROSS BETA - Activity (pCi/Liter)
Location 38 CAPE FEAR PLANT INTAKE - CONTROL
Location 40 LILLINGTON - CAPE FEAR RIVER
Activity
0
1
2
3
4
5
6
7
8
Feb-08
May-08
Aug-08
Nov-08
Date

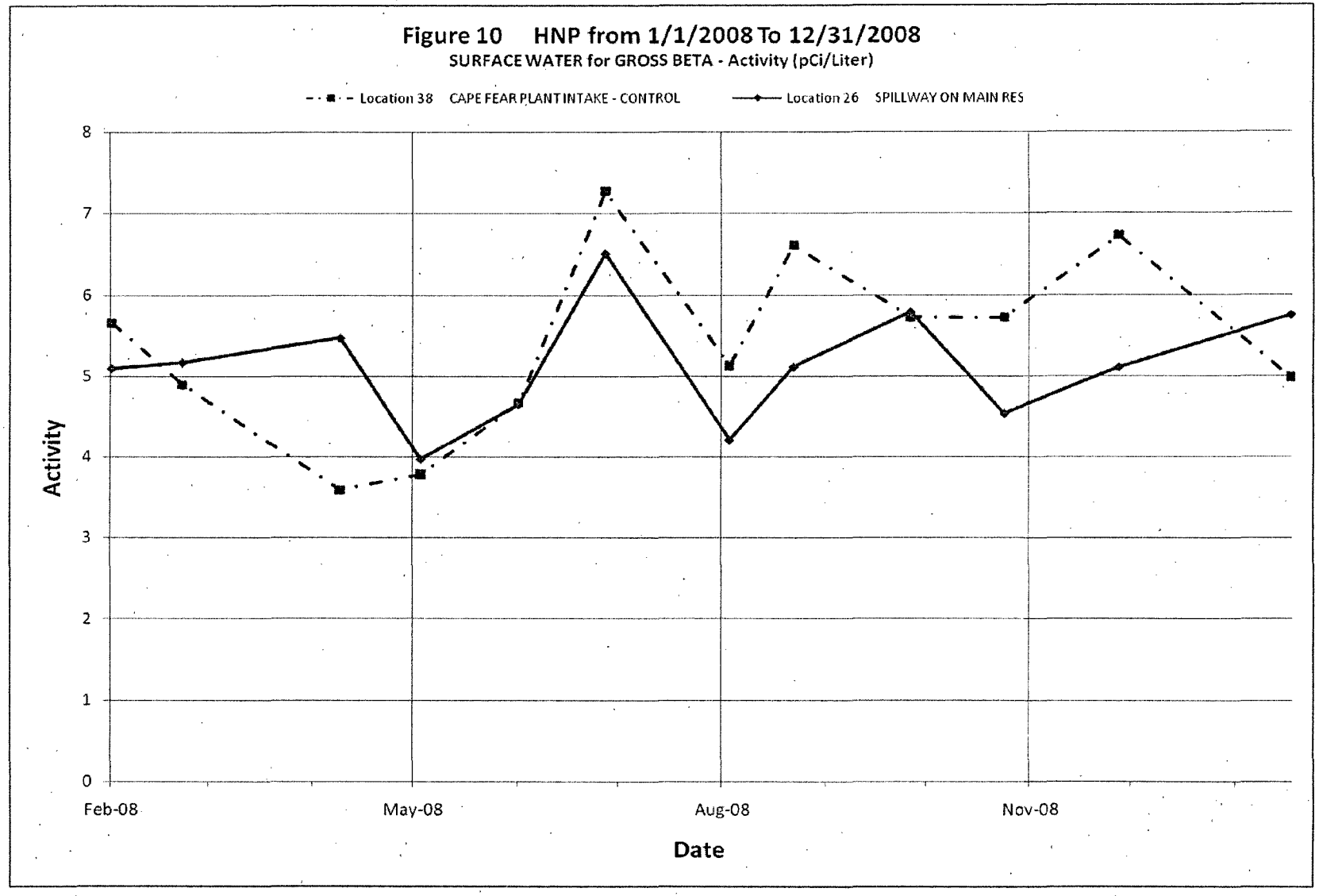


Figure 10 HNP from 1/1/2008 To 12/31/2008
SURFACE WATER for GROSS BETA - Activity (pCi/Liter)
Location 38 CAPE FEAR PLANT INTAKE - CONTROL
Location 26 SPILLWAY ON MAIN RES
Activity
0
1
2
3
4
5
6
7
8
Feb-08
May-08
Aug-08
Nov-08
Date

Figure 11 HNP 2008 Surface Water Tritium Activity

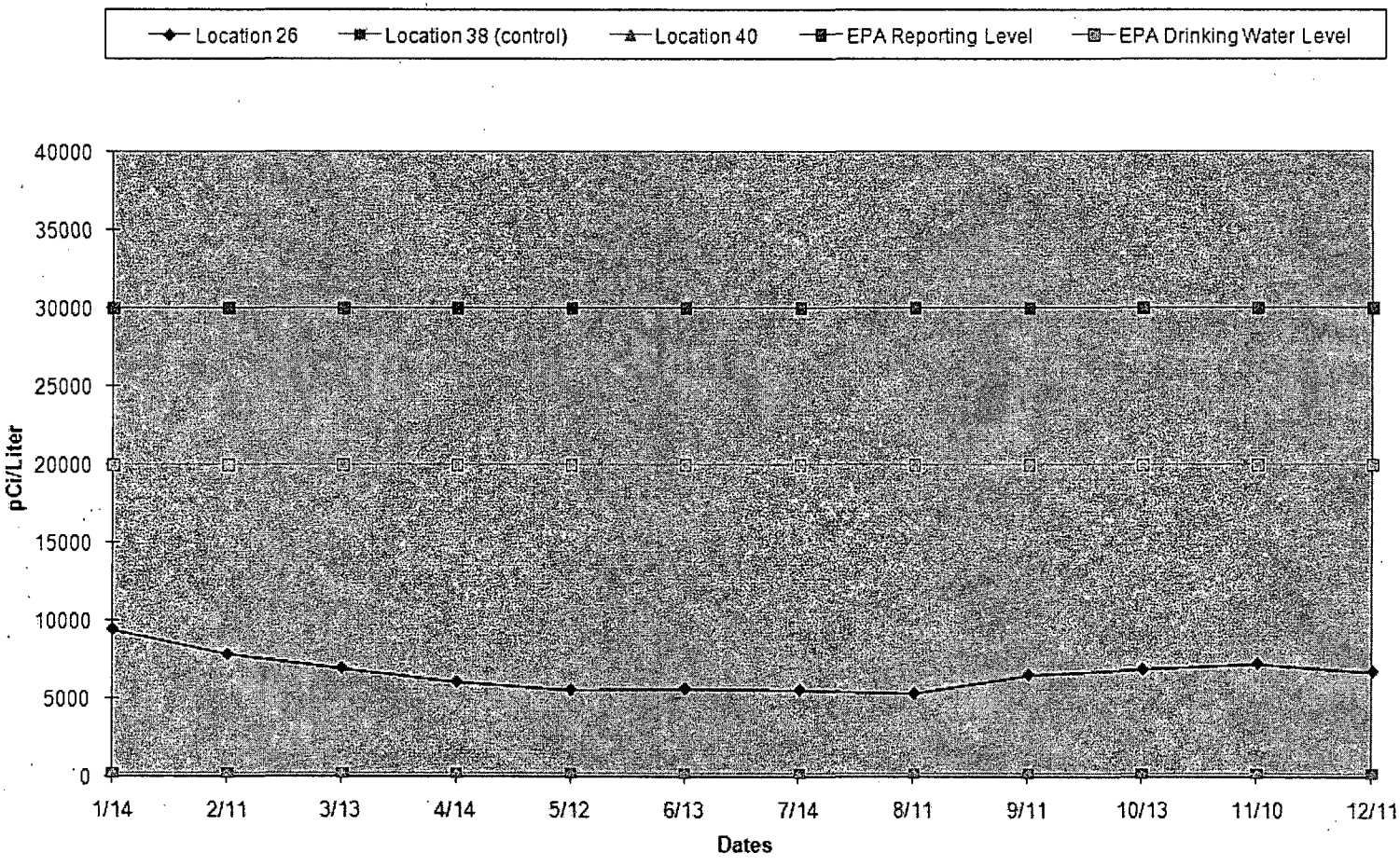
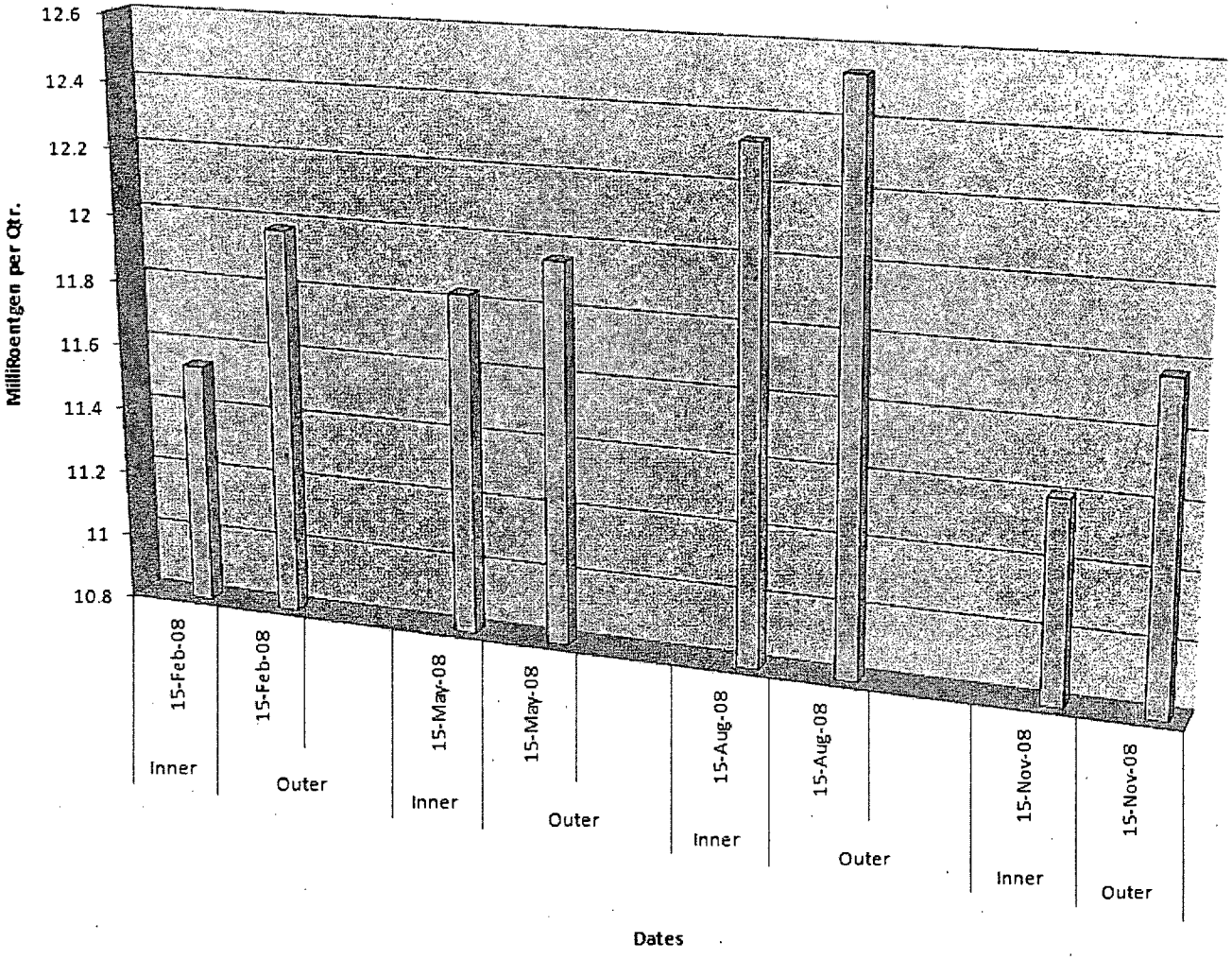


Figure 12 HNP 2008 TLD Averages for Inner and Outer Ring Locations



APPENDIX

The table located in the HNP Radiological Environmental Operating Reports (REORs) for 1994 – 2007, which contains the Sampling Point/Location and Description of the HNP Radiological Environmental Monitoring Program TLDs, contains two TLDs with incorrect sectors listed. See below for the corrections.

TLD #	Incorrect Sampling Point/Location & Description	Correct Sampling Point/Location & Description
27	4.8 miles SW	4.8 miles SSW
28	4.8 miles SSW	4.8 miles SW

2008 HNP
Radiological Environmental Monitoring TLD Report

Comments

- All HNP Environmental TLDS were present in 2008, except for the following TLDs:
  - TLD # 20 Second Quarter of 2008

HNP Radiological Environmental Monitoring TLD Report

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
1	2.6 MILES N	2/15/2008	12.9	1.3
1	2.6 MILES N	5/15/2008	13.5	1.8
1	2.6 MILES N	8/15/2008	13.8	2.1
1	2.6 MILES N	11/15/2008	12.9	1.2
2	SR 1134	2/15/2008	14	2.4
2	SR 1134	5/15/2008	15.9	4.3
2	SR 1134	8/15/2008	14.2	1.3
2	SR 1134	11/15/2008	13.6	1.9
3	HARRIS E&E CENTER - 2.2 MI NE	2/15/2008	11.2	1.5
3	HARRIS E&E CENTER - 2.2 MI NE	5/15/2008	11.2	1
3	HARRIS E&E CENTER - 2.2 MI NE	8/15/2008	12.3	2
3	HARRIS E&E CENTER - 2.2 MI NE	11/15/2008	11.1	0.9
4	NEW HILL NEAR 1ST BAPTIST CH	2/15/2008	11.4	1.9
4	NEW HILL NEAR 1ST BAPTIST CH	5/15/2008	11.2	1.2
4	NEW HILL NEAR 1ST BAPTIST CH	8/15/2008	12.5	1.5
4	NEW HILL NEAR 1ST BAPTIST CH	11/15/2008	11	0.6
5	PITTSBORO - CONTROL	2/15/2008	15.3	1.3
5	PITTSBORO - CONTROL	5/15/2008	14.4	1.5
5	PITTSBORO - CONTROL	8/15/2008	15.2	1.3
5	PITTSBORO - CONTROL	11/15/2008	14.6	0.6
6	INT OF SR 1134 AND 1135	2/15/2008	11.8	1.6

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
6	INT OF SR 1134 AND 1135	5/15/2008	11.6	1
6	INT OF SR 1134 AND 1135	8/15/2008	12.4	2.2
6	INT OF SR 1134 AND 1135	11/15/2008	11.8	0.9
7	HOUSE RUINS ON SR 1134	2/15/2008	12.6	1.3
7	HOUSE RUINS ON SR 1134	5/15/2008	12.9	1.3
7	HOUSE RUINS ON SR 1134	8/15/2008	13.1	2.4
7	HOUSE RUINS ON SR 1134	11/15/2008	11.9	1
8	DEAD END OF SR 1134	2/15/2008	13.7	1.3
8	DEAD END OF SR 1134	5/15/2008	11.9	0.4
8	DEAD END OF SR 1134	8/15/2008	14.6	1.5
8	DEAD END OF SR 1134	11/15/2008	11.6	0.8
9	1 MI SW OF HOLLEMANS XRDS ON SR 1130	2/15/2008	9.4	1.4
9	1 MI SW OF HOLLEMANS XRDS ON SR 1130	5/15/2008	10.3	1.3
9	1 MI SW OF HOLLEMANS XRDS ON SR 1130	8/15/2008	10.4	2
9	1 MI SW OF HOLLEMANS XRDS ON SR 1130	11/15/2008	9.6	1.1
10	2.0 MI SW OF HOLLEMANS XRDS ON SR 1130	2/15/2008	10.9	1.9
10	2.0 MI SW OF HOLLEMANS XRDS ON SR 1130	5/15/2008	10.7	1.3
10	2.0 MI SW OF HOLLEMANS XRDS ON SR 1130	8/15/2008	11.4	2.1
10	2.0 MI SW OF HOLLEMANS XRDS ON SR 1130	11/15/2008	10.6	1
11	EARTHEN DAM AT HARRIS PLANT	2/15/2008	10.4	1.2
11	EARTHEN DAM AT HARRIS PLANT	5/15/2008	10.7	0.9
11	EARTHEN DAM AT HARRIS PLANT	8/15/2008	11.4	1.5
11	EARTHEN DAM AT HARRIS PLANT	11/15/2008	10.7	1.1
12	1 MI S ON DIRT RD FROM TLD 13	2/15/2008	9.9	1.5

Dose: mR/std. qtr.

TLD	TLD Location Description	Sample Date	Dose	2 Sigma Error
12	1 MI S ON DIRT RD FROM TLD 13	5/15/2008	10.6	0.9
12	1 MI S ON DIRT RD FROM TLD 13	8/15/2008	10.8	1.8
12	1 MI S ON DIRT RD FROM TLD 13	11/15/2008	10.1	0.7
13	DIRT RD INT BETWEEN PLANT AND AUX RES	2/15/2008	10.5	1.6
13	DIRT RD INT BETWEEN PLANT AND AUX RES	5/15/2008	11.1	2
13	DIRT RD INT BETWEEN PLANT AND AUX RES	8/15/2008	11.3	1.3
13	DIRT RD INT BETWEEN PLANT AND AUX RES	11/15/2008	11	1.8
14	DEAD END OF SR 1911	2/15/2008	10.2	1.8
14	DEAD END OF SR 1911	5/15/2008	10.1	1.3
14	DEAD END OF SR 1911	8/15/2008	10.7	1.3
14	DEAD END OF SR 1911	11/15/2008	9.7	1.2
15	CEMETERY ON SR 1911	2/15/2008	9.4	2.1
15	CEMETERY ON SR 1911	5/15/2008	10.4	0.9
15	CEMETERY ON SR 1911	8/15/2008	10.2	1.2
15	CEMETERY ON SR 1911	11/15/2008	10.1	1.2
16	US 1 AT CHATHAM-WAKE CO LINE	2/15/2008	11.1	2.1
16	US 1 AT CHATHAM-WAKE CO LINE	5/15/2008	11.7	1.4
16	US 1 AT CHATHAM-WAKE CO LINE	8/15/2008	12.3	1.5
16	US 1 AT CHATHAM-WAKE CO LINE	11/15/2008	11.6	0.4
17	INT OF US 1 AND AUX RES	2/15/2008	11.3	1.8
17	INT OF US 1 AND AUX RES	5/15/2008	11.4	0.6
17	INT OF US 1 AND AUX RES	8/15/2008	12.1	1.7
17	INT OF US 1 AND AUX RES	11/15/2008	11	0.4
18	0.6 MI N ON US 1 FROM TLD 17	2/15/2008	11.9	1.7

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	5/15/2008	12.2	0.4
18	0.6 MI N ON US 1 FROM TLD 17	8/15/2008	12.6	1.9
18	0.6 MI N ON US 1 FROM TLD 17	11/15/2008	12.2	0.9
19	SR 1142 - OLIVES DAIRY	2/15/2008	10.7	1.6
19	SR 1142 - OLIVES DAIRY	5/15/2008	11.1	1.7
19	SR 1142 - OLIVES DAIRY	8/15/2008	11.3	2
19	SR 1142 - OLIVES DAIRY	11/15/2008	10.4	1.1
20	INT OF SR 1149 AND US 1	2/15/2008	13.7	1.5
20	INT OF SR 1149 AND US 1	8/15/2008	13.7	1.6
20	INT OF SR 1149 AND US 1	11/15/2008	13.7	0.8
21	1.3 MI ON SR 1152 FROM INT SR 1153	2/15/2008	13.7	1.9
21	1.3 MI ON SR 1152 FROM INT SR 1153	5/15/2008	11.4	1.1
21	1.3 MI ON SR 1152 FROM INT SR 1153	8/15/2008	14	1.6
21	1.3 MI ON SR 1152 FROM INT SR 1153	11/15/2008	10.9	1.2
22	2.0 MI E OF HOLLEMANS XRDS ON SR 1115	2/15/2008	9.8	1.5
22	2.0 MI E OF HOLLEMANS XRDS ON SR 1115	5/15/2008	10.8	0.4
22	2.0 MI E OF HOLLEMANS XRDS ON SR 1115	8/15/2008	10.9	1.9
22	2.0 MI E OF HOLLEMANS XRDS ON SR 1115	11/15/2008	10.4	0.6
23	INT SR 1116 AND SR 1127	2/15/2008	12.7	1.7
23	INT SR 1116 AND SR 1127	5/15/2008	12.7	0.8
23	INT SR 1116 AND SR 1127	8/15/2008	13.1	2.6
23	INT SR 1116 AND SR 1127	11/15/2008	12.5	1
24	SWEET SPRINGS CHURCH ON SR 1116	2/15/2008	11.3	1.4
24	SWEET SPRINGS CHURCH ON SR 1116	5/15/2008	11.5	0.8

Dose: mR/std. qtr.

TLD	TLD Location Description	Sample Date	Dose	2 Sigma Error
24	SWEET SPRINGS CHURCH ON SR 1116	8/15/2008	11.7	1.5
24	SWEET SPRINGS CHURCH ON SR 1116	11/15/2008	10.9	0.7
25	0.2 MI W OF INT OF SR 1401 AND SR 1402	2/15/2008	13.6	1.5
25	0.2 MI W OF INT OF SR 1401 AND SR 1402	5/15/2008	11.5	0.6
25	0.2 MI W OF INT OF SR 1401 AND SR 1402	8/15/2008	13.5	2.1
25	0.2 MI W OF INT OF SR 1401 AND SR 1402	11/15/2008	11.3	0.9
26	SPILLWAY ON MAIN RES	2/15/2008	12.2	1.8
26	SPILLWAY ON MAIN RES	5/15/2008	12.4	1.2
26	SPILLWAY ON MAIN RES	8/15/2008	12.5	2
26	SPILLWAY ON MAIN RES	11/15/2008	12.3	0.9
27	BUCKHORN UNITED METHODIST CH ON NC 42	2/15/2008	10	4.3
27	BUCKHORN UNITED METHODIST CH ON NC 42	5/15/2008	9.9	1
27	BUCKHORN UNITED METHODIST CH ON NC 42	8/15/2008	9.9	1.3
27	BUCKHORN UNITED METHODIST CH ON NC 42	11/15/2008	9.3	0.6
28	0.6 MI FROM INT SR 1916 AND SR 1924	2/15/2008	10.3	1.2
28	0.6 MI FROM INT SR 1916 AND SR 1924	5/15/2008	10.8	0.4
28	0.6 MI FROM INT SR 1916 AND SR 1924	8/15/2008	11.3	1.3
28	0.6 MI FROM INT SR 1916 AND SR 1924	11/15/2008	10.3	1.5
29	NESTE RESIN CORP ON SR 1916	2/15/2008	13.5	1.9
29	NESTE RESIN CORP ON SR 1916	5/15/2008	13.4	0.8
29	NESTE RESIN CORP ON SR 1916	8/15/2008	13.8	1.8
29	NESTE RESIN CORP ON SR 1916	11/15/2008	13.7	1.5
30	INT OF SR 1972 AND US 1	2/15/2008	9	1.4
30	INT OF SR 1972 AND US 1	5/15/2008	9.8	1.9

Dose: mR/std. qtr.

TLD	TLD Location Description	Sample Date	Dose	2 Sigma Error
30	INT OF SR 1972 AND US 1	8/15/2008	10.1	1.4
30	INT OF SR 1972 AND US 1	11/15/2008	9.8	1.3
31	INT OF SR 1910	2/15/2008	9.5	1.3
31	INT OF SR 1910	5/15/2008	9.8	1.1
31	INT OF SR 1910	8/15/2008	10.1	2.5
31	INT OF SR 1910	11/15/2008	9.5	0.5
32	3 MI ON SR 1008 FROM INT SR 1011	2/15/2008	12	1.8
32	3 MI ON SR 1008 FROM INT SR 1011	5/15/2008	12.9	1.6
32	3 MI ON SR 1008 FROM INT SR 1011	8/15/2008	12.9	2.3
32	3 MI ON SR 1008 FROM INT SR 1011	11/15/2008	13.2	0.3
33	SR 1142 AT BARRICADE	2/15/2008	10	1.2
33	SR 1142 AT BARRICADE	5/15/2008	10.2	0.8
33	SR 1142 AT BARRICADE	8/15/2008	10.6	1.4
33	SR 1142 AT BARRICADE	11/15/2008	10.3	1.1
34	APEX AT JONES PARK	2/15/2008	14.3	2.1
34	APEX AT JONES PARK	5/15/2008	16	1.1
34	APEX AT JONES PARK	8/15/2008	16.3	1.3
34	APEX AT JONES PARK	11/15/2008	16	1.4
35	HOLLY SPRINGS ON EARP STREET	2/15/2008	13.1	1.6
35	HOLLY SPRINGS ON EARP STREET	5/15/2008	12.8	0.7
35	HOLLY SPRINGS ON EARP STREET	8/15/2008	13.8	1.8
35	HOLLY SPRINGS ON EARP STREET	11/15/2008	12.5	1.4
36	INT OF SR 1393 AND SR 1421	2/15/2008	10.7	1.6
36	INT OF SR 1393 AND SR 1421	5/15/2008	10.1	0.5

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
36	INT OF SR 1393 AND SR 1421	8/15/2008	10.7	2.1
36	INT OF SR 1393 AND SR 1421	11/15/2008	9.7	1.3
37	FUQUAY VARINA AT OLD CP&L OFFICE	2/15/2008	15.2	1.6
37	FUQUAY VARINA AT OLD CP&L OFFICE	5/15/2008	15.4	1.3
37	FUQUAY VARINA AT OLD CP&L OFFICE	8/15/2008	15.5	1.3
37	FUQUAY VARINA AT OLD CP&L OFFICE	11/15/2008	14.4	0.8
48	SR 1142 AT UNDERGROUND CABLE SIGN	2/15/2008	12.6	1.7
48	SR 1142 AT UNDERGROUND CABLE SIGN	5/15/2008	13.9	0.8
48	SR 1142 AT UNDERGROUND CABLE SIGN	8/15/2008	13.9	1.3
48	SR 1142 AT UNDERGROUND CABLE SIGN	11/15/2008	13.3	0.5
49	SR 1127 AT WAKE CO TRASH COLLECTION AREA	2/15/2008	13.3	2
49	SR 1127 AT WAKE CO TRASH COLLECTION AREA	5/15/2008	15	2.4
49	SR 1127 AT WAKE CO TRASH COLLECTION AREA	8/15/2008	14.8	1.6
49	SR 1127 AT WAKE CO TRASH COLLECTION AREA	11/15/2008	14	0.8
50	HOLLEMANS CROSSROADS	2/15/2008	11.3	1.4
50	HOLLEMANS CROSSROADS	5/15/2008	10.9	0.9
50	HOLLEMANS CROSSROADS	8/15/2008	12.1	1.4
50	HOLLEMANS CROSSROADS	11/15/2008	10.5	1.9
53	INTERSECTION OF SR 1972 AND SR 1907	2/15/2008	10.1	1.7
53	INTERSECTION OF SR 1972 AND SR 1907	5/15/2008	10.2	0.8
53	INTERSECTION OF SR 1972 AND SR 1907	8/15/2008	10.9	1.6
53	INTERSECTION OF SR 1972 AND SR 1907	11/15/2008	10	0.5
56	2.8 MI WSW OF THE SITE	2/15/2008	12.2	1.8
56	2.8 MI WSW OF THE SITE	5/15/2008	11.9	1.3

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
56	2.8 MI WSW OF THE SITE	8/15/2008	12.8	2.3
56	2.8 MI WSW OF THE SITE	11/15/2008	11.7	1.3
63	0.7 MI SW SECTOR ON (POWER POLE COJ85)	2/15/2008	13	1.4
63	0.7 MI SW SECTOR ON (POWER POLE COJ85)	5/15/2008	13.3	1.5
63	0.7 MI SW SECTOR ON (POWER POLE COJ85)	8/15/2008	13.8	1.2
63	0.7 MI SW SECTOR ON (POWER POLE COJ85)	11/15/2008	12.5	1.5
67	1.2 MI FROM HNP IN ENE SECTOR	2/15/2008	11.4	1.7
67	1.2 MI FROM HNP IN ENE SECTOR	5/15/2008	11.8	0.4
67	1.2 MI FROM HNP IN ENE SECTOR	8/15/2008	11.7	1.9
67	1.2 MI FROM HNP IN ENE SECTOR	11/15/2008	11.7	1

2008 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	2.6 MILES N	1/7/2008	278.8	2.76E-02	3.60E-03	2.99E-03
1	2.6 MILES N	1/14/2008	276.4	1.35E-02	3.03E-03	3.46E-03
1	2.6 MILES N	1/21/2008	280.4	2.05E-02	3.41E-03	3.50E-03
1	2.6 MILES N	1/28/2008	279.6	2.97E-02	3.83E-03	3.42E-03
1	2.6 MILES N	2/4/2008	278.1	3.07E-02	3.85E-03	3.31E-03
1	2.6 MILES N	2/11/2008	274.4	1.73E-02	3.31E-03	3.60E-03
1	2.6 MILES N	2/18/2008	278	2.52E-02	3.57E-03	3.27E-03
1	2.6 MILES N	2/25/2008	278.3	1.78E-02	3.05E-03	2.88E-03
1	2.6 MILES N	3/3/2008	279.8	2.04E-02	3.21E-03	2.95E-03
1	2.6 MILES N	3/10/2008	273.6	1.28E-02	2.81E-03	3.02E-03
1	2.6 MILES N	3/17/2008	276.2	2.39E-02	3.52E-03	3.29E-03
1	2.6 MILES N	3/24/2008	276.7	2.08E-02	3.27E-03	3.04E-03
1	2.6 MILES N	3/31/2008	276.9	2.15E-02	3.32E-03	3.07E-03
1	2.6 MILES N	4/7/2008	276	1.17E-02	2.77E-03	3.10E-03
1	2.6 MILES N	4/14/2008	275	8.68E-03	2.70E-03	3.38E-03
1	2.6 MILES N	4/21/2008	275.1	2.16E-02	3.32E-03	3.03E-03
1	2.6 MILES N	4/28/2008	262	1.78E-02	3.36E-03	3.54E-03
1	2.6 MILES N	5/5/2008	262	2.33E-02	3.57E-03	3.33E-03
1	2.6 MILES N	5/12/2008	261.5	2.00E-02	3.49E-03	3.58E-03
1	2.6 MILES N	5/19/2008	263.6	1.20E-02	2.92E-03	3.33E-03
1	2.6 MILES N	5/27/2008	301.1	1.99E-02	3.11E-03	2.97E-03
1	2.6 MILES N	6/2/2008	225.1	1.64E-02	3.73E-03	4.31E-03
1	2.6 MILES N	6/9/2008	259.4	2.71E-02	3.76E-03	3.27E-03
1	2.6 MILES N	6/16/2008	262.6	2.64E-02	3.81E-03	3.59E-03
1	2.6 MILES N	6/23/2008	257.5	2.09E-02	3.63E-03	3.79E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
1	2.6 MILES N	6/30/2008	297.3	2.27E-02	3.31E-03	3.14E-03
1	2.6 MILES N	7/7/2008	295.5	1.83E-02	3.05E-03	2.99E-03
1	2.6 MILES N	7/14/2008	296.2	1.69E-02	2.91E-03	2.84E-03
1	2.6 MILES N	7/21/2008	299.6	2.21E-02	3.24E-03	3.02E-03
1	2.6 MILES N	7/28/2008	299.7	2.69E-02	3.38E-03	2.75E-03
1	2.6 MILES N	8/4/2008	271	3.16E-02	3.84E-03	3.10E-03
1	2.6 MILES N	8/11/2008	271.3	2.95E-02	3.72E-03	3.04E-03
1	2.6 MILES N	8/18/2008	272.5	2.57E-02	3.62E-03	3.30E-03
1	2.6 MILES N	8/25/2008	271	2.60E-02	3.58E-03	3.13E-03
1	2.6 MILES N	9/2/2008	312.4	1.76E-02	2.93E-03	2.92E-03
1	2.6 MILES N	9/8/2008	232.9	2.73E-02	4.07E-03	3.80E-03
1	2.6 MILES N	9/15/2008	269.6	1.53E-02	3.08E-03	3.30E-03
1	2.6 MILES N	9/22/2008	271.9	1.79E-02	3.20E-03	3.25E-03
1	2.6 MILES N	9/29/2008	307.7	1.85E-02	3.01E-03	2.99E-03
1	2.6 MILES N	10/6/2008	274.7	2.41E-02	3.52E-03	3.27E-03
1	2.6 MILES N	10/13/2008	274.4	3.27E-02	3.84E-03	2.98E-03
1	2.6 MILES N	10/20/2008	297.4	2.38E-02	3.26E-03	2.80E-03
1	2.6 MILES N	10/27/2008	340.8	1.71E-02	2.73E-03	2.68E-03
1	2.6 MILES N	11/3/2008	259.9	2.34E-02	3.53E-03	3.20E-03
1	2.6 MILES N	11/10/2008	263.8	2.08E-02	3.44E-03	3.38E-03
1	2.6 MILES N	11/17/2008	264.9	1.88E-02	3.38E-03	3.52E-03
1	2.6 MILES N	11/24/2008	267.1	1.61E-02	3.12E-03	3.28E-03
1	2.6 MILES N	12/1/2008	266.2	2.92E-02	3.81E-03	3.27E-03
1	2.6 MILES N	12/8/2008	266.9	2.45E-02	3.65E-03	3.49E-03
1	2.6 MILES N	12/15/2008	265.5	1.75E-02	3.30E-03	3.51E-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	2.6 MILES N	12/22/2008	265.4	1.37E-02	3.01E-03	3.33E-03
1	2.6 MILES N	12/29/2008	268.8	3.47E-02	4.03E-03	3.21E-03
2	SR 1134	1/7/2008	308	3.09E-02	3.53E-03	2.71E-03
2	SR 1134	1/14/2008	304.8	1.25E-02	2.76E-03	3.14E-03
2	SR 1134	1/21/2008	310	2.14E-02	3.23E-03	3.17E-03
2	SR 1134	1/28/2008	308.9	3.17E-02	3.68E-03	3.10E-03
2	SR 1134	2/4/2008	306.1	2.63E-02	3.42E-03	3.01E-03
2	SR 1134	2/11/2008	303.6	2.07E-02	3.25E-03	3.26E-03
2	SR 1134	2/18/2008	304.1	2.37E-02	3.30E-03	2.98E-03
2	SR 1134	2/25/2008	304.9	2.06E-02	3.02E-03	2.63E-03
2	SR 1134	3/3/2008	284.2	1.71E-02	3.00E-03	2.91E-03
2	SR 1134	3/10/2008	276.6	1.65E-02	3.01E-03	2.99E-03
2	SR 1134	3/17/2008	279	2.71E-02	3.66E-03	3.25E-03
2	SR 1134	3/24/2008	280.4	1.98E-02	3.19E-03	3.00E-03
2	SR 1134	3/31/2008	281.3	2.07E-02	3.24E-03	3.02E-03
2	SR 1134	4/7/2008	280.1	1.17E-02	2.74E-03	3.06E-03
2	SR 1134	4/14/2008	279.6	9.67E-03	2.73E-03	3.32E-03
2	SR 1134	4/21/2008	279.8	2.39E-02	3.41E-03	2.98E-03
2	SR 1134	4/28/2008	286.7	1.63E-02	3.07E-03	3.24E-03
2	SR 1134	5/5/2008	289.1	2.42E-02	3.39E-03	3.01E-03
2	SR 1134	5/12/2008	286.7	1.66E-02	3.09E-03	3.26E-03
2	SR 1134	5/19/2008	289.3	1.62E-02	2.97E-03	3.04E-03
2	SR 1134	5/27/2008	328.6	1.75E-02	2.81E-03	2.72E-03
2	SR 1134	6/2/2008	245.4	2.15E-02	3.78E-03	3.95E-03
2	SR 1134	6/9/2008	283.9	3.02E-02	3.69E-03	2.99E-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	6/16/2008	286.9	2.81E-02	3.68E-03	3.29E-03
2	SR 1134	6/23/2008	283.1	1.73E-02	3.21E-03	3.45E-03
2	SR 1134	6/30/2008	286.9	2.32E-02	3.42E-03	3.25E-03
2	SR 1134	7/7/2008	286.2	1.96E-02	3.18E-03	3.09E-03
2	SR 1134	7/14/2008	284.4	1.96E-02	3.14E-03	2.95E-03
2	SR 1134	7/21/2008	287.6	2.43E-02	3.43E-03	3.15E-03
2	SR 1134	7/28/2008	287.3	2.77E-02	3.51E-03	2.87E-03
2	SR 1134	8/4/2008	251.6	2.97E-02	3.93E-03	3.34E-03
2	SR 1134	8/11/2008	251.6	2.94E-02	3.90E-03	3.28E-03
2	SR 1134	8/18/2008	253.2	2.12E-02	3.56E-03	3.55E-03
2	SR 1134	8/25/2008	251.4	2.58E-02	3.75E-03	3.37E-03
2	SR 1134	9/2/2008	289.9	1.57E-02	2.98E-03	3.15E-03
2	SR 1134	9/8/2008	216.5	2.17E-02	3.97E-03	4.08E-03
2	SR 1134	9/15/2008	251.8	1.27E-02	3.08E-03	3.54E-03
2	SR 1134	9/22/2008	253.5	1.60E-02	3.25E-03	3.49E-03
2	SR 1134	9/29/2008	297.8	1.63E-02	2.96E-03	3.09E-03
2	SR 1134	10/6/2008	295.6	2.58E-02	3.44E-03	3.04E-03
2	SR 1134	10/13/2008	269.2	2.84E-02	3.68E-03	3.04E-03
2	SR 1134	10/20/2008	291.8	1.53E-02	2.84E-03	2.85E-03
2	SR 1134	10/27/2008	264.9	1.82E-02	3.31E-03	3.44E-03
2	SR 1134	11/3/2008	261.8	2.59E-02	3.64E-03	3.18E-03
2	SR 1134	11/10/2008	264.1	2.50E-02	3.65E-03	3.37E-03
2	SR 1134	11/17/2008	265	1.59E-02	3.22E-03	3.52E-03
2	SR 1134	11/24/2008	268.1	1.66E-02	3.15E-03	3.27E-03
2	SR 1134	12/1/2008	266	2.71E-02	3.71E-03	3.27E-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	12/8/2008	267.6	2.27E-02	3.56E-03	3.48E-03
2	SR 1134	12/15/2008	265.2	1.99E-02	3.43E-03	3.52E-03
2	SR 1134	12/22/2008	264.8	1.81E-02	3.27E-03	3.34E-03
2	SR 1134	12/29/2008	267.1	3.18E-02	3.91E-03	3.23E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/7/2008	292.1	3.27E-02	3.73E-03	2.85E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/14/2008	289.2	1.29E-02	2.89E-03	3.31E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/21/2008	294	2.01E-02	3.28E-03	3.34E-03
4	NEW HILL NEAR 1ST BAPTIST CH	1/28/2008	292.8	2.84E-02	3.66E-03	3.27E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/4/2008	290.7	2.86E-02	3.65E-03	3.17E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/11/2008	289.5	2.19E-02	3.41E-03	3.42E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/18/2008	290.4	2.46E-02	3.44E-03	3.13E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/25/2008	365.8	1.90E-02	2.62E-03	2.19E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/3/2008	288.8	1.89E-02	3.06E-03	2.86E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/10/2008	284.2	1.52E-02	2.88E-03	2.91E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/17/2008	286.6	2.69E-02	3.58E-03	3.17E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/24/2008	287.7	2.06E-02	3.18E-03	2.92E-03
4	NEW HILL NEAR 1ST BAPTIST CH	3/31/2008	288.1	2.07E-02	3.19E-03	2.95E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/7/2008	286.9	1.04E-02	2.61E-03	2.99E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/14/2008	286.2	1.23E-02	2.84E-03	3.25E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/21/2008	286.8	2.22E-02	3.26E-03	2.91E-03
4	NEW HILL NEAR 1ST BAPTIST CH	4/28/2008	315	1.67E-02	2.89E-03	2.95E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/5/2008	315.2	2.33E-02	3.17E-03	2.77E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/12/2008	313.8	1.75E-02	2.95E-03	2.98E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/19/2008	316.1	1.40E-02	2.68E-03	2.78E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/27/2008	358.9	1.87E-02	2.71E-03	2.49E-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	6/2/2008	267.9	2.14E-02	3.55E-03	3.62E-03
4	NEW HILL NEAR 1ST BAPTIST CH	6/9/2008	307.5	2.67E-02	3.36E-03	2.76E-03
4	NEW HILL NEAR 1ST BAPTIST CH	6/16/2008	311.4	2.32E-02	3.26E-03	3.03E-03
4	NEW HILL NEAR 1ST BAPTIST CH	6/23/2008	307.8	1.95E-02	3.14E-03	3.17E-03
4	NEW HILL NEAR 1ST BAPTIST CH	6/30/2008	311.3	2.27E-02	3.21E-03	3.00E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/7/2008	311.4	1.64E-02	2.84E-03	2.84E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/14/2008	309.3	1.76E-02	2.86E-03	2.72E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/21/2008	312.7	2.06E-02	3.07E-03	2.89E-03
4	NEW HILL NEAR 1ST BAPTIST CH	7/28/2008	313.2	2.60E-02	3.25E-03	2.63E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/4/2008	310.2	2.83E-02	3.39E-03	2.71E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/11/2008	310.2	2.79E-02	3.36E-03	2.66E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/18/2008	312.3	2.11E-02	3.09E-03	2.88E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/25/2008	310.2	2.40E-02	3.19E-03	2.73E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/2/2008	358	1.29E-02	2.42E-03	2.55E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/8/2008	267.3	2.01E-02	3.36E-03	3.31E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/15/2008	311	1.08E-02	2.52E-03	2.86E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/22/2008	313.3	1.73E-02	2.87E-03	2.82E-03
4	NEW HILL NEAR 1ST BAPTIST CH	9/29/2008	315.9	1.62E-02	2.84E-03	2.91E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/6/2008	314.2	2.32E-02	3.18E-03	2.86E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/13/2008	313.8	2.78E-02	3.32E-03	2.60E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/20/2008	319.2	1.32E-02	2.55E-03	2.61E-03
4	NEW HILL NEAR 1ST BAPTIST CH	10/27/2008	183.6	1.72E-02	4.26E-03	4.97E-03
4	NEW HILL NEAR 1ST BAPTIST CH	11/3/2008	295.2	2.24E-02	3.20E-03	2.82E-03
4	NEW HILL NEAR 1ST BAPTIST CH	11/10/2008	295.4	2.39E-02	3.34E-03	3.02E-03
4	NEW HILL NEAR 1ST BAPTIST CH	11/17/2008	299.3	1.63E-02	2.97E-03	3.12E-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	11/24/2008	277.8	1.80E-02	3.15E-03	3.16E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/1/2008	275.8	2.79E-02	3.66E-03	3.15E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/8/2008	277.2	2.26E-02	3.47E-03	3.36E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/15/2008	274.8	1.82E-02	3.26E-03	3.39E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/22/2008	273.9	1.35E-02	2.93E-03	3.23E-03
4	NEW HILL NEAR 1ST BAPTIST CH	12/29/2008	279.6	3.39E-02	3.90E-03	3.08E-03
5	PITTSBORO - CONTROL	1/7/2008	301.9	3.32E-02	3.68E-03	2.76E-03
5	PITTSBORO - CONTROL	1/14/2008	296.9	1.37E-02	2.88E-03	3.22E-03
5	PITTSBORO - CONTROL	1/21/2008	303.2	2.23E-02	3.32E-03	3.24E-03
5	PITTSBORO - CONTROL	1/28/2008	303.2	3.10E-02	3.69E-03	3.15E-03
5	PITTSBORO - CONTROL	2/4/2008	301.4	2.78E-02	3.53E-03	3.06E-03
5	PITTSBORO - CONTROL	2/11/2008	297.6	2.27E-02	3.39E-03	3.32E-03
5	PITTSBORO - CONTROL	2/18/2008	299.6	2.41E-02	3.35E-03	3.03E-03
5	PITTSBORO - CONTROL	2/25/2008	300.1	1.97E-02	3.01E-03	2.67E-03
5	PITTSBORO - CONTROL	3/3/2008	302.4	1.94E-02	3.00E-03	2.73E-03
5	PITTSBORO - CONTROL	3/10/2008	277.2	1.54E-02	2.94E-03	2.98E-03
5	PITTSBORO - CONTROL	3/17/2008	271.9	2.69E-02	3.71E-03	3.34E-03
5	PITTSBORO - CONTROL	3/24/2008	272.2	1.91E-02	3.22E-03	3.09E-03
5	PITTSBORO - CONTROL	3/31/2008	273	2.15E-02	3.35E-03	3.11E-03
5	PITTSBORO - CONTROL	4/7/2008	271	9.70E-03	2.68E-03	3.16E-03
5	PITTSBORO - CONTROL	4/14/2008	271.8	9.94E-03	2.80E-03	3.42E-03
5	PITTSBORO - CONTROL	4/21/2008	271.7	2.54E-02	3.54E-03	3.07E-03
5	PITTSBORO - CONTROL	4/28/2008	301.1	1.54E-02	2.91E-03	3.08E-03
5	PITTSBORO - CONTROL	5/5/2008	265.6	2.30E-02	3.52E-03	3.28E-03
5	PITTSBORO - CONTROL	5/12/2008	263.2	1.93E-02	3.44E-03	3.55E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
5	PITTSBORO - CONTROL	5/19/2008	266	1.49E-02	3.08E-03	3.30E-03
5	PITTSBORO - CONTROL	5/27/2008	303	1.91E-02	3.06E-03	2.95E-03
5	PITTSBORO - CONTROL	6/2/2008	227.7	1.72E-02	3.75E-03	4.26E-03
5	PITTSBORO - CONTROL	6/9/2008	261.3	2.95E-02	3.86E-03	3.25E-03
5	PITTSBORO - CONTROL	6/16/2008	264.2	2.61E-02	3.78E-03	3.57E-03
5	PITTSBORO - CONTROL	6/23/2008	262.1	1.93E-02	3.51E-03	3.72E-03
5	PITTSBORO - CONTROL	6/30/2008	302.7	2.04E-02	3.16E-03	3.08E-03
5	PITTSBORO - CONTROL	7/7/2008	300.3	1.70E-02	2.94E-03	2.94E-03
5	PITTSBORO - CONTROL	7/14/2008	297.5	1.84E-02	2.98E-03	2.82E-03
5	PITTSBORO - CONTROL	7/21/2008	303.8	2.09E-02	3.14E-03	2.98E-03
5	PITTSBORO - CONTROL	7/28/2008	303	2.60E-02	3.32E-03	2.72E-03
5	PITTSBORO - CONTROL	8/4/2008	278.3	2.69E-02	3.56E-03	3.02E-03
5	PITTSBORO - CONTROL	8/11/2008	277.3	2.81E-02	3.61E-03	2.97E-03
5	PITTSBORO - CONTROL	8/18/2008	256	2.37E-02	3.67E-03	3.51E-03
5	PITTSBORO - CONTROL	8/25/2008	254.2	2.71E-02	3.79E-03	3.33E-03
5	PITTSBORO - CONTROL	9/2/2008	293.6	1.71E-02	3.03E-03	3.11E-03
5	PITTSBORO - CONTROL	9/8/2008	214.3	2.35E-02	4.10E-03	4.12E-03
5	PITTSBORO - CONTROL	9/15/2008	252.3	1.43E-02	3.17E-03	3.53E-03
5	PITTSBORO - CONTROL	9/22/2008	255.7	1.83E-02	3.36E-03	3.46E-03
5	PITTSBORO - CONTROL	9/29/2008	277	1.97E-02	3.30E-03	3.32E-03
5	PITTSBORO - CONTROL	10/6/2008	279.6	2.64E-02	3.59E-03	3.21E-03
5	PITTSBORO - CONTROL	10/13/2008	277.1	2.72E-02	3.56E-03	2.95E-03
5	PITTSBORO - CONTROL	10/20/2008	289.7	2.34E-02	3.29E-03	2.87E-03
5	PITTSBORO - CONTROL	10/27/2008	278.3	1.56E-02	3.06E-03	3.28E-03
5	PITTSBORO - CONTROL	11/3/2008	281.2	2.21E-02	3.29E-03	2.96E-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	11/10/2008	279.3	2.35E-02	3.44E-03	3.19E-03
5	PITTSBORO - CONTROL	11/17/2008	280.9	1.55E-02	3.06E-03	3.32E-03
5	PITTSBORO - CONTROL	11/24/2008	285.2	1.39E-02	2.86E-03	3.07E-03
5	PITTSBORO - CONTROL	12/1/2008	282.9	2.54E-02	3.48E-03	3.07E-03
5	PITTSBORO - CONTROL	12/8/2008	284.6	2.29E-02	3.42E-03	3.28E-03
5	PITTSBORO - CONTROL	12/15/2008	281.8	2.00E-02	3.30E-03	3.31E-03
5	PITTSBORO - CONTROL	12/22/2008	281.6	1.57E-02	3.00E-03	3.14E-03
5	PITTSBORO - CONTROL	12/29/2008	285.4	2.94E-02	3.64E-03	3.02E-03
26	SPILLWAY ON MAIN RES	1/7/2008	321.6	3.03E-02	3.41E-03	2.59E-03
26	SPILLWAY ON MAIN RES	1/14/2008	315.1	1.07E-02	2.59E-03	3.03E-03
26	SPILLWAY ON MAIN RES	1/21/2008	320.5	1.85E-02	3.01E-03	3.07E-03
26	SPILLWAY ON MAIN RES	1/28/2008	317.3	2.50E-02	3.32E-03	3.01E-03
26	SPILLWAY ON MAIN RES	2/4/2008	315.4	2.69E-02	3.39E-03	2.92E-03
26	SPILLWAY ON MAIN RES	2/11/2008	302	1.57E-02	3.00E-03	3.28E-03
26	SPILLWAY ON MAIN RES	2/18/2008	312.6	2.18E-02	3.15E-03	2.90E-03
26	SPILLWAY ON MAIN RES	2/25/2008	314.4	1.62E-02	2.72E-03	2.55E-03
26	SPILLWAY ON MAIN RES	3/3/2008	283.3	1.87E-02	3.09E-03	2.92E-03
26	SPILLWAY ON MAIN RES	3/10/2008	278.2	1.29E-02	2.78E-03	2.97E-03
26	SPILLWAY ON MAIN RES	3/17/2008	279.3	2.30E-02	3.45E-03	3.25E-03
26	SPILLWAY ON MAIN RES	3/24/2008	280	1.48E-02	2.91E-03	3.01E-03
26	SPILLWAY ON MAIN RES	3/31/2008	280.2	2.20E-02	3.32E-03	3.03E-03
26	SPILLWAY ON MAIN RES	4/7/2008	279.2	5.32E-03	2.31E-03	3.07E-03
26	SPILLWAY ON MAIN RES	4/14/2008	277.8	1.10E-02	2.82E-03	3.34E-03
26	SPILLWAY ON MAIN RES	4/21/2008	277	2.04E-02	3.24E-03	3.01E-03
26	SPILLWAY ON MAIN RES	4/28/2008	286.5	1.91E-02	3.22E-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*
26	SPILLWAY ON MAIN RES	5/5/2008	297.3	1.97E-02	3.10E-03	2.93E-03
26	SPILLWAY ON MAIN RES	5/12/2008	294.5	1.77E-02	3.09E-03	3.18E-03
26	SPILLWAY ON MAIN RES	5/19/2008	297.5	1.14E-02	2.63E-03	2.95E-03
26	SPILLWAY ON MAIN RES	5/27/2008	333.5	2.10E-02	2.96E-03	2.68E-03
26	SPILLWAY ON MAIN RES	6/2/2008	267.2	1.42E-02	3.17E-03	3.63E-03
26	SPILLWAY ON MAIN RES	6/9/2008	263.6	2.86E-02	3.80E-03	3.22E-03
26	SPILLWAY ON MAIN RES	6/16/2008	268.9	2.03E-02	3.45E-03	3.51E-03
26	SPILLWAY ON MAIN RES	6/23/2008	267.1	1.94E-02	3.46E-03	3.65E-03
26	SPILLWAY ON MAIN RES	6/30/2008	271.1	1.76E-02	3.26E-03	3.44E-03
26	SPILLWAY ON MAIN RES	7/7/2008	272.9	1.86E-02	3.23E-03	3.24E-03
26	SPILLWAY ON MAIN RES	7/14/2008	268	1.78E-02	3.17E-03	3.13E-03
26	SPILLWAY ON MAIN RES	7/21/2008	274.1	2.13E-02	3.39E-03	3.30E-03
26	SPILLWAY ON MAIN RES	7/28/2008	272.2	2.44E-02	3.47E-03	3.03E-03
26	SPILLWAY ON MAIN RES	8/4/2008	272.6	2.47E-02	3.50E-03	3.08E-03
26	SPILLWAY ON MAIN RES	8/11/2008	271.7	2.79E-02	3.65E-03	3.04E-03
26	SPILLWAY ON MAIN RES	8/18/2008	273.5	2.40E-02	3.53E-03	3.28E-03
26	SPILLWAY ON MAIN RES	8/25/2008	270	2.35E-02	3.46E-03	3.14E-03
26	SPILLWAY ON MAIN RES	9/2/2008	314.5	1.73E-02	2.90E-03	2.90E-03
26	SPILLWAY ON MAIN RES	9/8/2008	232.3	1.93E-02	3.65E-03	3.80E-03
26	SPILLWAY ON MAIN RES	9/15/2008	261.6	1.40E-02	3.07E-03	3.41E-03
26	SPILLWAY ON MAIN RES	9/22/2008	264.6	1.52E-02	3.11E-03	3.34E-03
26	SPILLWAY ON MAIN RES	9/29/2008	270	1.50E-02	3.10E-03	3.40E-03
26	SPILLWAY ON MAIN RES	10/6/2008	265.3	2.34E-02	3.57E-03	3.38E-03
26	SPILLWAY ON MAIN RES	10/13/2008	263.3	3.50E-02	4.05E-03	3.10E-03
26	SPILLWAY ON MAIN RES	10/20/2008	270.5	1.68E-02	3.08E-03	3.08E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		Sample Date	Quantity	Activity	2 Sigma Error	LLD
26	SPILLWAY ON MAIN RES	10/27/2008	283.3	2.01E-02	3.26E-03	3.22E-03
26	SPILLWAY ON MAIN RES	11/3/2008	284.9	1.92E-02	3.10E-03	2.92E-03
26	SPILLWAY ON MAIN RES	11/10/2008	280.1	2.26E-02	3.39E-03	3.18E-03
26	SPILLWAY ON MAIN RES	11/17/2008	281.9	1.47E-02	3.01E-03	3.31E-03
26	SPILLWAY ON MAIN RES	11/24/2008	287.6	2.01E-02	3.19E-03	3.05E-03
26	SPILLWAY ON MAIN RES	12/1/2008	265.2	2.23E-02	3.47E-03	3.28E-03
26	SPILLWAY ON MAIN RES	12/8/2008	265.4	2.46E-02	3.67E-03	3.51E-03
26	SPILLWAY ON MAIN RES	12/15/2008	261.9	1.48E-02	3.18E-03	3.56E-03
26	SPILLWAY ON MAIN RES	12/22/2008	260.9	1.66E-02	3.22E-03	3.39E-03
26	SPILLWAY ON MAIN RES	12/29/2008	263.9	3.15E-02	3.93E-03	3.27E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/7/2008	282.2	3.35E-02	3.84E-03	2.95E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/14/2008	273.7	1.20E-02	2.96E-03	3.49E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/21/2008	282.7	1.97E-02	3.35E-03	3.48E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/28/2008	284	2.99E-02	3.80E-03	3.37E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/4/2008	281.6	2.70E-02	3.64E-03	3.27E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/11/2008	268.2	1.89E-02	3.45E-03	3.69E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/18/2008	274.6	2.21E-02	3.44E-03	3.31E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/25/2008	277	2.11E-02	3.24E-03	2.90E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/3/2008	276.6	2.08E-02	3.26E-03	2.99E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/10/2008	276.2	1.73E-02	3.06E-03	2.99E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/17/2008	278.4	2.48E-02	3.55E-03	3.26E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/24/2008	277.8	2.15E-02	3.30E-03	3.03E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/31/2008	278.4	2.21E-02	3.34E-03	3.05E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/7/2008	279.1	1.04E-02	2.66E-03	3.07E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/14/2008	280.7	9.54E-03	2.71E-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*
47	SSW SECTOR 3.4 MI FROM SITE	4/21/2008	280.6	2.46E-02	3.43E-03	2.97E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/28/2008	265.7	1.83E-02	3.35E-03	3.50E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/5/2008	268.5	2.78E-02	3.74E-03	3.25E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/12/2008	262.4	1.95E-02	3.45E-03	3.57E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/19/2008	266.8	1.58E-02	3.12E-03	3.29E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/27/2008	303.2	2.27E-02	3.24E-03	2.95E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/2/2008	226.7	1.97E-02	3.90E-03	4.28E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/9/2008	254.5	2.98E-02	3.94E-03	3.34E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/16/2008	264	2.83E-02	3.89E-03	3.57E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/23/2008	261.1	2.18E-02	3.65E-03	3.74E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/30/2008	291.3	2.64E-02	3.54E-03	3.20E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/7/2008	243.6	1.77E-02	3.44E-03	3.63E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/14/2008	238.9	1.56E-02	3.30E-03	3.52E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/21/2008	244	2.68E-02	3.95E-03	3.71E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/28/2008	240.3	3.11E-02	4.10E-03	3.43E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/4/2008	242	3.02E-02	4.06E-03	3.47E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/11/2008	241.2	3.09E-02	4.08E-03	3.42E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/18/2008	245.2	2.62E-02	3.90E-03	3.66E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/25/2008	235.6	3.04E-02	4.15E-03	3.60E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/2/2008	278.6	2.01E-02	3.30E-03	3.27E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/8/2008	208.3	2.50E-02	4.26E-03	4.24E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/15/2008	239.7	1.36E-02	3.25E-03	3.72E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/22/2008	242.8	1.88E-02	3.51E-03	3.64E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/29/2008	277	1.85E-02	3.24E-03	3.32E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/6/2008	248.6	2.44E-02	3.78E-03	3.61E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
47	SSW SECTOR 3.4 MI FROM SITE	10/13/2008	246.2	3.43E-02	4.18E-03	3.32E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/20/2008	277.1	2.56E-02	3.50E-03	3.00E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/27/2008	280.7	1.95E-02	3.25E-03	3.25E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/3/2008	282.3	2.43E-02	3.39E-03	2.95E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/10/2008	281.6	2.05E-02	3.27E-03	3.16E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/17/2008	283.3	1.69E-02	3.12E-03	3.29E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/24/2008	288.5	1.73E-02	3.03E-03	3.04E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/1/2008	286.1	2.70E-02	3.54E-03	3.04E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/8/2008	286.2	2.21E-02	3.37E-03	3.26E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/15/2008	283.9	1.88E-02	3.22E-03	3.28E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/22/2008	285.6	1.84E-02	3.12E-03	3.09E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/29/2008	290	3.19E-02	3.72E-03	2.97E-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	1/14/2008	1.00	5.65E+00	9.62E-01	8.09E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/11/2008	1.00	4.89E+00	9.40E-01	9.01E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/13/2008	1.00	3.59E+00	7.43E-01	6.23E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/14/2008	1.00	3.79E+00	8.91E-01	9.33E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/12/2008	1.00	4.67E+00	8.88E-01	7.96E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/13/2008	1.00	7.27E+00	1.07E+00	7.65E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2008	1.00	5.13E+00	9.66E-01	8.39E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	1.00	6.61E+00	1.09E+00	8.89E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	1.00	5.72E+00	9.21E-01	7.35E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	1.00	5.72E+00	9.20E-01	7.12E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	1.00	6.73E+00	1.06E+00	8.97E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1.00	4.98E+00	8.63E-01	6.84E-01
40	LILLINGTON - CAPE FEAR RIVER	1/14/2008	1.00	5.99E+00	9.82E-01	8.09E-01
40	LILLINGTON - CAPE FEAR RIVER	2/11/2008	1.00	4.64E+00	9.13E-01	8.86E-01
40	LILLINGTON - CAPE FEAR RIVER	3/13/2008	1.00	2.77E+00	6.61E-01	6.00E-01
40	LILLINGTON - CAPE FEAR RIVER	4/14/2008	1.00	3.37E+00	8.33E-01	8.90E-01
40	LILLINGTON - CAPE FEAR RIVER	5/12/2008	1.00	4.59E+00	8.77E-01	7.88E-01
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1.00	6.48E+00	1.01E+00	7.57E-01
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	1.00	5.10E+00	9.49E-01	8.18E-01
40	LILLINGTON - CAPE FEAR RIVER	8/11/2008	1.00	6.86E+00	1.09E+00	8.73E-01
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1.00	5.40E+00	9.02E-01	7.37E-01
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	1.00	3.75E+00	7.71E-01	6.90E-01
40	LILLINGTON - CAPE FEAR RIVER	11/10/2008	1.00	5.38E+00	9.56E-01	8.71E-01
40	LILLINGTON - CAPE FEAR RIVER	12/11/2008	1.00	4.76E+00	8.37E-01	6.69E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/14/2008	1.00	1.72E+00	6.20E-01	7.31E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/11/2008	1.00	2.03E+00	6.90E-01	8.29E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/13/2008	1.00	2.07E+00	6.03E-01	6.04E-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	4/14/2008	1.00	1.11E+00	6.25E-01	8.48E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/12/2008	1.00	1.70E+00	6.20E-01	7.33E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/13/2008	1.00	2.80E+00	6.86E-01	6.65E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/14/2008	1.00	3.47E+00	7.80E-01	7.44E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/11/2008	1.00	3.65E+00	8.11E-01	7.81E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/11/2008	1.00	3.22E+00	7.59E-01	7.47E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/13/2008	1.00	2.34E+00	6.54E-01	6.79E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/10/2008	1.00	1.80E+00	6.76E-01	8.30E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/11/2008	1.00	1.49E+00	5.69E-01	6.57E-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	1/14/2008	1.00	5.09E+00	8.93E-01	7.66E-01
26	SPILLWAY ON MAIN RES	2/11/2008	1.00	5.16E+00	9.28E-01	8.61E-01
26	SPILLWAY ON MAIN RES	3/13/2008	1.00	5.46E+00	8.85E-01	6.35E-01
26	SPILLWAY ON MAIN RES	4/14/2008	1.00	3.97E+00	8.61E-01	8.70E-01
26	SPILLWAY ON MAIN RES	5/12/2008	1.00	4.65E+00	8.70E-01	7.73E-01
26	SPILLWAY ON MAIN RES	6/13/2008	1.00	6.50E+00	9.63E-01	6.97E-01
26	SPILLWAY ON MAIN RES	7/14/2008	1.00	4.20E+00	8.26E-01	7.35E-01
26	SPILLWAY ON MAIN RES	8/11/2008	1.00	5.11E+00	9.05E-01	7.74E-01
26	SPILLWAY ON MAIN RES	9/11/2008	1.00	5.78E+00	9.19E-01	7.28E-01
26	SPILLWAY ON MAIN RES	10/13/2008	1.00	4.53E+00	8.23E-01	6.86E-01
26	SPILLWAY ON MAIN RES	11/10/2008	1.00	5.10E+00	9.14E-01	8.35E-01
26	SPILLWAY ON MAIN RES	12/11/2008	1.00	5.74E+00	9.01E-01	6.69E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/14/2008	1.00	5.65E+00	9.62E-01	8.09E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/11/2008	1.00	4.89E+00	9.40E-01	9.01E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/13/2008	1.00	3.59E+00	7.43E-01	6.23E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/14/2008	1.00	3.79E+00	8.91E-01	9.33E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/12/2008	1.00	4.67E+00	8.88E-01	7.96E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/13/2008	1.00	7.27E+00	1.07E+00	7.65E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2008	1.00	5.13E+00	9.66E-01	8.39E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	1.00	6.61E+00	1.09E+00	8.89E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	1.00	5.72E+00	9.21E-01	7.35E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	1.00	5.72E+00	9.20E-01	7.12E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	1.00	6.73E+00	1.06E+00	8.97E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1.00	4.98E+00	8.63E-01	6.84E-01
40	LILLINGTON - CAPE FEAR RIVER	1/14/2008	1.00	5.99E+00	9.82E-01	8.09E-01
40	LILLINGTON - CAPE FEAR RIVER	2/11/2008	1.00	4.64E+00	9.13E-01	8.86E-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	3/13/2008	1.00	2.77E+00	6.61E-01	6.00E-01
40	LILLINGTON - CAPE FEAR RIVER	4/14/2008	1.00	3.37E+00	8.33E-01	8.90E-01
40	LILLINGTON - CAPE FEAR RIVER	5/12/2008	1.00	4.59E+00	8.77E-01	7.88E-01
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1.00	6.48E+00	1.01E+00	7.57E-01
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	1.00	5.10E+00	9.49E-01	8.18E-01
40	LILLINGTON - CAPE FEAR RIVER	8/11/2008	1.00	6.86E+00	1.09E+00	8.73E-01
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1.00	5.40E+00	9.02E-01	7.37E-01
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	1.00	3.75E+00	7.71E-01	6.90E-01
40	LILLINGTON - CAPE FEAR RIVER	11/10/2008	1.00	5.38E+00	9.56E-01	8.71E-01
40	LILLINGTON - CAPE FEAR RIVER	12/11/2008	1.00	4.76E+00	8.37E-01	6.69E-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	2.6 MILES N	1/7/2008	278.80	<LLD		2.32E-02
1	2.6 MILES N	1/14/2008	276.40	<LLD		2.20E-02
1	2.6 MILES N	1/21/2008	280.40	<LLD		2.39E-02
1	2.6 MILES N	1/28/2008	279.60	<LLD		1.98E-02
1	2.6 MILES N	2/4/2008	278.10	<LLD		1.50E-02
1	2.6 MILES N	2/11/2008	274.40	<LLD		1.98E-02
1	2.6 MILES N	2/18/2008	278.00	<LLD		2.14E-02
1	2.6 MILES N	2/25/2008	278.30	<LLD		2.05E-02
1	2.6 MILES N	3/3/2008	279.80	<LLD		2.09E-02
1	2.6 MILES N	3/10/2008	273.60	<LLD		1.58E-02
1	2.6 MILES N	3/17/2008	276.20	<LLD		2.88E-02
1	2.6 MILES N	3/24/2008	276.70	<LLD		2.25E-02
1	2.6 MILES N	3/31/2008	276.90	<LLD		2.20E-02
1	2.6 MILES N	4/7/2008	276.00	<LLD		2.39E-02
1	2.6 MILES N	4/14/2008	275.00	<LLD		2.67E-02
1	2.6 MILES N	4/21/2008	275.10	<LLD		1.41E-02
1	2.6 MILES N	4/28/2008	262.00	<LLD		2.49E-02
1	2.6 MILES N	5/5/2008	262.00	<LLD		2.11E-02
1	2.6 MILES N	5/12/2008	261.50	<LLD		2.13E-02
1	2.6 MILES N	5/19/2008	263.60	<LLD		2.15E-02
1	2.6 MILES N	5/27/2008	301.10	<LLD		1.94E-02
1	2.6 MILES N	6/2/2008	225.10	<LLD		3.15E-02
1	2.6 MILES N	6/9/2008	259.40	<LLD		2.25E-02
1	2.6 MILES N	6/16/2008	262.60	<LLD		2.17E-02
1	2.6 MILES N	6/23/2008	257.50	<LLD		2.06E-02
1	2.6 MILES N	6/30/2008	297.30	<LLD		2.93E-02
1	2.6 MILES N	7/7/2008	295.50	<LLD		2.54E-02

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
1	2.6 MILES N	7/14/2008	296.20	<LLD		1.58E-02
1	2.6 MILES N	7/21/2008	299.60	<LLD		2.45E-02
1	2.6 MILES N	7/28/2008	299.70	<LLD		2.51E-02
1	2.6 MILES N	8/4/2008	271.00	<LLD		2.65E-02
1	2.6 MILES N	8/11/2008	271.30	<LLD		2.99E-02
1	2.6 MILES N	8/18/2008	272.50	<LLD		2.58E-02
1	2.6 MILES N	8/25/2008	271.00	<LLD		3.12E-02
1	2.6 MILES N	9/2/2008	312.40	<LLD		1.63E-02
1	2.6 MILES N	9/8/2008	232.90	<LLD		2.22E-02
1	2.6 MILES N	9/15/2008	269.60	<LLD		2.04E-02
1	2.6 MILES N	9/22/2008	271.90	<LLD		2.78E-02
1	2.6 MILES N	9/29/2008	307.70	<LLD		2.45E-02
1	2.6 MILES N	10/6/2008	274.70	<LLD		2.16E-02
1	2.6 MILES N	10/6/2008	274.40	<LLD		2.24E-02
1	2.6 MILES N	10/20/2008	297.40	<LLD		1.73E-02
1	2.6 MILES N	10/27/2008	340.80	<LLD		1.59E-02
1	2.6 MILES N	11/3/2008	259.90	<LLD		2.10E-02
1	2.6 MILES N	11/10/2008	263.80	<LLD		3.19E-02
1	2.6 MILES N	11/17/2008	264.90	<LLD		2.84E-02
1	2.6 MILES N	11/24/2008	267.10	<LLD		1.90E-02
1	2.6 MILES N	12/1/2008	266.20	<LLD		2.60E-02
1	2.6 MILES N	12/8/2008	266.90	<LLD		3.51E-02
1	2.6 MILES N	12/15/2008	265.50	<LLD		2.84E-02
1	2.6 MILES N	12/22/2008	265.40	<LLD		1.80E-02
1	2.6 MILES N	12/29/2008	268.80	<LLD		1.91E-02
2	SR 1134	1/7/2008	308.00	<LLD		1.52E-02
2	SR 1134	1/14/2008	304.80	<LLD		1.67E-02

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		Sample Date	Quantity	Activity	2 Sigma Error	LLD
2	SR 1134	1/21/2008	310.00	<LLD		1.53E-02
2	SR 1134	1/28/2008	308.90	<LLD		1.84E-02
2	SR 1134	2/4/2008	306.10	<LLD		2.12E-02
2	SR 1134	2/11/2008	303.60	<LLD		1.69E-02
2	SR 1134	2/18/2008	304.10	<LLD		3.00E-02
2	SR 1134	2/25/2008	304.90	<LLD		1.43E-02
2	SR 1134	3/3/2008	284.20	<LLD		1.88E-02
2	SR 1134	3/10/2008	276.60	<LLD		1.84E-02
2	SR 1134	3/17/2008	279.00	<LLD		1.77E-02
2	SR 1134	3/24/2008	280.40	<LLD		2.00E-02
2	SR 1134	3/31/2008	281.30	<LLD		2.55E-02
2	SR 1134	4/7/2008	280.10	<LLD		1.61E-02
2	SR 1134	4/14/2008	279.60	<LLD		1.93E-02
2	SR 1134	4/21/2008	279.80	<LLD		1.65E-02
2	SR 1134	4/28/2008	286.70	<LLD		2.17E-02
2	SR 1134	5/5/2008	289.10	<LLD		2.71E-02
2	SR 1134	5/12/2008	286.70	<LLD		1.44E-02
2	SR 1134	5/19/2008	289.30	<LLD		2.50E-02
2	SR 1134	5/27/2008	328.60	<LLD		1.10E-02
2	SR 1134	6/2/2008	245.40	<LLD		1.83E-02
2	SR 1134	6/9/2008	283.90	<LLD		1.76E-02
2	SR 1134	6/16/2008	286.90	<LLD		1.83E-02
2	SR 1134	6/23/2008	283.10	<LLD		3.00E-02
2	SR 1134	6/30/2008	286.90	<LLD		2.11E-02
2	SR 1134	7/7/2008	286.20	<LLD		3.09E-02
2	SR 1134	7/14/2008	284.40	<LLD		2.68E-02
2	SR 1134	7/21/2008	287.60	<LLD		2.89E-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	7/28/2008	287.30	<LLD		2.29E-02
2	SR 1134	8/4/2008	251.60	<LLD		1.92E-02
2	SR 1134	8/11/2008	251.60	<LLD		4.80E-02
2	SR 1134	8/18/2008	253.20	<LLD		2.03E-02
2	SR 1134	8/25/2008	251.40	<LLD		2.14E-02
2	SR 1134	9/2/2008	289.90	<LLD		2.03E-02
2	SR 1134	9/8/2008	216.50	<LLD		1.46E-02
2	SR 1134	9/15/2008	251.80	<LLD		2.01E-02
2	SR 1134	9/22/2008	253.50	<LLD		2.32E-02
2	SR 1134	9/29/2008	297.80	<LLD		2.70E-02
2	SR 1134	10/6/2008	295.60	<LLD		2.07E-02
2	SR 1134	10/6/2008	269.20	<LLD		1.81E-02
2	SR 1134	10/20/2008	291.80	<LLD		2.41E-02
2	SR 1134	10/27/2008	264.90	<LLD		2.72E-02
2	SR 1134	11/3/2008	261.80	<LLD		3.30E-02
2	SR 1134	11/10/2008	264.10	<LLD		2.11E-02
2	SR 1134	11/17/2008	265.00	<LLD		1.67E-02
2	SR 1134	11/24/2008	268.10	<LLD		3.10E-02
2	SR 1134	12/1/2008	266.00	<LLD		1.88E-02
2	SR 1134	12/8/2008	267.60	<LLD		2.41E-02
2	SR 1134	12/15/2008	265.20	<LLD		2.07E-02
2	SR 1134	12/22/2008	264.80	<LLD		2.34E-02
2	SR 1134	12/29/2008	267.10	<LLD		2.86E-02
4	NEW HILL NEAR 1ST BAPTIST CH	1/7/2008	292.10	<LLD		1.77E-02
4	NEW HILL NEAR 1ST BAPTIST CH	1/14/2008	289.20	<LLD		3.72E-02
4	NEW HILL NEAR 1ST BAPTIST CH	1/21/2008	294.00	<LLD		1.96E-02
4	NEW HILL NEAR 1ST BAPTIST CH	1/28/2008	292.80	<LLD		2.13E-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
4	NEW HILL NEAR 1ST BAPTIST CH	2/4/2008	290.70	<LLD		2.07E-02
4	NEW HILL NEAR 1ST BAPTIST CH	2/11/2008	289.50	<LLD		1.56E-02
4	NEW HILL NEAR 1ST BAPTIST CH	2/18/2008	290.40	<LLD		2.20E-02
4	NEW HILL NEAR 1ST BAPTIST CH	2/25/2008	365.80	<LLD		1.38E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/3/2008	288.80	<LLD		1.59E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/10/2008	284.20	<LLD		1.82E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/17/2008	286.60	<LLD		2.17E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/24/2008	287.70	<LLD		2.01E-02
4	NEW HILL NEAR 1ST BAPTIST CH	3/31/2008	288.10	<LLD		1.83E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/7/2008	286.90	<LLD		2.27E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/14/2008	286.20	<LLD		1.45E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/21/2008	286.80	<LLD		3.18E-02
4	NEW HILL NEAR 1ST BAPTIST CH	4/28/2008	315.00	<LLD		1.32E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/5/2008	315.20	<LLD		2.47E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/12/2008	313.80	<LLD		1.69E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/19/2008	316.10	<LLD		1.25E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/27/2008	358.90	<LLD		2.47E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/2/2008	267.90	<LLD		3.16E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/9/2008	307.50	<LLD		3.12E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/16/2008	311.40	<LLD		2.41E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/23/2008	307.80	<LLD		1.67E-02
4	NEW HILL NEAR 1ST BAPTIST CH	6/30/2008	311.30	<LLD		3.58E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/7/2008	311.40	<LLD		2.36E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/14/2008	309.30	<LLD		2.00E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/21/2008	312.70	<LLD		2.79E-02
4	NEW HILL NEAR 1ST BAPTIST CH	7/28/2008	313.20	<LLD		2.43E-02
4	NEW HILL NEAR 1ST BAPTIST CH	8/4/2008	310.20	<LLD		3.40E-02

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
4	NEW HILL NEAR 1ST BAPTIST CH	8/11/2008	310.20	<LLD		2.90E-02
4	NEW HILL NEAR 1ST BAPTIST CH	8/18/2008	312.30	<LLD		1.55E-02
4	NEW HILL NEAR 1ST BAPTIST CH	8/25/2008	310.20	<LLD		1.63E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/2/2008	358.00	<LLD		1.67E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/8/2008	267.30	<LLD		2.91E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/15/2008	311.00	<LLD		1.81E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/22/2008	313.30	<LLD		1.35E-02
4	NEW HILL NEAR 1ST BAPTIST CH	9/29/2008	315.90	<LLD		2.45E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/6/2008	313.80	<LLD		2.49E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/6/2008	314.20	<LLD		3.29E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/20/2008	319.20	<LLD		1.56E-02
4	NEW HILL NEAR 1ST BAPTIST CH	10/27/2008	183.60	<LLD		2.17E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/3/2008	295.20	<LLD		1.78E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/10/2008	295.40	<LLD		1.75E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/17/2008	299.30	<LLD		1.95E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/24/2008	277.80	<LLD		1.93E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/1/2008	275.80	<LLD		3.95E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/8/2008	277.20	<LLD		1.73E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/15/2008	274.80	<LLD		1.61E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/22/2008	273.90	<LLD		1.66E-02
4	NEW HILL NEAR 1ST BAPTIST CH	12/29/2008	279.60	<LLD		3.04E-02
5	PITTSBORO - CONTROL	1/7/2008	301.90	<LLD		3.17E-02
5	PITTSBORO - CONTROL	1/14/2008	296.90	<LLD		1.99E-02
5	PITTSBORO - CONTROL	1/21/2008	303.20	<LLD		2.62E-02
5	PITTSBORO - CONTROL	1/28/2008	303.20	<LLD		3.08E-02
5	PITTSBORO - CONTROL	2/4/2008	301.40	<LLD		1.39E-02
5	PITTSBORO - CONTROL	2/11/2008	297.60	<LLD		2.32E-02

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		Sample Date	Quantity	Activity	2 Sigma Error	LLD
5	PITTSBORO - CONTROL	2/18/2008	299.60	<LLD		1.45E-02
5	PITTSBORO - CONTROL	2/25/2008	300.10	<LLD		1.97E-02
5	PITTSBORO - CONTROL	3/3/2008	302.40	<LLD		3.48E-02
5	PITTSBORO - CONTROL	3/10/2008	277.20	<LLD		3.12E-02
5	PITTSBORO - CONTROL	3/17/2008	271.90	<LLD		3.28E-02
5	PITTSBORO - CONTROL	3/24/2008	272.20	<LLD		2.00E-02
5	PITTSBORO - CONTROL	3/31/2008	273.00	<LLD		3.62E-02
5	PITTSBORO - CONTROL	4/7/2008	271.00	<LLD		1.63E-02
5	PITTSBORO - CONTROL	4/14/2008	271.80	<LLD		2.66E-02
5	PITTSBORO - CONTROL	4/21/2008	271.70	<LLD		2.83E-02
5	PITTSBORO - CONTROL	4/28/2008	301.10	<LLD		2.91E-02
5	PITTSBORO - CONTROL	5/5/2008	265.60	<LLD		3.24E-02
5	PITTSBORO - CONTROL	5/12/2008	263.20	<LLD		3.82E-02
5	PITTSBORO - CONTROL	5/19/2008	266.00	<LLD		3.27E-02
5	PITTSBORO - CONTROL	5/27/2008	303.00	<LLD		2.40E-02
5	PITTSBORO - CONTROL	6/2/2008	227.70	<LLD		2.13E-02
5	PITTSBORO - CONTROL	6/9/2008	261.30	<LLD		2.76E-02
5	PITTSBORO - CONTROL	6/16/2008	264.20	<LLD		2.34E-02
5	PITTSBORO - CONTROL	6/23/2008	262.10	<LLD		2.43E-02
5	PITTSBORO - CONTROL	6/30/2008	302.70	<LLD		2.53E-02
5	PITTSBORO - CONTROL	7/7/2008	300.30	<LLD		2.68E-02
5	PITTSBORO - CONTROL	7/14/2008	297.50	<LLD		2.64E-02
5	PITTSBORO - CONTROL	7/21/2008	303.80	<LLD		2.82E-02
5	PITTSBORO - CONTROL	7/28/2008	303.00	<LLD		2.26E-02
5	PITTSBORO - CONTROL	8/4/2008	278.30	<LLD		3.11E-02
5	PITTSBORO - CONTROL	8/11/2008	277.30	<LLD		3.57E-02
5	PITTSBORO - CONTROL	8/18/2008	256.00	<LLD		3.40E-02

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		Sample Date	Quantity	Activity	2 Sigma Error	LLD
5	PITTSBORO - CONTROL	8/25/2008	254.20	<LLD		3.17E-02
5	PITTSBORO - CONTROL	9/2/2008	293.60	<LLD		2.79E-02
5	PITTSBORO - CONTROL	9/8/2008	214.30	<LLD		2.25E-02
5	PITTSBORO - CONTROL	9/15/2008	252.30	<LLD		1.95E-02
5	PITTSBORO - CONTROL	9/22/2008	255.70	<LLD		3.20E-02
5	PITTSBORO - CONTROL	9/29/2008	277.00	<LLD		2.22E-02
5	PITTSBORO - CONTROL	10/6/2008	279.60	<LLD		1.93E-02
5	PITTSBORO - CONTROL	10/6/2008	277.10	<LLD		2.50E-02
5	PITTSBORO - CONTROL	10/20/2008	289.70	<LLD		2.89E-02
5	PITTSBORO - CONTROL	10/27/2008	278.30	<LLD		2.93E-02
5	PITTSBORO - CONTROL	11/3/2008	281.20	<LLD		1.93E-02
5	PITTSBORO - CONTROL	11/10/2008	279.30	<LLD		2.93E-02
5	PITTSBORO - CONTROL	11/17/2008	280.90	<LLD		1.79E-02
5	PITTSBORO - CONTROL	11/24/2008	285.20	<LLD		2.73E-02
5	PITTSBORO - CONTROL	12/1/2008	282.90	<LLD		2.67E-02
5	PITTSBORO - CONTROL	12/8/2008	284.60	<LLD		2.22E-02
5	PITTSBORO - CONTROL	12/15/2008	281.80	<LLD		2.83E-02
5	PITTSBORO - CONTROL	12/22/2008	281.60	<LLD		2.26E-02
5	PITTSBORO - CONTROL	12/29/2008	285.40	<LLD		1.65E-02
26	SPILLWAY ON MAIN RES	1/7/2008	321.60	<LLD		1.91E-02
26	SPILLWAY ON MAIN RES	1/14/2008	315.10	<LLD		1.67E-02
26	SPILLWAY ON MAIN RES	1/21/2008	320.50	<LLD		1.88E-02
26	SPILLWAY ON MAIN RES	1/28/2008	317.30	<LLD		2.19E-02
26	SPILLWAY ON MAIN RES	2/4/2008	315.40	<LLD		2.10E-02
26	SPILLWAY ON MAIN RES	2/11/2008	302.00	<LLD		2.19E-02
26	SPILLWAY ON MAIN RES	2/18/2008	312.60	<LLD		2.06E-02
26	SPILLWAY ON MAIN RES	2/25/2008	314.40	<LLD		2.23E-02

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
26	SPILLWAY ON MAIN RES	3/3/2008	283.30	<LLD		2.35E-02
26	SPILLWAY ON MAIN RES	3/10/2008	278.20	<LLD		2.56E-02
26	SPILLWAY ON MAIN RES	3/17/2008	279.30	<LLD		2.65E-02
26	SPILLWAY ON MAIN RES	3/24/2008	280.00	<LLD		1.81E-02
26	SPILLWAY ON MAIN RES	3/31/2008	280.20	<LLD		2.16E-02
26	SPILLWAY ON MAIN RES	4/7/2008	279.20	<LLD		2.04E-02
26	SPILLWAY ON MAIN RES	4/14/2008	277.80	<LLD		3.08E-02
26	SPILLWAY ON MAIN RES	4/21/2008	277.00	<LLD		1.81E-02
26	SPILLWAY ON MAIN RES	4/28/2008	286.50	<LLD		2.57E-02
26	SPILLWAY ON MAIN RES	5/5/2008	297.30	<LLD		2.16E-02
26	SPILLWAY ON MAIN RES	5/12/2008	294.50	<LLD		1.78E-02
26	SPILLWAY ON MAIN RES	5/19/2008	297.50	<LLD		1.79E-02
26	SPILLWAY ON MAIN RES	5/27/2008	333.50	<LLD		1.52E-02
26	SPILLWAY ON MAIN RES	6/2/2008	267.20	<LLD		1.99E-02
26	SPILLWAY ON MAIN RES	6/9/2008	263.60	<LLD		2.27E-02
26	SPILLWAY ON MAIN RES	6/16/2008	268.90	<LLD		1.94E-02
26	SPILLWAY ON MAIN RES	6/23/2008	267.10	<LLD		2.12E-02
26	SPILLWAY ON MAIN RES	6/30/2008	271.10	<LLD		2.01E-02
26	SPILLWAY ON MAIN RES	7/7/2008	272.90	<LLD		3.25E-02
26	SPILLWAY ON MAIN RES	7/14/2008	268.00	<LLD		1.99E-02
26	SPILLWAY ON MAIN RES	7/21/2008	274.10	<LLD		3.07E-02
26	SPILLWAY ON MAIN RES	7/28/2008	272.20	<LLD		1.83E-02
26	SPILLWAY ON MAIN RES	8/4/2008	272.60	<LLD		2.39E-02
26	SPILLWAY ON MAIN RES	8/11/2008	271.70	<LLD		3.33E-02
26	SPILLWAY ON MAIN RES	8/18/2008	273.50	<LLD		2.89E-02
26	SPILLWAY ON MAIN RES	8/25/2008	270.00	<LLD		2.40E-02
26	SPILLWAY ON MAIN RES	9/2/2008	314.50	<LLD		1.90E-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*
26	SPILLWAY ON MAIN RES	9/8/2008	232.30	<LLD		1.91E-02
26	SPILLWAY ON MAIN RES	9/15/2008	261.60	<LLD		2.25E-02
26	SPILLWAY ON MAIN RES	9/22/2008	264.60	<LLD		2.77E-02
26	SPILLWAY ON MAIN RES	9/29/2008	270.00	<LLD		2.66E-02
26	SPILLWAY ON MAIN RES	10/6/2008	263.30	<LLD		1.34E-02
26	SPILLWAY ON MAIN RES	10/6/2008	265.30	<LLD		1.80E-02
26	SPILLWAY ON MAIN RES	10/20/2008	270.50	<LLD		2.58E-02
26	SPILLWAY ON MAIN RES	10/27/2008	283.30	<LLD		1.67E-02
26	SPILLWAY ON MAIN RES	11/3/2008	284.90	<LLD		1.71E-02
26	SPILLWAY ON MAIN RES	11/10/2008	280.10	<LLD		2.55E-02
26	SPILLWAY ON MAIN RES	11/17/2008	281.90	<LLD		2.42E-02
26	SPILLWAY ON MAIN RES	11/24/2008	287.60	<LLD		1.86E-02
26	SPILLWAY ON MAIN RES	12/1/2008	265.20	<LLD		1.12E-02
26	SPILLWAY ON MAIN RES	12/8/2008	265.40	<LLD		1.92E-02
26	SPILLWAY ON MAIN RES	12/15/2008	261.90	<LLD		2.18E-02
26	SPILLWAY ON MAIN RES	12/22/2008	260.90	<LLD		1.40E-02
26	SPILLWAY ON MAIN RES	12/29/2008	263.90	<LLD		2.53E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/7/2008	282.20	<LLD		2.24E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/14/2008	273.70	<LLD		9.11E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/21/2008	282.70	<LLD		1.72E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/28/2008	284.00	<LLD		2.30E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/4/2008	281.60	<LLD		1.74E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/11/2008	268.20	<LLD		1.85E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/18/2008	274.60	<LLD		1.58E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/25/2008	277.00	<LLD		2.46E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/3/2008	276.60	<LLD		1.45E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/10/2008	276.20	<LLD		2.11E-02

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		Sample Date	Quantity	Activity	2 Sigma Error	LLD
47	SSW SECTOR 3.4 MI FROM SITE	3/17/2008	278.40	<LLD		1.62E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/24/2008	277.80	<LLD		1.43E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/31/2008	278.40	<LLD		2.35E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/7/2008	279.10	<LLD		1.95E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/14/2008	280.70	<LLD		2.07E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/21/2008	280.60	<LLD		1.38E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/28/2008	265.70	<LLD		2.06E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/5/2008	268.50	<LLD		3.03E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/12/2008	262.40	<LLD		1.67E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/19/2008	266.80	<LLD		3.05E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/27/2008	303.20	<LLD		3.37E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/2/2008	226.70	<LLD		3.44E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/9/2008	254.50	<LLD		3.68E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/16/2008	264.00	<LLD		2.68E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/23/2008	261.10	<LLD		3.47E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/30/2008	291.30	<LLD		2.92E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/7/2008	243.60	<LLD		3.53E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/14/2008	238.90	<LLD		3.47E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/21/2008	244.00	<LLD		3.39E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/28/2008	240.30	<LLD		3.37E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/4/2008	242.00	<LLD		3.31E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/11/2008	241.20	<LLD		3.57E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/18/2008	245.20	<LLD		2.62E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/25/2008	235.60	<LLD		2.22E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/2/2008	278.60	<LLD		3.84E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/8/2008	208.30	<LLD		4.11E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/15/2008	239.70	<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*
47	SSW SECTOR 3.4 MI FROM SITE	9/22/2008	242.80	<LLD		1.87E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/29/2008	277.00	<LLD		3.64E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/6/2008	248.60	<LLD		3.20E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/6/2008	246.20	<LLD		3.31E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/20/2008	277.10	<LLD		1.96E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/27/2008	280.70	<LLD		2.09E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/3/2008	282.30	<LLD		2.89E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/10/2008	281.60	<LLD		2.04E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/17/2008	283.30	<LLD		1.80E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/24/2008	288.50	<LLD		2.66E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/1/2008	286.10	<LLD		3.58E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/8/2008	286.20	<LLD		3.16E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/15/2008	283.90	<LLD		1.68E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/22/2008	285.60	<LLD		2.82E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/29/2008	290.00	<LLD		2.91E-02

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
38	CAPE FEAR PLANT INTAKE - CONTROL	1/7/2008	4.00			6.27E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/21/2008	4.00	1.26E+00	4.16E-01	
38	CAPE FEAR PLANT INTAKE - CONTROL	2/4/2008	4.00			7.95E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/18/2008	4.00			4.67E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/3/2008	4.00			3.87E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/17/2008	4.00	4.06E-01	2.82E-01	
38	CAPE FEAR PLANT INTAKE - CONTROL	3/31/2008	4.00			8.36E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/14/2008	4.00			8.04E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/28/2008	4.00			6.41E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/12/2008	4.00			4.87E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/26/2008	4.00			5.73E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/9/2008	4.00			5.87E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/23/2008	4.00			6.46E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/7/2008	4.00			6.70E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/21/2008	4.00			6.89E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/4/2008	4.00			4.25E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/18/2008	4.00			4.33E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/1/2008	4.00			4.61E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/15/2008	4.00			4.37E-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	9/29/2008	4.00			7.45E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	4.00			5.17E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/27/2008	4.00			6.94E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	4.00			4.50E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/24/2008	4.00			6.65E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/8/2008	4.00			4.78E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/22/2008	4.00			5.18E-01
40	LILLINGTON - CAPE FEAR RIVER	1/7/2008	4.00			4.25E-01
40	LILLINGTON - CAPE FEAR RIVER	1/21/2008	4.00			6.27E-01
40	LILLINGTON - CAPE FEAR RIVER	2/4/2008	4.00	6.19E-01	3.96E-01	
40	LILLINGTON - CAPE FEAR RIVER	2/18/2008	4.00			7.58E-01
40	LILLINGTON - CAPE FEAR RIVER	3/3/2008	4.00			7.67E-01
40	LILLINGTON - CAPE FEAR RIVER	3/17/2008	4.00			3.58E-01
40	LILLINGTON - CAPE FEAR RIVER	3/31/2008	4.00			6.13E-01
40	LILLINGTON - CAPE FEAR RIVER	4/14/2008	4.00			6.03E-01
40	LILLINGTON - CAPE FEAR RIVER	4/28/2008	4.00			4.61E-01
40	LILLINGTON - CAPE FEAR RIVER	5/12/2008	4.00			6.28E-01
40	LILLINGTON - CAPE FEAR RIVER	5/26/2008	4.00			4.17E-01
40	LILLINGTON - CAPE FEAR RIVER	6/9/2008	4.00			4.18E-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	6/23/2008	4.00			4.91E-01
40	LILLINGTON - CAPE FEAR RIVER	7/7/2008	4.00			5.14E-01
40	LILLINGTON - CAPE FEAR RIVER	7/21/2008	4.00			5.39E-01
40	LILLINGTON - CAPE FEAR RIVER	8/4/2008	4.00			8.27E-01
40	LILLINGTON - CAPE FEAR RIVER	8/18/2008	4.00			5.70E-01
40	LILLINGTON - CAPE FEAR RIVER	9/1/2008	4.00			4.81E-01
40	LILLINGTON - CAPE FEAR RIVER	9/15/2008	4.00			7.61E-01
40	LILLINGTON - CAPE FEAR RIVER	9/29/2008	4.00			5.04E-01
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	4.00			4.59E-01
40	LILLINGTON - CAPE FEAR RIVER	10/27/2008	4.00			4.53E-01
40	LILLINGTON - CAPE FEAR RIVER	11/10/2008	4.00			5.97E-01
40	LILLINGTON - CAPE FEAR RIVER	11/24/2008	4.00			4.30E-01
40	LILLINGTON - CAPE FEAR RIVER	12/8/2008	4.00			6.36E-01
40	LILLINGTON - CAPE FEAR RIVER	12/22/2008	4.00			6.52E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/7/2008	4.00			4.23E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/21/2008	4.00			4.38E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/4/2008	4.00			4.57E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/18/2008	4.00			5.67E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/3/2008	4.00			4.62E-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	3/17/2008	4.00			6.02E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/31/2008	4.00			4.62E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/14/2008	4.00			4.61E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/28/2008	4.00			4.13E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/12/2008	4.00			4.34E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/26/2008	4.00			7.03E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/9/2008	4.00			7.24E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/23/2008	4.00			7.84E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/7/2008	4.00			8.02E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/21/2008	4.00			7.44E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/4/2008	4.00			6.44E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/18/2008	4.00			3.96E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/1/2008	4.00			7.41E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/15/2008	4.00			6.38E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/29/2008	4.00			4.77E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/13/2008	4.00			7.99E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/27/2008	4.00			8.69E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/10/2008	4.00			4.02E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/24/2008	4.00			7.66E-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	12/8/2008	4.00			3.89E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/22/2008	4.00			7.18E-01

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		Sample Date	Quantity	Activity	2 Sigma Error	LLD
5	PITTSBORO - CONTROL	1/8/2008	4.00	<LLD		4.64E-01
5	PITTSBORO - CONTROL	2/4/2008	4.00	<LLD		5.38E-01
5	PITTSBORO - CONTROL	3/3/2008	4.00	<LLD		3.17E-01
5	PITTSBORO - CONTROL	4/7/2008	4.00	<LLD		2.96E-01
5	PITTSBORO - CONTROL	5/5/2008	4.00	<LLD		4.81E-01
5	PITTSBORO - CONTROL	6/2/2008	4.00	<LLD		4.40E-01
5	PITTSBORO - CONTROL	7/7/2008	4.00	<LLD		5.48E-01
5	PITTSBORO - CONTROL	8/4/2008	4.00	<LLD		3.98E-01
5	PITTSBORO - CONTROL	9/8/2008	4.00	<LLD		4.65E-01
5	PITTSBORO - CONTROL	10/6/2008	4.00	<LLD		5.70E-01
5	PITTSBORO - CONTROL	11/3/2008	4.00	<LLD		3.04E-01
5	PITTSBORO - CONTROL	12/1/2008	4.00	<LLD		3.21E-01

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
38	CAPE FEAR PLANT INTAKE - CONTROL	1/7/2008	4.00			6.27E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/21/2008	4.00	1.26E+00	4.16E-01	
38	CAPE FEAR PLANT INTAKE - CONTROL	2/4/2008	4.00			7.95E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/18/2008	4.00			4.67E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/3/2008	4.00			3.87E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/17/2008	4.00	4.06E-01	2.82E-01	
38	CAPE FEAR PLANT INTAKE - CONTROL	3/31/2008	4.00			8.36E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/14/2008	4.00			8.04E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/28/2008	4.00			6.41E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/12/2008	4.00			4.87E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/26/2008	4.00			5.73E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/9/2008	4.00			5.87E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/23/2008	4.00			6.46E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/7/2008	4.00			6.70E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/21/2008	4.00			6.89E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/4/2008	4.00			4.25E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/18/2008	4.00			4.33E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/1/2008	4.00			4.61E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/15/2008	4.00			4.37E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/29/2008	4.00			7.45E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	4.00			5.17E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/27/2008	4.00			6.94E-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	11/10/2008	4.00			4.50E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/24/2008	4.00			6.65E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/8/2008	4.00			4.78E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/22/2008	4.00			5.18E-01
40	LILLINGTON - CAPE FEAR RIVER	1/7/2008	4.00			4.25E-01
40	LILLINGTON - CAPE FEAR RIVER	1/21/2008	4.00			6.27E-01
40	LILLINGTON - CAPE FEAR RIVER	2/4/2008	4.00	6.19E-01	3.96E-01	
40	LILLINGTON - CAPE FEAR RIVER	2/18/2008	4.00			7.58E-01
40	LILLINGTON - CAPE FEAR RIVER	3/3/2008	4.00			7.67E-01
40	LILLINGTON - CAPE FEAR RIVER	3/17/2008	4.00			3.58E-01
40	LILLINGTON - CAPE FEAR RIVER	3/31/2008	4.00			6.13E-01
40	LILLINGTON - CAPE FEAR RIVER	4/14/2008	4.00			6.03E-01
40	LILLINGTON - CAPE FEAR RIVER	4/28/2008	4.00			4.61E-01
40	LILLINGTON - CAPE FEAR RIVER	5/12/2008	4.00			6.28E-01
40	LILLINGTON - CAPE FEAR RIVER	5/26/2008	4.00			4.17E-01
40	LILLINGTON - CAPE FEAR RIVER	6/9/2008	4.00			4.18E-01
40	LILLINGTON - CAPE FEAR RIVER	6/23/2008	4.00			4.91E-01
40	LILLINGTON - CAPE FEAR RIVER	7/7/2008	4.00			5.14E-01
40	LILLINGTON - CAPE FEAR RIVER	7/21/2008	4.00			5.39E-01
40	LILLINGTON - CAPE FEAR RIVER	8/4/2008	4.00			8.27E-01
40	LILLINGTON - CAPE FEAR RIVER	8/18/2008	4.00			5.70E-01
40	LILLINGTON - CAPE FEAR RIVER	9/1/2008	4.00			4.81E-01

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
40	LILLINGTON - CAPE FEAR RIVER	9/15/2008	4.00			7.61E-01
40	LILLINGTON - CAPE FEAR RIVER	9/29/2008	4.00			5.04E-01
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	4.00			4.59E-01
40	LILLINGTON - CAPE FEAR RIVER	10/27/2008	4.00			4.53E-01
40	LILLINGTON - CAPE FEAR RIVER	11/10/2008	4.00			5.97E-01
40	LILLINGTON - CAPE FEAR RIVER	11/24/2008	4.00			4.30E-01
40	LILLINGTON - CAPE FEAR RIVER	12/8/2008	4.00			6.36E-01
40	LILLINGTON - CAPE FEAR RIVER	12/22/2008	4.00			6.52E-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	1/14/2008	0.005	<LLD		2.52E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	2/11/2008	0.005	<LLD		2.51E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	3/13/2008	0.005	<LLD		2.48E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	4/14/2008	0.005	<LLD		2.47E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	5/12/2008	0.005	<LLD		2.48E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	6/13/2008	0.005	<LLD		2.48E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2008	0.005	<LLD		2.39E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	0.005	<LLD		2.43E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	0.005	<LLD		2.52E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	0.005	<LLD		2.43E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	0.005	<LLD		2.41E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	0.005	<LLD		2.46E+02
40	LILLINGTON - CAPE FEAR RIVER	1/14/2008	0.005	<LLD		2.51E+02
40	LILLINGTON - CAPE FEAR RIVER	2/11/2008	0.005	<LLD		2.51E+02
40	LILLINGTON - CAPE FEAR RIVER	3/13/2008	0.005	<LLD		2.49E+02
40	LILLINGTON - CAPE FEAR RIVER	4/14/2008	0.005	<LLD		2.46E+02
40	LILLINGTON - CAPE FEAR RIVER	5/12/2008	0.005	<LLD		2.50E+02
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	0.005	<LLD		2.48E+02
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	0.005	<LLD		2.40E+02
40	LILLINGTON - CAPE FEAR RIVER	8/11/2008	0.005	<LLD		2.42E+02
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	0.005	<LLD		2.50E+02
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	0.005	<LLD		2.43E+02
40	LILLINGTON - CAPE FEAR RIVER	11/10/2008	0.005	<LLD		2.41E+02
40	LILLINGTON - CAPE FEAR RIVER	12/11/2008	0.005	<LLD		2.46E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/14/2008	0.005	2.40E+03	1.73E+02	2.50E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/11/2008	0.005	3.62E+03	1.84E+02	2.51E+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	3/13/2008	0.005	4.67E+03	1.91E+02	2.48E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/14/2008	0.005	5.42E+03	1.96E+02	2.47E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/12/2008	0.005	1.65E+03	1.66E+02	2.48E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/13/2008	0.005	2.30E+03	1.72E+02	2.48E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/14/2008	0.005	5.40E+03	1.92E+02	2.40E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/11/2008	0.005	5.06E+03	1.91E+02	2.43E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/11/2008	0.005	5.54E+03	1.99E+02	2.50E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/13/2008	0.005	5.94E+03	1.98E+02	2.43E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/10/2008	0.005	6.23E+03	1.99E+02	2.42E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/11/2008	0.005	6.30E+03	2.02E+02	2.47E+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	2/19/2008	0.005	<LLD		2.50E+02
39	DEEP WELL NEAR DIABASE DIKES	5/20/2008	0.005	<LLD		2.46E+02
39	DEEP WELL NEAR DIABASE DIKES	8/19/2008	0.005	<LLD		2.46E+02
39	DEEP WELL NEAR DIABASE DIKES	11/18/2008	0.005	<LLD		2.43E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	2/19/2008	0.005	<LLD		2.51E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	5/20/2008	0.005	<LLD		2.45E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	8/19/2008	0.005	<LLD		2.45E+02
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	11/18/2008	0.005	<LLD		2.43E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	2/19/2008	0.005	<LLD		2.51E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	5/20/2008	0.005	<LLD		2.45E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	8/19/2008	0.005	<LLD		2.45E+02
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	11/18/2008	0.005	<LLD		2.43E+02
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. STORAG	2/19/2008	0.005	<LLD		2.50E+02
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. STORAG	5/20/2008	0.005	<LLD		2.46E+02
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. STORAG	8/19/2008	0.005	<LLD		2.45E+02
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. STORAG	11/18/2008	0.005	<LLD		2.42E+02
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF WARE	2/19/2008	0.005	<LLD		2.50E+02
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF WARE	5/20/2008	0.005	<LLD		2.46E+02
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF WARE	8/19/2008	0.005	<LLD		2.45E+02
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF WARE	11/18/2008	0.005	<LLD		2.42E+02
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT ENTRA	2/19/2008	0.005	<LLD		2.51E+02
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT ENTRA	5/20/2008	0.005	<LLD		2.44E+02
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT ENTRA	8/19/2008	0.005	<LLD		2.45E+02
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT ENTRA	11/18/2008	0.005	<LLD		2.41E+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*
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITCH YA	2/19/2008	0.005	<LLD		2.50E+02
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITCH YA	5/20/2008	0.005	<LLD		2.46E+02
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITCH YA	8/19/2008	0.005	<LLD		2.45E+02
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITCH YA	11/18/2008	0.005	<LLD		2.42E+02
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUCTURE	2/19/2008	0.005	<LLD		2.50E+02
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUCTURE	5/20/2008	0.005	<LLD		2.45E+02
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUCTURE	8/19/2008	0.005	<LLD		2.45E+02
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUCTURE	11/18/2008	0.005	<LLD		2.42E+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	1/14/2008	0.005	9.44E+03	2.25E+02	2.50E+02
26	SPILLWAY ON MAIN RES	2/11/2008	0.005	7.84E+03	2.15E+02	2.52E+02
26	SPILLWAY ON MAIN RES	3/13/2008	0.005	6.96E+03	2.07E+02	2.48E+02
26	SPILLWAY ON MAIN RES	4/14/2008	0.005	6.10E+03	2.01E+02	2.47E+02
26	SPILLWAY ON MAIN RES	5/12/2008	0.005	5.60E+03	1.98E+02	2.48E+02
26	SPILLWAY ON MAIN RES	6/13/2008	0.005	5.68E+03	1.99E+02	2.48E+02
26	SPILLWAY ON MAIN RES	7/14/2008	0.005	5.60E+03	1.94E+02	2.40E+02
26	SPILLWAY ON MAIN RES	8/11/2008	0.005	5.38E+03	1.93E+02	2.43E+02
26	SPILLWAY ON MAIN RES	9/11/2008	0.005	6.57E+03	2.07E+02	2.50E+02
26	SPILLWAY ON MAIN RES	10/13/2008	0.005	6.91E+03	2.05E+02	2.44E+02
26	SPILLWAY ON MAIN RES	11/10/2008	0.005	7.28E+03	2.07E+02	2.42E+02
26	SPILLWAY ON MAIN RES	12/11/2008	0.005	6.77E+03	2.05E+02	2.47E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	1/14/2008	0.005	<LLD		2.52E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	2/11/2008	0.005	<LLD		2.51E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	3/13/2008	0.005	<LLD		2.48E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	4/14/2008	0.005	<LLD		2.47E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	5/12/2008	0.005	<LLD		2.48E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	6/13/2008	0.005	<LLD		2.48E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2008	0.005	<LLD		2.39E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	0.005	<LLD		2.43E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	0.005	<LLD		2.52E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	0.005	<LLD		2.43E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	0.005	<LLD		2.41E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	0.005	<LLD		2.46E+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	1/14/2008	0.005	<LLD		2.51E+02
40	LILLINGTON - CAPE FEAR RIVER	2/11/2008	0.005	<LLD		2.51E+02
40	LILLINGTON - CAPE FEAR RIVER	3/13/2008	0.005	<LLD		2.49E+02
40	LILLINGTON - CAPE FEAR RIVER	4/14/2008	0.005	<LLD		2.46E+02
40	LILLINGTON - CAPE FEAR RIVER	5/12/2008	0.005	<LLD		2.50E+02
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	0.005	<LLD		2.48E+02
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	0.005	<LLD		2.40E+02
40	LILLINGTON - CAPE FEAR RIVER	8/11/2008	0.005	<LLD		2.42E+02
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	0.005	<LLD		2.50E+02
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	0.005	<LLD		2.43E+02
40	LILLINGTON - CAPE FEAR RIVER	11/10/2008	0.005	<LLD		2.41E+02
40	LILLINGTON - CAPE FEAR RIVER	12/11/2008	0.005	<LLD		2.46E+02

2008 HNP
Radiological Environmental Monitoring Gamma Isotopic Report

Comments

- NO-ACT refers to no detectable gamma activity being present in the samples. Refer to Table 5 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	2.6 MILES N	2/18/2008	3607.2	BE-7	1.26E-01	2.12E-02
1	2.6 MILES N	5/19/2008	3478.2	BE-7	1.29E-01	1.78E-02
1	2.6 MILES N	5/19/2008	3478.2	K-40	2.27E-02	9.52E-03
1	2.6 MILES N	5/19/2008	3478.2	TL-208	5.47E-04	4.23E-04
1	2.6 MILES N	5/19/2008	3478.2	BI-214	6.43E-03	1.48E-03
1	2.6 MILES N	5/19/2008	3478.2	PB-214	8.52E-03	1.48E-03
1	2.6 MILES N	5/19/2008	3478.2	RA-226	8.24E-03	8.63E-03
1	2.6 MILES N	8/18/2008	3671.3	K-40	6.04E-02	1.30E-02
1	2.6 MILES N	8/18/2008	3671.3	BE-7	1.24E-01	1.88E-02
1	2.6 MILES N	11/17/2008	3575.8	BE-7	1.09E-01	1.61E-02
1	2.6 MILES N	11/17/2008	3575.8	K-40	2.27E-02	9.20E-03
1	2.6 MILES N	11/17/2008	3575.8	PB-212	1.59E-03	7.86E-04
1	2.6 MILES N	11/17/2008	3575.8	BI-214	3.36E-03	1.35E-03
1	2.6 MILES N	11/17/2008	3575.8	PB-214	3.46E-03	1.34E-03
1	2.6 MILES N	11/17/2008	3575.8	RA-226	1.72E-02	9.30E-03
2	SR 1134	2/18/2008	3851.9	PB-214	2.75E-03	1.38E-03
2	SR 1134	2/18/2008	3851.9	BE-7	1.19E-01	1.34E-02
2	SR 1134	2/18/2008	3851.9	K-40	3.83E-02	8.91E-03
2	SR 1134	2/18/2008	3851.9	BI-214	2.87E-03	1.15E-03
2	SR 1134	2/18/2008	3851.9	PB-212	9.29E-04	6.02E-04
2	SR 1134	5/19/2008	3706.1	BE-7	1.44E-01	2.18E-02
2	SR 1134	5/19/2008	3706.1	K-40	6.58E-02	1.59E-02
2	SR 1134	5/19/2008	3706.1	RA-226	2.34E-02	1.28E-02
2	SR 1134	8/18/2008	3462.8	PB-214	6.22E-03	1.23E-03

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*
2	SR 1134	8/18/2008	3462.8	BI-214	6.76E-03	1.54E-03
2	SR 1134	8/18/2008	3462.8	RA-226	1.37E-02	8.31E-03
2	SR 1134	8/18/2008	3462.8	PB-212	1.19E-03	5.95E-04
2	SR 1134	8/18/2008	3462.8	BE-7	1.20E-01	1.67E-02
2	SR 1134	8/18/2008	3462.8	K-40	3.48E-02	8.53E-03
2	SR 1134	11/17/2008	3511.2	PB-214	2.83E-03	1.76E-03
2	SR 1134	11/17/2008	3511.2	BI-214	7.53E-03	2.21E-03
2	SR 1134	11/17/2008	3511.2	K-40	9.29E-02	1.81E-02
2	SR 1134	11/17/2008	3511.2	BE-7	9.64E-02	2.08E-02
4	NEW HILL NEAR 1ST BAPTIST CH	2/18/2008	3839.9	BE-7	1.12E-01	1.45E-02
4	NEW HILL NEAR 1ST BAPTIST CH	2/18/2008	3839.9	PB-214	4.40E-03	1.31E-03
4	NEW HILL NEAR 1ST BAPTIST CH	2/18/2008	3839.9	TL-208	9.90E-04	5.30E-04
4	NEW HILL NEAR 1ST BAPTIST CH	2/18/2008	3839.9	TH-234	1.45E-02	1.23E-02
4	NEW HILL NEAR 1ST BAPTIST CH	2/18/2008	3839.9	PB-212	1.35E-03	6.18E-04
4	NEW HILL NEAR 1ST BAPTIST CH	2/18/2008	3839.9	BI-214	2.82E-03	1.48E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/19/2008	3984.8	K-40	1.91E-02	7.13E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/19/2008	3984.8	RA-226	1.24E-02	7.73E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/19/2008	3984.8	PB-214	7.18E-03	1.24E-03
4	NEW HILL NEAR 1ST BAPTIST CH	5/19/2008	3984.8	PB-212	1.16E-03	3.65E-04
4	NEW HILL NEAR 1ST BAPTIST CH	5/19/2008	3984.8	BE-7	1.26E-01	1.61E-02
4	NEW HILL NEAR 1ST BAPTIST CH	5/19/2008	3984.8	BI-214	5.29E-03	1.25E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/18/2008	4055	RA-226	1.35E-02	8.94E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/18/2008	4055	BI-214	5.12E-03	1.33E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/18/2008	4055	K-40	2.37E-02	7.75E-03

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*
4	NEW HILL NEAR 1ST BAPTIST CH	8/18/2008	4055	BE-7	1.03E-01	1.57E-02
4	NEW HILL NEAR 1ST BAPTIST CH	8/18/2008	4055	PB-214	4.99E-03	1.31E-03
4	NEW HILL NEAR 1ST BAPTIST CH	8/18/2008	4055	TH-234	2.17E-02	1.26E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/17/2008	3679.8	PB-212	1.81E-03	1.25E-03
4	NEW HILL NEAR 1ST BAPTIST CH	11/17/2008	3679.8	K-40	8.57E-02	1.80E-02
4	NEW HILL NEAR 1ST BAPTIST CH	11/17/2008	3679.8	BE-7	1.07E-01	2.25E-02
5	PITTSBORO - CONTROL	2/18/2008	3800.6	BE-7	1.15E-01	2.24E-02
5	PITTSBORO - CONTROL	2/18/2008	3800.6	TL-208	9.50E-04	8.73E-04
5	PITTSBORO - CONTROL	5/19/2008	3531.4	BI-214	1.60E-03	1.29E-03
5	PITTSBORO - CONTROL	5/19/2008	3531.4	K-40	6.35E-02	1.38E-02
5	PITTSBORO - CONTROL	5/19/2008	3531.4	BE-7	1.24E-01	1.94E-02
5	PITTSBORO - CONTROL	5/19/2008	3531.4	RA-226	1.46E-02	1.01E-02
5	PITTSBORO - CONTROL	8/18/2008	3563.3	BI-214	2.42E-03	1.40E-03
5	PITTSBORO - CONTROL	8/18/2008	3563.3	BE-7	1.21E-01	1.96E-02
5	PITTSBORO - CONTROL	8/18/2008	3563.3	K-40	5.96E-02	1.48E-02
5	PITTSBORO - CONTROL	11/17/2008	3667.6	BE-7	1.08E-01	2.21E-02
5	PITTSBORO - CONTROL	11/17/2008	3667.6	PB-214	3.52E-03	1.41E-03
5	PITTSBORO - CONTROL	11/17/2008	3667.6	K-40	9.36E-02	2.02E-02
26	SPILLWAY ON MAIN RES	2/18/2008	3919.9	K-40	2.98E-02	8.48E-03
26	SPILLWAY ON MAIN RES	2/18/2008	3919.9	BI-214	2.59E-03	1.24E-03
26	SPILLWAY ON MAIN RES	2/18/2008	3919.9	PB-214	2.94E-03	1.47E-03
26	SPILLWAY ON MAIN RES	2/18/2008	3919.9	PB-212	1.27E-03	4.78E-04
26	SPILLWAY ON MAIN RES	2/18/2008	3919.9	BE-7	1.12E-01	1.45E-02
26	SPILLWAY ON MAIN RES	5/19/2008	3681.2	BE-7	1.21E-01	2.03E-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*
26	SPILLWAY ON MAIN RES	5/19/2008	3681.2	RA-226	1.31E-02	1.11E-02
26	SPILLWAY ON MAIN RES	5/19/2008	3681.2	PB-214	1.71E-03	1.27E-03
26	SPILLWAY ON MAIN RES	5/19/2008	3681.2	BI-214	2.06E-03	1.52E-03
26	SPILLWAY ON MAIN RES	5/19/2008	3681.2	K-40	6.36E-02	1.57E-02
26	SPILLWAY ON MAIN RES	8/18/2008	3518	PB-212	1.43E-03	1.32E-03
26	SPILLWAY ON MAIN RES	8/18/2008	3518	BI-214	4.42E-03	1.27E-03
26	SPILLWAY ON MAIN RES	8/18/2008	3518	PB-214	5.69E-03	1.30E-03
26	SPILLWAY ON MAIN RES	8/18/2008	3518	RA-226	2.20E-02	1.07E-02
26	SPILLWAY ON MAIN RES	8/18/2008	3518	BE-7	1.20E-01	1.63E-02
26	SPILLWAY ON MAIN RES	8/18/2008	3518	K-40	3.06E-02	9.85E-03
26	SPILLWAY ON MAIN RES	11/17/2008	3534.2	PB-214	4.89E-03	1.40E-03
26	SPILLWAY ON MAIN RES	11/17/2008	3534.2	K-40	3.01E-02	8.85E-03
26	SPILLWAY ON MAIN RES	11/17/2008	3534.2	BE-7	9.54E-02	1.87E-02
26	SPILLWAY ON MAIN RES	11/17/2008	3534.2	BI-214	3.12E-03	1.36E-03
26	SPILLWAY ON MAIN RES	11/17/2008	3534.2	PB-212	2.22E-03	6.80E-04
26	SPILLWAY ON MAIN RES	11/17/2008	3534.2	TH-234	3.20E-02	1.55E-02
26	SPILLWAY ON MAIN RES	11/17/2008	3534.2	RA-226	1.08E-02	7.34E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/18/2008	3611.4	BI-214	4.49E-03	1.34E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/18/2008	3611.4	PB-214	3.11E-03	1.60E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/18/2008	3611.4	BE-7	1.22E-01	1.50E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/19/2008	3504.6	K-40	3.59E-02	1.01E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/19/2008	3504.6	TH-234	1.60E-03	1.07E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/19/2008	3504.6	PB-214	6.43E-03	1.20E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/19/2008	3504.6	BI-214	4.23E-03	1.25E-03

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*
47	SSW SECTOR 3.4 MI FROM SITE	5/19/2008	3504.6	PB-212	2.62E-03	7.96E-04
47	SSW SECTOR 3.4 MI FROM SITE	5/19/2008	3504.6	BE-7	1.44E-01	1.82E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/18/2008	3177.2	BE-7	1.31E-01	2.40E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/18/2008	3177.2	K-40	8.62E-02	2.11E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/17/2008	3620.1	TH-234	1.55E-02	1.01E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/17/2008	3620.1	RA-226	2.04E-02	1.10E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/17/2008	3620.1	PB-214	4.86E-03	1.20E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/17/2008	3620.1	BI-214	4.57E-03	1.44E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/17/2008	3620.1	PB-212	1.87E-03	6.76E-04
47	SSW SECTOR 3.4 MI FROM SITE	11/17/2008	3620.1	TL-208	9.49E-04	6.77E-04
47	SSW SECTOR 3.4 MI FROM SITE	11/17/2008	3620.1	K-40	3.13E-02	8.63E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/17/2008	3620.1	BE-7	9.51E-02	1.68E-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	11/12/2008	768.5	RA-226	1.55E-01	1.47E-01
26	SPILLWAY ON MAIN RES	11/12/2008	768.5	BE-7	1.55E-01	6.91E-02
26	SPILLWAY ON MAIN RES	11/12/2008	768.5	K-40	2.97E+00	2.83E-01
26	SPILLWAY ON MAIN RES	11/12/2008	768.5	TL-208	1.28E-02	1.02E-02
26	SPILLWAY ON MAIN RES	11/12/2008	768.5	PB-212	2.06E-02	1.45E-02
26	SPILLWAY ON MAIN RES	11/12/2008	768.5	PB-214	3.72E-02	1.85E-02
26	SPILLWAY ON MAIN RES	11/12/2008	768.5	TH-234	3.25E-01	2.49E-01
26	SPILLWAY ON MAIN RES	11/12/2008	768.5	BI-214	4.74E-02	1.90E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/2/2008	656.6	K-40	3.79E+00	4.56E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/2/2008	656.6	TL-208	2.24E-02	1.73E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/2/2008	656.6	PB-212	8.32E-02	2.34E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/2/2008	656.6	BE-7	3.14E-01	1.28E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/2/2008	656.6	BI-214	3.76E-02	2.45E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/2/2008	656.6	RA-226	3.58E-01	2.54E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/2/2008	656.6	AC-228	1.56E-01	6.20E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/12/2008	831.6	BI-214	2.50E-02	2.47E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/12/2008	831.6	K-40	3.06E+00	3.31E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/12/2008	831.6	BE-7	2.71E-01	9.09E-02
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/12/2008	647.7	PB-212	4.60E-02	2.35E-02
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/12/2008	647.7	RA-226	3.71E-01	2.20E-01
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/12/2008	647.7	BI-214	8.17E-02	3.00E-02
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/12/2008	647.7	BE-7	2.16E-01	1.19E-01
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/12/2008	647.7	TL-208	2.21E-02	9.76E-03
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/12/2008	647.7	TH-234	4.80E-01	4.76E-01

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*
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/12/2008	647.7	K-40	2.90E+00	3.63E-01
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/12/2008	647.7	PB-214	5.43E-02	2.79E-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	5/19/2008	524.3	BI-214	6.40E-02	4.20E-02
44	SITE VARIES WITHIN HARRIS LAKE	5/19/2008	524.3	K-40	2.83E+00	6.53E-01
44	SITE VARIES WITHIN HARRIS LAKE	11/17/2008	507.3	K-40	3.55E+00	7.37E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/19/2008	542.9	PB-214	5.09E-02	3.60E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/19/2008	542.9	BI-214	7.20E-02	6.25E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/19/2008	542.9	K-40	2.46E+00	7.21E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/17/2008	503.4	RA-226	6.24E-01	3.72E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/17/2008	503.4	BI-214	5.64E-02	3.72E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/17/2008	503.4	K-40	4.04E+00	7.94E-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	1/24/2008	721.2	K-40	1.14E+01	1.33E+00
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/24/2008	721.2	CO-60	1.40E+00	1.52E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/24/2008	721.2	AC-228	1.17E+00	2.86E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/24/2008	721.2	RA-226	2.09E+00	7.94E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/24/2008	721.2	PB-214	7.56E-01	1.66E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/24/2008	721.2	BI-214	8.35E-01	1.57E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/24/2008	721.2	PB-212	1.01E+00	1.08E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/24/2008	721.2	BI-212	9.91E-01	4.14E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/24/2008	721.2	TL-208	3.60E-01	8.66E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/24/2008	721.2	CS-137	3.06E-01	8.67E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/20/2008	1306.7	CO-58	7.38E-02	4.81E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/20/2008	1306.7	CO-60	8.90E-01	9.16E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/20/2008	1306.7	CS-137	9.25E-02	3.69E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/20/2008	1306.7	TL-208	2.08E-01	4.51E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/20/2008	1306.7	BI-212	9.17E-01	3.86E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/20/2008	1306.7	PB-212	6.34E-01	6.47E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/20/2008	1306.7	BI-214	3.80E-01	8.43E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/20/2008	1306.7	PB-214	4.02E-01	8.10E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/20/2008	1306.7	K-40	8.26E+00	8.53E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/20/2008	1306.7	AC-228	6.26E-01	1.72E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	8/20/2008	1306.7	RA-226	1.30E+00	5.57E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: BEECH

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
65	1.36 MI S SECTOR	8/19/2008	386.5	BI-214	1.02E-01	6.95E-02
65	1.36 MI S SECTOR	8/19/2008	386.5	PB-212	8.27E-02	6.14E-02
65	1.36 MI S SECTOR	8/19/2008	386.5	K-40	5.39E+00	7.26E-01
65	1.36 MI S SECTOR	8/19/2008	386.5	BE-7	1.58E+00	3.21E-01
65	1.36 MI S SECTOR	9/15/2008	462.8	BI-214	5.54E-02	4.30E-02
65	1.36 MI S SECTOR	9/15/2008	462.8	K-40	3.73E+00	5.53E-01
65	1.36 MI S SECTOR	9/15/2008	462.8	BE-7	1.18E+00	2.53E-01
65	1.36 MI S SECTOR	10/21/2008	480.3	PB-212	8.81E-02	2.95E-02
65	1.36 MI S SECTOR	10/21/2008	480.3	BE-7	1.14E+00	2.21E-01
65	1.36 MI S SECTOR	10/21/2008	480.3	TL-208	4.45E-02	2.03E-02
65	1.36 MI S SECTOR	10/21/2008	480.3	BI-214	5.45E-02	2.93E-02
65	1.36 MI S SECTOR	10/21/2008	480.3	RA-226	6.60E-01	3.10E-01
65	1.36 MI S SECTOR	10/21/2008	480.3	K-40	1.52E+00	2.81E-01
66	1.33 MI SSW SECTOR	5/22/2008	351.2	BE-7	9.96E-01	2.74E-01
66	1.33 MI SSW SECTOR	5/22/2008	351.2	K-40	4.03E+00	6.93E-01
66	1.33 MI SSW SECTOR	5/22/2008	351.2	PB-212	5.71E-02	4.40E-02
66	1.33 MI SSW SECTOR	5/22/2008	351.2	PB-214	9.05E-02	6.06E-02
66	1.33 MI SSW SECTOR	5/22/2008	351.2	BI-214	1.37E-01	6.87E-02
66	1.33 MI SSW SECTOR	7/23/2008	355.5	K-40	4.52E+00	6.42E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: BEECH

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
66	1.33 MI SSW SECTOR	7/23/2008	355.5	BE-7	1.21E+00	2.64E-01
66	1.33 MI SSW SECTOR	7/23/2008	355.5	PB-212	5.78E-02	3.60E-02
66	1.33 MI SSW SECTOR	8/19/2008	387.7	PB-212	4.23E-02	3.45E-02
66	1.33 MI SSW SECTOR	8/19/2008	387.7	TL-208	2.56E-02	1.81E-02
66	1.33 MI SSW SECTOR	8/19/2008	387.7	CS-137	4.90E-02	2.20E-02
66	1.33 MI SSW SECTOR	8/19/2008	387.7	K-40	3.97E+00	5.74E-01
66	1.33 MI SSW SECTOR	8/19/2008	387.7	BE-7	1.29E+00	2.46E-01
66	1.33 MI SSW SECTOR	9/15/2008	300.9	CS-137	7.55E-02	3.92E-02
66	1.33 MI SSW SECTOR	9/15/2008	300.9	PB-212	7.26E-02	5.32E-02
66	1.33 MI SSW SECTOR	9/15/2008	300.9	K-40	6.01E+00	7.78E-01
66	1.33 MI SSW SECTOR	9/15/2008	300.9	BE-7	2.05E+00	4.44E-01
66	1.33 MI SSW SECTOR	9/15/2008	300.9	BI-214	8.37E-02	5.55E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: CHERRY

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
66	1.33 MI SSW SECTOR	6/17/2008	426.6	TL-208	3.67E-02	2.43E-02
66	1.33 MI SSW SECTOR	6/17/2008	426.6	K-40	2.40E+00	5.18E-01
66	1.33 MI SSW SECTOR	6/17/2008	426.6	BE-7	2.76E-01	1.96E-01
66	1.33 MI SSW SECTOR	6/17/2008	426.6	PB-212	4.24E-02	3.17E-02

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	5/21/2008	389.2	PB-212	4.49E-02	4.33E-02
65	1.36 MI S SECTOR	5/21/2008	389.2	K-40	3.36E+00	5.04E-01
65	1.36 MI S SECTOR	5/21/2008	389.2	BE-7	6.83E-01	1.66E-01
65	1.36 MI S SECTOR	6/17/2008	429.8	K-40	2.57E+00	4.49E-01
65	1.36 MI S SECTOR	6/17/2008	429.8	BE-7	5.82E-01	2.14E-01
65	1.36 MI S SECTOR	7/23/2008	428.1	BE-7	1.03E+00	2.30E-01
65	1.36 MI S SECTOR	7/23/2008	428.1	K-40	4.39E+00	6.02E-01
65	1.36 MI S SECTOR	7/23/2008	428.1	TL-208	5.94E-02	2.44E-02
65	1.36 MI S SECTOR	7/23/2008	428.1	PB-212	9.18E-02	3.43E-02
65	1.36 MI S SECTOR	7/23/2008	428.1	RA-226	4.44E-01	3.43E-01
66	1.33 MI SSW SECTOR	10/21/2008	331.1	TL-208	5.22E-02	2.42E-02
66	1.33 MI SSW SECTOR	10/21/2008	331.1	PB-214	1.46E-01	4.16E-02
66	1.33 MI SSW SECTOR	10/21/2008	331.1	PB-212	1.41E-01	4.49E-02
66	1.33 MI SSW SECTOR	10/21/2008	331.1	K-40	3.36E+00	5.27E-01
66	1.33 MI SSW SECTOR	10/21/2008	331.1	BE-7	3.52E+00	4.26E-01
66	1.33 MI SSW SECTOR	10/21/2008	331.1	BI-214	1.13E-01	6.27E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: FIG LEAF

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	5/21/2008	394.9	BE-7	8.26E-01	3.27E-01
5	PITTSBORO - CONTROL	5/21/2008	394.9	TL-208	7.24E-02	3.28E-02
5	PITTSBORO - CONTROL	5/21/2008	394.9	K-40	3.55E+00	6.34E-01
5	PITTSBORO - CONTROL	5/21/2008	394.9	PB-212	1.90E-01	4.69E-02
5	PITTSBORO - CONTROL	5/21/2008	394.9	AC-228	1.32E-01	7.39E-02
5	PITTSBORO - CONTROL	6/17/2008	370	BE-7	7.87E-01	2.55E-01
5	PITTSBORO - CONTROL	6/17/2008	370	PB-214	9.20E-02	5.86E-02
5	PITTSBORO - CONTROL	6/17/2008	370	K-40	4.43E+00	6.88E-01
5	PITTSBORO - CONTROL	6/17/2008	370	TL-208	4.34E-02	3.40E-02
5	PITTSBORO - CONTROL	6/17/2008	370	PB-212	5.97E-02	5.31E-02
5	PITTSBORO - CONTROL	6/17/2008	370	BI-214	1.27E-01	5.38E-02
5	PITTSBORO - CONTROL	6/17/2008	370	AC-228	1.32E-01	9.55E-02
5	PITTSBORO - CONTROL	7/23/2008	433.5	RA-226	3.94E-01	3.86E-01
5	PITTSBORO - CONTROL	7/23/2008	433.5	BE-7	7.73E-01	2.22E-01
5	PITTSBORO - CONTROL	7/23/2008	433.5	K-40	5.14E+00	6.45E-01
5	PITTSBORO - CONTROL	7/23/2008	433.5	PB-212	2.81E-01	4.79E-02
5	PITTSBORO - CONTROL	7/23/2008	433.5	BI-214	8.96E-02	4.34E-02
5	PITTSBORO - CONTROL	7/23/2008	433.5	TL-208	9.63E-02	2.61E-02
5	PITTSBORO - CONTROL	8/19/2008	408.7	TL-208	8.31E-02	3.48E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: FIG LEAF

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	8/19/2008	408.7	AC-228	1.48E-01	1.09E-01
5	PITTSBORO - CONTROL	8/19/2008	408.7	PB-214	1.38E-01	6.34E-02
5	PITTSBORO - CONTROL	8/19/2008	408.7	PB-212	2.13E-01	5.40E-02
5	PITTSBORO - CONTROL	8/19/2008	408.7	K-40	5.59E+00	6.79E-01
5	PITTSBORO - CONTROL	8/19/2008	408.7	BE-7	1.13E+00	2.72E-01
5	PITTSBORO - CONTROL	8/19/2008	408.7	BI-214	1.85E-01	6.55E-02
5	PITTSBORO - CONTROL	9/15/2008	408.4	TH-234	1.02E+00	7.40E-01
5	PITTSBORO - CONTROL	9/15/2008	408.4	AC-228	1.95E-01	7.08E-02
5	PITTSBORO - CONTROL	9/15/2008	408.4	RA-226	5.42E-01	3.71E-01
5	PITTSBORO - CONTROL	9/15/2008	408.4	PB-214	6.84E-02	5.21E-02
5	PITTSBORO - CONTROL	9/15/2008	408.4	PB-212	5.37E-02	4.82E-02
5	PITTSBORO - CONTROL	9/15/2008	408.4	K-40	5.37E+00	6.66E-01
5	PITTSBORO - CONTROL	9/15/2008	408.4	BE-7	2.25E+00	3.04E-01
5	PITTSBORO - CONTROL	9/15/2008	408.4	BI-214	1.33E-01	4.67E-02
5	PITTSBORO - CONTROL	9/15/2008	408.4	TL-208	4.88E-02	2.20E-02
5	PITTSBORO - CONTROL	10/21/2008	397.5	BE-7	2.69E+00	3.79E-01
5	PITTSBORO - CONTROL	10/21/2008	397.5	AC-228	3.41E-01	9.33E-02
5	PITTSBORO - CONTROL	10/21/2008	397.5	PB-214	1.26E-01	5.94E-02
5	PITTSBORO - CONTROL	10/21/2008	397.5	BI-214	1.98E-01	6.08E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: FIG LEAF

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	10/21/2008	397.5	K-40	7.21E+00	7.98E-01
5	PITTSBORO - CONTROL	10/21/2008	397.5	TL-208	5.75E-02	3.08E-02
5	PITTSBORO - CONTROL	10/21/2008	397.5	PB-212	1.68E-01	3.90E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: MAPLE

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	5/21/2008	354.2	BI-214	1.15E-01	6.09E-02
5	PITTSBORO - CONTROL	5/21/2008	354.2	PB-212	8.99E-02	4.30E-02
5	PITTSBORO - CONTROL	5/21/2008	354.2	BE-7	1.17E+00	3.07E-01
5	PITTSBORO - CONTROL	5/21/2008	354.2	K-40	2.83E+00	6.44E-01
5	PITTSBORO - CONTROL	6/17/2008	494.1	K-40	2.75E+00	4.29E-01
5	PITTSBORO - CONTROL	6/17/2008	494.1	PB-214	1.03E-01	4.08E-02
5	PITTSBORO - CONTROL	6/17/2008	494.1	PB-212	9.24E-02	3.00E-02
5	PITTSBORO - CONTROL	6/17/2008	494.1	BE-7	7.10E-01	1.77E-01
5	PITTSBORO - CONTROL	6/17/2008	494.1	AC-228	1.23E-01	7.95E-02
5	PITTSBORO - CONTROL	6/17/2008	494.1	BI-214	7.76E-02	4.19E-02
5	PITTSBORO - CONTROL	7/23/2008	423.7	TL-208	1.09E-01	2.86E-02
5	PITTSBORO - CONTROL	7/23/2008	423.7	K-40	4.02E+00	5.35E-01
5	PITTSBORO - CONTROL	7/23/2008	423.7	PB-212	3.51E-01	4.72E-02
5	PITTSBORO - CONTROL	7/23/2008	423.7	AC-228	2.48E-01	7.71E-02
5	PITTSBORO - CONTROL	7/23/2008	423.7	BI-214	1.32E-01	4.77E-02
5	PITTSBORO - CONTROL	7/23/2008	423.7	RA-226	5.12E-01	3.45E-01
5	PITTSBORO - CONTROL	7/23/2008	423.7	BE-7	1.75E+00	2.55E-01
5	PITTSBORO - CONTROL	8/19/2008	420.4	PB-214	1.44E-01	4.39E-02
5	PITTSBORO - CONTROL	8/19/2008	420.4	BE-7	1.24E+00	2.09E-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*
5	PITTSBORO - CONTROL	8/19/2008	420.4	K-40	3.82E+00	4.95E-01
5	PITTSBORO - CONTROL	8/19/2008	420.4	TL-208	7.60E-02	2.77E-02
5	PITTSBORO - CONTROL	8/19/2008	420.4	BI-214	1.53E-01	6.67E-02
5	PITTSBORO - CONTROL	8/19/2008	420.4	AC-228	1.99E-01	9.85E-02
5	PITTSBORO - CONTROL	8/19/2008	420.4	PB-212	2.20E-01	4.81E-02
5	PITTSBORO - CONTROL	9/15/2008	418.9	K-40	4.25E+00	5.81E-01
5	PITTSBORO - CONTROL	9/15/2008	418.9	BE-7	2.16E+00	3.57E-01
5	PITTSBORO - CONTROL	9/15/2008	418.9	AC-228	3.33E-01	1.10E-01
5	PITTSBORO - CONTROL	9/15/2008	418.9	PB-212	7.31E-02	3.61E-02
5	PITTSBORO - CONTROL	9/15/2008	418.9	TL-208	4.09E-02	2.36E-02
5	PITTSBORO - CONTROL	10/21/2008	464.4	RA-226	8.44E-01	4.48E-01
5	PITTSBORO - CONTROL	10/21/2008	464.4	K-40	3.37E+00	4.56E-01
5	PITTSBORO - CONTROL	10/21/2008	464.4	PB-214	1.33E-01	4.25E-02
5	PITTSBORO - CONTROL	10/21/2008	464.4	BI-214	1.12E-01	3.50E-02
5	PITTSBORO - CONTROL	10/21/2008	464.4	AC-228	2.06E-01	6.48E-02
5	PITTSBORO - CONTROL	10/21/2008	464.4	PB-212	1.05E-01	2.54E-02
5	PITTSBORO - CONTROL	10/21/2008	464.4	BI-212	2.03E-01	1.00E-01
5	PITTSBORO - CONTROL	10/21/2008	464.4	TL-208	5.19E-02	2.27E-02
5	PITTSBORO - CONTROL	10/21/2008	464.4	BE-7	1.80E+00	2.53E-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	5/21/2008	355.5	BE-7	4.78E-01	2.00E-01
65	1.36 MI S SECTOR	5/21/2008	355.5	K-40	2.01E+00	6.67E-01
65	1.36 MI S SECTOR	6/17/2008	351.8	K-40	1.68E+00	5.64E-01
65	1.36 MI S SECTOR	6/17/2008	351.8	BE-7	4.49E-01	2.53E-01
65	1.36 MI S SECTOR	7/23/2008	434.4	BE-7	1.19E+00	2.31E-01
65	1.36 MI S SECTOR	7/23/2008	434.4	K-40	4.68E+00	6.24E-01
65	1.36 MI S SECTOR	7/23/2008	434.4	TL-208	4.21E-02	2.33E-02
65	1.36 MI S SECTOR	7/23/2008	434.4	PB-212	8.66E-02	3.72E-02
65	1.36 MI S SECTOR	7/23/2008	434.4	BI-214	6.66E-02	3.73E-02
65	1.36 MI S SECTOR	8/19/2008	491.4	TL-208	2.67E-02	1.96E-02
65	1.36 MI S SECTOR	8/19/2008	491.4	K-40	3.61E+00	4.83E-01
65	1.36 MI S SECTOR	8/19/2008	491.4	BE-7	1.59E+00	2.37E-01
65	1.36 MI S SECTOR	9/15/2008	400.2	PB-212	5.15E-02	2.73E-02
65	1.36 MI S SECTOR	9/15/2008	400.2	K-40	2.82E+00	4.28E-01
65	1.36 MI S SECTOR	9/15/2008	400.2	BI-214	5.32E-02	3.44E-02
65	1.36 MI S SECTOR	9/15/2008	400.2	TL-208	2.08E-02	1.44E-02
65	1.36 MI S SECTOR	9/15/2008	400.2	RA-226	5.21E-01	3.38E-01
65	1.36 MI S SECTOR	9/15/2008	400.2	TH-234	8.45E-01	5.55E-01
65	1.36 MI S SECTOR	9/15/2008	400.2	BE-7	2.87E+00	3.40E-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	10/21/2008	383.2	BI-214	8.15E-02	4.93E-02
65	1.36 MI S SECTOR	10/21/2008	383.2	RA-226	1.02E+00	4.86E-01
65	1.36 MI S SECTOR	10/21/2008	383.2	TL-208	3.94E-02	2.42E-02
65	1.36 MI S SECTOR	10/21/2008	383.2	BE-7	1.58E+00	2.93E-01
65	1.36 MI S SECTOR	10/21/2008	383.2	PB-212	6.63E-02	5.74E-02
65	1.36 MI S SECTOR	10/21/2008	383.2	K-40	4.17E+00	5.94E-01
66	1.33 MI SSW SECTOR	5/21/2008	353.8	TL-208	4.43E-02	2.70E-02
66	1.33 MI SSW SECTOR	5/21/2008	353.8	K-40	2.37E+00	5.86E-01
66	1.33 MI SSW SECTOR	5/21/2008	353.8	BE-7	7.52E-01	2.49E-01
66	1.33 MI SSW SECTOR	5/21/2008	353.8	PB-212	9.50E-02	5.41E-02
66	1.33 MI SSW SECTOR	6/17/2008	439.3	K-40	1.94E+00	3.85E-01
66	1.33 MI SSW SECTOR	6/17/2008	439.3	BE-7	6.05E-01	1.74E-01
66	1.33 MI SSW SECTOR	7/23/2008	354.4	BE-7	1.24E+00	2.88E-01
66	1.33 MI SSW SECTOR	7/23/2008	354.4	K-40	5.54E+00	7.82E-01
66	1.33 MI SSW SECTOR	7/23/2008	354.4	PB-212	8.07E-02	3.59E-02
66	1.33 MI SSW SECTOR	7/23/2008	354.4	TL-208	3.36E-02	2.79E-02
66	1.33 MI SSW SECTOR	8/19/2008	411.7	RA-226	7.07E-01	3.99E-01
66	1.33 MI SSW SECTOR	8/19/2008	411.7	K-40	2.80E+00	4.75E-01
66	1.33 MI SSW SECTOR	8/19/2008	411.7	BI-214	8.72E-02	3.56E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: MAPLE

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
66	1.33 MI SSW SECTOR	8/19/2008	411.7	TL-208	2.64E-02	1.53E-02
66	1.33 MI SSW SECTOR	8/19/2008	411.7	BE-7	9.21E-01	2.18E-01
66	1.33 MI SSW SECTOR	8/19/2008	411.7	PB-212	3.27E-02	3.07E-02
66	1.33 MI SSW SECTOR	9/15/2008	248.6	RA-226	9.65E-01	7.40E-01
66	1.33 MI SSW SECTOR	9/15/2008	248.6	PB-212	7.56E-02	4.23E-02
66	1.33 MI SSW SECTOR	9/15/2008	248.6	K-40	4.92E+00	9.06E-01
66	1.33 MI SSW SECTOR	9/15/2008	248.6	BE-7	1.75E+00	3.96E-01
66	1.33 MI SSW SECTOR	10/21/2008	342.8	BE-7	3.76E+00	4.91E-01
66	1.33 MI SSW SECTOR	10/21/2008	342.8	K-40	3.60E+00	5.63E-01
66	1.33 MI SSW SECTOR	10/21/2008	342.8	PB-212	7.12E-02	5.02E-02
66	1.33 MI SSW SECTOR	10/21/2008	342.8	BI-214	1.36E-01	5.15E-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*
5	PITTSBORO - CONTROL	5/21/2008	473.6	TL-208	4.02E-02	1.96E-02
5	PITTSBORO - CONTROL	5/21/2008	473.6	PB-212	9.21E-02	2.81E-02
5	PITTSBORO - CONTROL	5/21/2008	473.6	BE-7	4.97E-01	1.68E-01
5	PITTSBORO - CONTROL	6/17/2008	461.7	AC-228	1.85E-01	8.23E-02
5	PITTSBORO - CONTROL	6/17/2008	461.7	PB-214	6.60E-02	4.49E-02
5	PITTSBORO - CONTROL	6/17/2008	461.7	BI-214	6.12E-02	5.50E-02
5	PITTSBORO - CONTROL	6/17/2008	461.7	PB-212	1.55E-01	3.83E-02
5	PITTSBORO - CONTROL	6/17/2008	461.7	BE-7	3.52E-01	2.02E-01
5	PITTSBORO - CONTROL	6/17/2008	461.7	K-40	2.03E+00	5.33E-01
5	PITTSBORO - CONTROL	6/17/2008	461.7	TL-208	5.15E-02	3.21E-02
5	PITTSBORO - CONTROL	7/23/2008	433.2	BI-214	6.40E-02	4.33E-02
5	PITTSBORO - CONTROL	7/23/2008	433.2	BE-7	6.77E-01	2.19E-01
5	PITTSBORO - CONTROL	7/23/2008	433.2	K-40	4.81E+00	6.49E-01
5	PITTSBORO - CONTROL	7/23/2008	433.2	TL-208	1.79E-01	3.50E-02
5	PITTSBORO - CONTROL	7/23/2008	433.2	PB-212	4.12E-01	5.12E-02
5	PITTSBORO - CONTROL	7/23/2008	433.2	BI-212	1.94E-01	1.54E-01
5	PITTSBORO - CONTROL	8/19/2008	415.8	BI-214	1.01E-01	7.08E-02
5	PITTSBORO - CONTROL	8/19/2008	415.8	TL-208	1.09E-01	3.11E-02
5	PITTSBORO - CONTROL	8/19/2008	415.8	PB-212	2.50E-01	5.38E-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*
5	PITTSBORO - CONTROL	8/19/2008	415.8	K-40	4.25E+00	6.38E-01
5	PITTSBORO - CONTROL	8/19/2008	415.8	BE-7	5.55E-01	2.44E-01
5	PITTSBORO - CONTROL	9/15/2008	403.5	PB-212	1.21E-01	4.29E-02
5	PITTSBORO - CONTROL	9/15/2008	403.5	AC-228	1.86E-01	9.56E-02
5	PITTSBORO - CONTROL	9/15/2008	403.5	BI-214	8.39E-02	4.05E-02
5	PITTSBORO - CONTROL	9/15/2008	403.5	TL-208	6.83E-02	3.04E-02
5	PITTSBORO - CONTROL	9/15/2008	403.5	K-40	4.03E+00	5.40E-01
5	PITTSBORO - CONTROL	9/15/2008	403.5	BE-7	1.02E+00	2.62E-01
5	PITTSBORO - CONTROL	9/15/2008	403.5	RA-226	7.64E-01	5.23E-01
5	PITTSBORO - CONTROL	10/21/2008	415.3	AC-228	1.91E-01	9.52E-02
5	PITTSBORO - CONTROL	10/21/2008	415.3	PB-212	2.72E-01	5.08E-02
5	PITTSBORO - CONTROL	10/21/2008	415.3	TL-208	9.00E-02	3.40E-02
5	PITTSBORO - CONTROL	10/21/2008	415.3	BI-214	1.01E-01	8.84E-02
5	PITTSBORO - CONTROL	10/21/2008	415.3	BE-7	9.75E-01	2.73E-01
5	PITTSBORO - CONTROL	10/21/2008	415.3	K-40	4.53E+00	6.33E-01
65	1.36 MI S SECTOR	5/21/2008	358.9	BE-7	2.95E-01	2.78E-01
65	1.36 MI S SECTOR	5/21/2008	358.9	TL-208	4.55E-02	3.23E-02
65	1.36 MI S SECTOR	5/21/2008	358.9	K-40	5.30E+00	7.17E-01
65	1.36 MI S SECTOR	5/21/2008	358.9	PB-212	8.31E-02	5.65E-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	6/17/2008	415.7	BE-7	5.13E-01	1.87E-01
65	1.36 MI S SECTOR	6/17/2008	415.7	K-40	2.34E+00	5.70E-01
65	1.36 MI S SECTOR	6/17/2008	415.7	TL-208	2.74E-02	2.49E-02
65	1.36 MI S SECTOR	6/17/2008	415.7	PB-214	1.15E-01	5.79E-02
65	1.36 MI S SECTOR	7/23/2008	407.5	TH-234	1.01E+00	5.06E-01
65	1.36 MI S SECTOR	7/23/2008	407.5	BE-7	6.81E-01	1.75E-01
65	1.36 MI S SECTOR	7/23/2008	407.5	TL-208	4.84E-02	1.88E-02
65	1.36 MI S SECTOR	7/23/2008	407.5	PB-212	1.09E-01	2.99E-02
65	1.36 MI S SECTOR	7/23/2008	407.5	BI-214	8.97E-02	3.71E-02
65	1.36 MI S SECTOR	7/23/2008	407.5	K-40	2.18E+00	3.95E-01
65	1.36 MI S SECTOR	8/19/2008	450.1	RA-226	7.91E-01	3.60E-01
65	1.36 MI S SECTOR	8/19/2008	450.1	BI-214	5.97E-02	3.19E-02
65	1.36 MI S SECTOR	8/19/2008	450.1	PB-212	7.98E-02	3.35E-02
65	1.36 MI S SECTOR	8/19/2008	450.1	TL-208	3.02E-02	2.31E-02
65	1.36 MI S SECTOR	8/19/2008	450.1	K-40	1.98E+00	3.62E-01
65	1.36 MI S SECTOR	8/19/2008	450.1	BE-7	1.41E+00	2.16E-01
65	1.36 MI S SECTOR	8/19/2008	450.1	TH-234	5.95E-01	5.47E-01
65	1.36 MI S SECTOR	9/15/2008	409.3	TL-208	5.23E-02	2.11E-02
65	1.36 MI S SECTOR	9/15/2008	409.3	K-40	3.03E+00	4.80E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: SWEETGUM

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
65	1.36 MI S SECTOR	9/15/2008	409.3	BE-7	2.03E+00	3.30E-01
65	1.36 MI S SECTOR	9/15/2008	409.3	PB-212	1.13E-01	3.91E-02
65	1.36 MI S SECTOR	10/21/2008	431.2	BE-7	1.61E+00	2.75E-01
65	1.36 MI S SECTOR	10/21/2008	431.2	TL-208	4.99E-02	2.19E-02
65	1.36 MI S SECTOR	10/21/2008	431.2	K-40	2.78E+00	4.54E-01
65	1.36 MI S SECTOR	10/21/2008	431.2	BI-214	6.72E-02	3.95E-02
65	1.36 MI S SECTOR	10/21/2008	431.2	PB-212	1.26E-01	3.40E-02
66	1.33 MI SSW SECTOR	5/21/2008	368.5	PB-214	7.25E-02	4.86E-02
66	1.33 MI SSW SECTOR	5/21/2008	368.5	BI-214	9.12E-02	5.10E-02
66	1.33 MI SSW SECTOR	5/21/2008	368.5	PB-212	7.80E-02	3.16E-02
66	1.33 MI SSW SECTOR	5/21/2008	368.5	BE-7	3.97E-01	1.51E-01
66	1.33 MI SSW SECTOR	6/17/2008	529.3	K-40	1.44E+00	4.27E-01
66	1.33 MI SSW SECTOR	6/17/2008	529.3	BE-7	3.08E-01	1.66E-01
66	1.33 MI SSW SECTOR	7/23/2008	383.2	K-40	2.96E+00	5.18E-01
66	1.33 MI SSW SECTOR	7/23/2008	383.2	PB-212	9.56E-02	3.48E-02
66	1.33 MI SSW SECTOR	7/23/2008	383.2	BE-7	6.57E-01	2.02E-01
66	1.33 MI SSW SECTOR	7/23/2008	383.2	BI-214	6.29E-02	3.94E-02
66	1.33 MI SSW SECTOR	8/19/2008	484	K-40	1.60E+00	2.96E-01
66	1.33 MI SSW SECTOR	8/19/2008	484	BE-7	1.32E+00	2.52E-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	8/19/2008	484	TL-208	1.89E-02	1.62E-02
66	1.33 MI SSW SECTOR	8/19/2008	484	PB-212	5.90E-02	2.35E-02
66	1.33 MI SSW SECTOR	8/19/2008	484	BI-214	5.53E-02	2.43E-02
66	1.33 MI SSW SECTOR	8/19/2008	484	RA-226	4.47E-01	2.76E-01
66	1.33 MI SSW SECTOR	9/15/2008	503.6	PB-212	8.69E-02	3.48E-02
66	1.33 MI SSW SECTOR	9/15/2008	503.6	TL-208	4.78E-02	2.45E-02
66	1.33 MI SSW SECTOR	9/15/2008	503.6	K-40	2.43E+00	4.50E-01
66	1.33 MI SSW SECTOR	9/15/2008	503.6	BE-7	1.78E+00	2.71E-01
66	1.33 MI SSW SECTOR	9/15/2008	503.6	RA-226	3.78E-01	3.01E-01
66	1.33 MI SSW SECTOR	10/21/2008	529.2	BE-7	1.33E+00	2.35E-01
66	1.33 MI SSW SECTOR	10/21/2008	529.2	K-40	3.52E+00	4.72E-01
66	1.33 MI SSW SECTOR	10/21/2008	529.2	PB-212	4.88E-02	3.31E-02
66	1.33 MI SSW SECTOR	10/21/2008	529.2	BI-214	4.77E-02	4.08E-02

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	1/14/2008	1.0	TH-234	5.91E+01	4.73E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/11/2008	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	3/13/2008	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	4/14/2008	1.0	PB-214	4.48E+00	3.10E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/12/2008	1.0	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	6/13/2008	1.0	K-40	2.75E+02	3.25E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/13/2008	1.0	TH-234	6.32E+01	2.94E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/13/2008	1.0	RA-226	3.25E+01	2.34E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/13/2008	1.0	BI-214	7.31E+00	2.68E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/13/2008	1.0	TL-208	3.08E+00	1.48E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/13/2008	1.0	PB-212	6.60E+00	1.90E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2008	1.0	BI-214	6.95E+00	3.88E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2008	1.0	RA-226	4.07E+01	2.62E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2008	1.0	TH-234	5.61E+01	3.74E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2008	1.0	TL-208	1.96E+00	1.56E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2008	1.0	K-40	2.80E+02	3.40E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2008	1.0	PB-212	5.77E+00	2.23E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	1.0	PB-214	1.09E+01	2.92E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	1.0	K-40	1.20E+02	2.02E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	1.0	TL-208	2.95E+00	1.10E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	1.0	BI-214	1.42E+01	3.40E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	1.0	RA-226	6.39E+01	2.22E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	1.0	TH-234	7.26E+01	2.19E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	1.0	PB-212	7.66E+00	1.95E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	1.0	TH-234	5.81E+01	2.53E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	1.0	K-40	1.43E+02	2.62E+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	9/11/2008	1.0	TL-208	2.17E+00	1.24E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	1.0	PB-212	7.38E+00	1.68E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	1.0	BI-214	1.49E+01	3.24E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	1.0	PB-214	1.05E+01	2.94E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	1.0	RA-226	1.06E+02	2.60E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	1.0	RA-226	7.20E+01	2.35E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	1.0	TH-234	7.94E+01	2.15E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	1.0	BI-214	1.12E+01	2.94E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	1.0	PB-212	6.24E+00	1.82E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	1.0	PB-214	1.02E+01	2.68E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	1.0	TL-208	2.59E+00	1.37E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	1.0	K-40	1.57E+02	2.30E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	1.0	TL-208	5.65E+00	2.63E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	1.0	K-40	3.54E+02	4.16E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	1.0	TH-234	1.98E+02	8.91E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	1.0	AC-228	1.52E+01	7.99E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	1.0	RA-226	7.19E+01	4.24E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	1.0	BI-214	7.13E+00	3.59E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	1.0	PB-212	8.70E+00	3.29E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1.0	PB-214	1.10E+01	2.64E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1.0	TL-208	2.63E+00	1.22E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1.0	BI-214	1.24E+01	2.57E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1.0	K-40	1.18E+02	1.84E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1.0	RA-226	7.23E+01	1.92E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1.0	AC-228	6.93E+00	3.68E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1.0	TH-234	6.35E+01	2.32E+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	12/11/2008	1.0	PB-212	6.60E+00	1.76E+00
40	LILLINGTON - CAPE FEAR RIVER	1/14/2008	1.0	PB-212	2.49E+00	2.08E+00
40	LILLINGTON - CAPE FEAR RIVER	1/14/2008	1.0	PB-214	4.29E+00	3.56E+00
40	LILLINGTON - CAPE FEAR RIVER	2/11/2008	1.0	PB-212	3.48E+00	1.96E+00
40	LILLINGTON - CAPE FEAR RIVER	2/11/2008	1.0	BI-214	8.36E+00	3.58E+00
40	LILLINGTON - CAPE FEAR RIVER	2/11/2008	1.0	PB-214	7.70E+00	2.99E+00
40	LILLINGTON - CAPE FEAR RIVER	3/13/2008	1.0	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	4/14/2008	1.0	PB-214	5.11E+00	3.45E+00
40	LILLINGTON - CAPE FEAR RIVER	4/14/2008	1.0	BI-214	6.20E+00	3.65E+00
40	LILLINGTON - CAPE FEAR RIVER	5/12/2008	1.0	TL-208	3.42E+00	2.66E+00
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1.0	BI-214	1.15E+01	2.85E+00
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1.0	TL-208	3.36E+00	1.27E+00
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1.0	TH-234	6.43E+01	2.15E+01
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1.0	BI-212	1.22E+01	7.36E+00
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1.0	PB-214	7.37E+00	1.99E+00
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1.0	K-40	9.12E+01	1.80E+01
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1.0	RA-226	7.14E+01	1.95E+01
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1.0	PB-212	9.10E+00	1.22E+00
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	1.0	TL-208	3.80E+00	1.36E+00
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	1.0	PB-212	8.54E+00	1.51E+00
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	1.0	TH-234	6.08E+01	2.72E+01
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	1.0	RA-226	5.73E+01	2.07E+01
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	1.0	BI-214	1.12E+01	2.60E+00
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	1.0	PB-214	8.11E+00	2.10E+00
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	1.0	K-40	1.13E+02	2.09E+01
40	LILLINGTON - CAPE FEAR RIVER	8/11/2008	1.0	RA-226	7.34E+01	3.04E+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
40	LILLINGTON - CAPE FEAR RIVER	8/11/2008	1.0	TH-234	7.27E+01	6.41E+01
40	LILLINGTON - CAPE FEAR RIVER	8/11/2008	1.0	TL-208	3.60E+00	2.36E+00
40	LILLINGTON - CAPE FEAR RIVER	8/11/2008	1.0	PB-212	9.22E+00	2.77E+00
40	LILLINGTON - CAPE FEAR RIVER	8/11/2008	1.0	K-40	3.17E+02	3.90E+01
40	LILLINGTON - CAPE FEAR RIVER	8/11/2008	1.0	BI-214	1.27E+01	3.92E+00
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1.0	TL-208	3.60E+00	1.42E+00
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1.0	TH-234	5.40E+01	2.88E+01
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1.0	AC-228	9.78E+00	4.65E+00
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1.0	RA-226	6.14E+01	2.23E+01
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1.0	PB-214	1.05E+01	2.45E+00
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1.0	BI-214	1.25E+01	3.23E+00
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1.0	PB-212	7.13E+00	1.46E+00
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1.0	K-40	1.09E+02	1.88E+01
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	1.0	PB-214	1.08E+01	2.89E+00
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	1.0	TL-208	2.52E+00	1.21E+00
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	1.0	PB-212	6.29E+00	1.64E+00
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	1.0	BI-214	1.12E+01	3.18E+00
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	1.0	TH-234	7.29E+01	3.43E+01
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	1.0	RA-226	6.60E+01	1.92E+01
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	1.0	K-40	1.16E+02	2.04E+01
40	LILLINGTON - CAPE FEAR RIVER	11/10/2008	1.0	K-40	2.99E+02	3.48E+01
40	LILLINGTON - CAPE FEAR RIVER	11/10/2008	1.0	TL-208	3.24E+00	1.46E+00
40	LILLINGTON - CAPE FEAR RIVER	11/10/2008	1.0	PB-212	7.90E+00	2.32E+00
40	LILLINGTON - CAPE FEAR RIVER	11/10/2008	1.0	RA-226	4.30E+01	2.68E+01
40	LILLINGTON - CAPE FEAR RIVER	12/11/2008	1.0	TL-208	2.09E+00	1.70E+00
40	LILLINGTON - CAPE FEAR RIVER	12/11/2008	1.0	PB-212	5.73E+00	2.98E+00

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*
40	LILLINGTON - CAPE FEAR RIVER	12/11/2008	1.0	BI-214	7.52E+00	3.92E+00
40	LILLINGTON - CAPE FEAR RIVER	12/11/2008	1.0	RA-226	3.11E+01	2.98E+01
40	LILLINGTON - CAPE FEAR RIVER	12/11/2008	1.0	K-40	4.77E+02	5.03E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/14/2008	1.0	NO-ACT		
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/11/2008	1.0	PB-214	4.28E+00	3.54E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/11/2008	1.0	BI-214	7.93E+00	4.22E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/11/2008	1.0	PB-212	4.33E+00	1.90E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/13/2008	1.0	TH-234	1.33E+02	1.11E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/14/2008	1.0	NO-ACT		
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/12/2008	1.0	PB-212	3.88E+00	2.77E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/13/2008	1.0	K-40	3.53E+02	3.91E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/13/2008	1.0	PB-212	7.13E+00	2.54E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/13/2008	1.0	BI-214	3.91E+00	3.37E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/13/2008	1.0	RA-226	6.57E+01	3.17E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/13/2008	1.0	TL-208	2.66E+00	1.59E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/14/2008	1.0	PB-212	6.85E+00	2.42E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/14/2008	1.0	K-40	3.38E+02	4.51E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/14/2008	1.0	BI-214	9.21E+00	4.64E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/14/2008	1.0	RA-226	7.09E+01	3.02E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/14/2008	1.0	TH-234	7.45E+01	8.12E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/11/2008	1.0	TL-208	4.28E+00	1.59E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/11/2008	1.0	PB-212	9.68E+00	1.77E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/11/2008	1.0	BI-214	1.81E+01	3.61E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/11/2008	1.0	PB-214	1.69E+01	3.46E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/11/2008	1.0	RA-226	8.50E+01	2.13E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/11/2008	1.0	AC-228	4.04E+00	3.66E+00

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	8/11/2008	1.0	TH-234	7.03E+01	2.58E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/11/2008	1.0	K-40	1.49E+02	2.08E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/11/2008	1.0	TH-234	1.16E+02	7.35E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/11/2008	1.0	K-40	3.23E+02	4.03E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/11/2008	1.0	PB-212	7.30E+00	2.81E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/11/2008	1.0	PB-214	9.80E+00	4.45E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/11/2008	1.0	TL-208	3.87E+00	2.38E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/11/2008	1.0	BI-214	1.15E+01	3.75E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/13/2008	1.0	RA-226	8.76E+01	3.89E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/13/2008	1.0	TH-234	1.50E+02	9.72E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/13/2008	1.0	PB-214	6.57E+00	3.88E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/13/2008	1.0	PB-212	5.56E+00	2.60E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/13/2008	1.0	K-40	3.20E+02	3.92E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/10/2008	1.0	PB-212	5.76E+00	1.75E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/10/2008	1.0	TH-234	5.07E+01	2.41E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/10/2008	1.0	RA-226	1.07E+02	2.29E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/10/2008	1.0	PB-214	1.70E+01	3.53E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/10/2008	1.0	TL-208	2.72E+00	1.28E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/10/2008	1.0	BI-214	1.87E+01	3.12E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/10/2008	1.0	K-40	1.45E+02	2.39E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/11/2008	1.0	RA-226	2.99E+01	2.32E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/11/2008	1.0	AC-228	1.41E+01	8.21E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/11/2008	1.0	TH-234	6.67E+01	4.33E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/11/2008	1.0	BI-214	8.59E+00	4.23E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/11/2008	1.0	K-40	4.46E+02	4.82E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/11/2008	1.0	TL-208	5.43E+00	2.67E+00

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	12/11/2008	1.0	PB-212	1.10E+01	2.90E+00

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	5/19/2008	592.9	K-40	2.58E+00	6.33E-01
44	SITE VARIES WITHIN HARRIS LAKE	11/18/2008	571.2	K-40	3.18E+00	7.00E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/19/2008	678.8	K-40	2.42E+00	6.47E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/17/2008	600	PB-214	1.63E-01	5.34E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/17/2008	600	BI-214	1.63E-01	5.42E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/17/2008	600	K-40	4.20E+00	6.48E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: Sunfish

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
44	SITE VARIES WITHIN HARRIS LAKE	5/19/2008	539.8	K-40	2.26E+00	5.57E-01
44	SITE VARIES WITHIN HARRIS LAKE	11/18/2008	567	K-40	3.82E+00	7.30E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/19/2008	516.8	K-40	2.52E+00	5.98E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/17/2008	525.2	K-40	3.33E+00	7.01E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: COLLARDS

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	1/16/2008	638	K-40	2.42E+00	3.12E-01
5	PITTSBORO - CONTROL	1/16/2008	638	PB-212	2.23E-01	3.17E-02
5	PITTSBORO - CONTROL	1/16/2008	638	BE-7	1.73E-01	1.04E-01
5	PITTSBORO - CONTROL	1/16/2008	638	BI-212	1.72E-01	1.00E-01
5	PITTSBORO - CONTROL	1/16/2008	638	TL-208	9.42E-02	1.91E-02
5	PITTSBORO - CONTROL	2/12/2008	535.6	PB-212	1.17E-01	3.13E-02
5	PITTSBORO - CONTROL	2/12/2008	535.6	BI-214	7.01E-02	2.99E-02
5	PITTSBORO - CONTROL	2/12/2008	535.6	K-40	4.66E+00	4.48E-01
5	PITTSBORO - CONTROL	2/12/2008	535.6	PB-214	3.60E-02	2.61E-02
5	PITTSBORO - CONTROL	2/12/2008	535.6	TL-208	2.80E-02	1.89E-02
5	PITTSBORO - CONTROL	3/18/2008	615	PB-212	1.55E-01	2.36E-02
5	PITTSBORO - CONTROL	3/18/2008	615	K-40	3.10E+00	3.94E-01
5	PITTSBORO - CONTROL	3/18/2008	615	TL-208	6.13E-02	1.97E-02
5	PITTSBORO - CONTROL	4/17/2008	550.4	K-40	2.25E+00	3.78E-01
5	PITTSBORO - CONTROL	4/17/2008	550.4	TL-208	6.32E-02	2.04E-02
5	PITTSBORO - CONTROL	4/17/2008	550.4	PB-212	1.54E-01	2.96E-02
5	PITTSBORO - CONTROL	4/17/2008	550.4	PB-214	3.71E-02	3.42E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	1/16/2008	606.2	BI-214	3.41E-02	3.00E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	1/16/2008	606.2	K-40	2.98E+00	3.68E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: COLLARDS

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
55	RD 1167 1.7 MI NNW (GOODWIN)	1/16/2008	606.2	TL-208	6.06E-02	1.87E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	1/16/2008	606.2	PB-212	2.32E-01	3.43E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	1/16/2008	606.2	BE-7	3.23E-01	1.24E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	2/12/2008	627.7	PB-214	4.45E-02	3.13E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	2/12/2008	627.7	BI-214	6.32E-02	3.86E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	2/12/2008	627.7	PB-212	1.48E-01	3.93E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	2/12/2008	627.7	K-40	3.54E+00	4.55E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	2/12/2008	627.7	TL-208	6.31E-02	2.14E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	9/15/2008	498.1	PB-212	5.66E-02	2.95E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	9/15/2008	498.1	K-40	3.10E+00	4.56E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	9/15/2008	498.1	TL-208	2.52E-02	1.96E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	9/15/2008	498.1	BI-214	9.18E-02	3.93E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	10/21/2008	540.8	BE-7	2.14E-01	1.47E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	10/21/2008	540.8	K-40	2.43E+00	3.73E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	10/21/2008	540.8	BI-214	5.60E-02	4.15E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	10/21/2008	540.8	TL-208	2.28E-02	1.59E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	10/21/2008	540.8	PB-212	3.74E-02	2.67E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	11/24/2008	617.8	BE-7	1.94E-01	1.16E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	11/24/2008	617.8	K-40	2.54E+00	2.91E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: COLLARDS

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
55	RD 1167 1.7 MI NNW (GOODWIN)	11/24/2008	617.8	TL-208	1.68E-02	9.97E-03
55	RD 1167 1.7 MI NNW (GOODWIN)	11/24/2008	617.8	PB-212	6.41E-02	1.71E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	11/24/2008	617.8	BI-214	8.60E-02	2.23E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	11/24/2008	617.8	RA-226	3.26E-01	1.96E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	11/24/2008	617.8	PB-214	5.81E-02	1.98E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	12/18/2008	483.1	BE-7	1.87E-01	1.03E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	12/18/2008	483.1	K-40	2.90E+00	4.38E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	12/18/2008	483.1	TL-208	1.74E-02	1.57E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	12/18/2008	483.1	PB-212	6.85E-02	2.77E-02
64	1.8 MI ENE SECTOR (MICHAEL)	10/21/2008	617.1	K-40	5.74E+00	6.24E-01
64	1.8 MI ENE SECTOR (MICHAEL)	10/21/2008	617.1	PB-212	1.20E-01	3.35E-02
64	1.8 MI ENE SECTOR (MICHAEL)	10/21/2008	617.1	BE-7	1.94E-01	1.28E-01
64	1.8 MI ENE SECTOR (MICHAEL)	10/21/2008	617.1	BI-214	4.63E-02	2.97E-02
64	1.8 MI ENE SECTOR (MICHAEL)	10/21/2008	617.1	TL-208	5.23E-02	2.78E-02
64	1.8 MI ENE SECTOR (MICHAEL)	11/24/2008	572.9	PB-212	7.67E-02	2.79E-02
64	1.8 MI ENE SECTOR (MICHAEL)	11/24/2008	572.9	BI-214	5.76E-02	3.77E-02
64	1.8 MI ENE SECTOR (MICHAEL)	11/24/2008	572.9	TL-208	4.16E-02	2.61E-02
64	1.8 MI ENE SECTOR (MICHAEL)	11/24/2008	572.9	K-40	4.99E+00	5.49E-01
64	1.8 MI ENE SECTOR (MICHAEL)	11/24/2008	572.9	BE-7	3.70E-01	1.54E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: COLLARDS

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
64	1.8 MI ENE SECTOR (MICHAEL)	12/18/2008	522.7	K-40	3.73E+00	4.75E-01
64	1.8 MI ENE SECTOR (MICHAEL)	12/18/2008	522.7	TH-234	3.85E-01	4.78E-01
64	1.8 MI ENE SECTOR (MICHAEL)	12/18/2008	522.7	TL-208	7.83E-02	2.11E-02
64	1.8 MI ENE SECTOR (MICHAEL)	12/18/2008	522.7	PB-212	2.23E-01	3.61E-02
64	1.8 MI ENE SECTOR (MICHAEL)	12/18/2008	522.7	BI-214	4.80E-02	3.42E-02
64	1.8 MI ENE SECTOR (MICHAEL)	12/18/2008	522.7	BE-7	2.61E-01	1.27E-01
64	1.8 MI ENE SECTOR (MICHAEL)	12/18/2008	522.7	RA-226	4.03E-01	3.22E-01
64	1.8 MI ENE SECTOR (MICHAEL)	12/18/2008	522.7	BI-212	1.31E-01	1.02E-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	7/23/2008	567.8	TH-234	6.02E-01	3.56E-01
5	PITTSBORO - CONTROL	7/23/2008	567.8	K-40	2.33E+00	3.48E-01
5	PITTSBORO - CONTROL	7/23/2008	567.8	PB-212	2.00E-02	1.84E-02
5	PITTSBORO - CONTROL	7/23/2008	567.8	RA-226	2.27E-01	2.15E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: LETTUCE

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	5/21/2008	645.2	K-40	2.96E+00	3.50E-01
5	PITTSBORO - CONTROL	5/21/2008	645.2	BE-7	2.45E-01	9.63E-02
5	PITTSBORO - CONTROL	5/21/2008	645.2	PB-212	5.04E-02	2.18E-02

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	1/16/2008	519.1	PB-212	2.26E-01	4.71E-02
5	PITTSBORO - CONTROL	1/16/2008	519.1	BE-7	4.70E-01	1.33E-01
5	PITTSBORO - CONTROL	1/16/2008	519.1	K-40	4.92E+00	5.88E-01
5	PITTSBORO - CONTROL	1/16/2008	519.1	BI-212	2.04E-01	1.59E-01
5	PITTSBORO - CONTROL	1/16/2008	519.1	TL-208	8.02E-02	2.40E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: OKRA

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	PITTSBORO - CONTROL	9/15/2008	596.2	PB-212	2.83E-02	1.91E-02
5	PITTSBORO - CONTROL	9/15/2008	596.2	K-40	2.82E+00	3.90E-01
5	PITTSBORO - CONTROL	9/15/2008	596.2	TH-234	5.62E-01	4.53E-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*
54	RD 1189 1.7 MI NNE (WILKINS OR MORRIS)	8/19/2008	968.4	K-40	2.74E+00	3.53E-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	2/19/2008	1	BI-214	2.01E+01	8.62E+00
39	DEEP WELL NEAR DIABASE DIKES	2/19/2008	1	PB-212	7.70E+00	3.41E+00
39	DEEP WELL NEAR DIABASE DIKES	2/19/2008	1	PB-214	1.59E+01	6.43E+00
39	DEEP WELL NEAR DIABASE DIKES	5/20/2008	1	BI-214	7.67E+00	5.91E+00
39	DEEP WELL NEAR DIABASE DIKES	8/19/2008	1	K-40	2.57E+02	6.09E+01
39	DEEP WELL NEAR DIABASE DIKES	8/19/2008	1	TL-208	7.31E+00	3.65E+00
39	DEEP WELL NEAR DIABASE DIKES	8/19/2008	1	PB-212	6.01E+00	4.98E+00
39	DEEP WELL NEAR DIABASE DIKES	8/19/2008	1	BI-214	1.78E+01	8.67E+00
39	DEEP WELL NEAR DIABASE DIKES	11/18/2008	1	K-40	2.67E+02	6.51E+01
39	DEEP WELL NEAR DIABASE DIKES	11/18/2008	1	BI-214	1.47E+01	8.47E+00
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	2/19/2008	1	BI-214	4.28E+01	1.10E+01
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	2/19/2008	1	PB-214	3.19E+01	9.15E+00
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	5/20/2008	1	PB-214	1.04E+01	8.03E+00
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	8/19/2008	1	BI-214	2.42E+01	6.29E+00
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	8/19/2008	1	TH-234	6.19E+01	5.93E+01
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	8/19/2008	1	RA-226	9.87E+01	4.29E+01
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	8/19/2008	1	K-40	1.60E+02	4.09E+01
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	8/19/2008	1	PB-212	4.28E+00	4.21E+00
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	8/19/2008	1	PB-214	1.98E+01	7.30E+00
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	11/18/2008	1	K-40	1.58E+02	4.36E+01
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	11/18/2008	1	TL-208	3.90E+00	2.63E+00
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	11/18/2008	1	PB-212	6.44E+00	3.40E+00
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	11/18/2008	1	TH-234	4.91E+01	4.88E+01
59	0.5 MI NNE SECTOR (NEAR CONSTRUCTION RD)	11/18/2008	1	RA-226	8.74E+01	4.55E+01
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	2/19/2008	1	PB-212	5.55E+00	3.62E+00
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	2/19/2008	1	PB-214	2.39E+01	7.74E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	2/19/2008	1	BI-214	3.30E+01	9.52E+00
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	5/20/2008	1	PB-214	5.46E+01	8.38E+00
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	5/20/2008	1	BI-214	5.97E+01	9.77E+00
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	8/19/2008	1	K-40	1.48E+02	4.27E+01
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	8/19/2008	1	PB-212	9.56E+00	3.81E+00
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	8/19/2008	1	BI-214	2.16E+01	6.47E+00
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	8/19/2008	1	PB-214	1.84E+01	5.83E+00
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	8/19/2008	1	RA-226	1.26E+02	5.59E+01
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	8/19/2008	1	TH-234	6.28E+01	4.45E+01
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	11/18/2008	1	TH-234	1.03E+02	6.01E+01
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	11/18/2008	1	PB-214	6.07E+01	1.11E+01
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	11/18/2008	1	BI-214	8.22E+01	1.14E+01
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	11/18/2008	1	PB-212	6.76E+00	3.73E+00
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	11/18/2008	1	K-40	1.83E+02	4.29E+01
60	0.5 MI ESE SECTOR W BANK OF THOMAS CREEK	11/18/2008	1	TL-208	4.15E+00	2.17E+00
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	2/19/2008	1	PB-214	2.99E+01	1.02E+01
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	2/19/2008	1	TL-208	6.29E+00	5.25E+00
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	2/19/2008	1	BI-214	5.30E+01	1.36E+01
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	2/19/2008	1	PB-212	7.26E+00	6.96E+00
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	5/20/2008	1	BI-214	3.94E+01	1.23E+01
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	5/20/2008	1	PB-214	3.12E+01	9.93E+00
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	5/20/2008	1	PB-212	5.74E+00	5.21E+00
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	8/19/2008	1	K-40	1.35E+02	4.57E+01
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	8/19/2008	1	PB-214	2.50E+01	7.37E+00
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	8/19/2008	1	BI-214	3.95E+01	8.34E+00
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	8/19/2008	1	PB-212	9.53E+00	3.28E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		Sample Date	Quantity	Isotope	Activity	2 Sigma Error
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	11/18/2008	1	BI-214	7.61E+00	4.16E+00
68	W SECTOR 0.2 MI FROM SITE (N OF OLD STEAM GEN. ST	11/18/2008	1	K-40	3.07E+02	6.16E+01
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	2/19/2008	1	PB-214	9.73E+00	7.07E+00
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	5/20/2008	1	BI-214	1.82E+01	1.09E+01
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	5/20/2008	1	PB-214	2.24E+01	8.06E+00
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	5/20/2008	1	PB-212	8.28E+00	4.64E+00
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	5/20/2008	1	K-40	4.43E+02	8.57E+01
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	8/19/2008	1	PB-212	6.94E+00	6.28E+00
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	8/19/2008	1	BI-214	2.95E+01	8.31E+00
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	8/19/2008	1	K-40	3.22E+02	8.81E+01
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	11/18/2008	1	K-40	3.77E+02	7.68E+01
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	11/18/2008	1	BI-214	3.29E+01	1.08E+01
69	NNE SECTOR 0.2 MILES (LOCATED ON SOUTH SIDE OF	11/18/2008	1	PB-214	2.47E+01	1.12E+01
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	2/19/2008	1	BI-214	9.73E+00	7.28E+00
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	2/19/2008	1	PB-214	1.34E+01	5.66E+00
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	5/20/2008	1	BI-214	1.44E+01	6.05E+00
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	5/20/2008	1	PB-214	8.00E+00	7.00E+00
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	8/19/2008	1	TH-234	1.18E+02	8.02E+01
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	8/19/2008	1	BI-214	2.00E+01	8.22E+00
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	8/19/2008	1	K-40	3.00E+02	6.41E+01
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	8/19/2008	1	TL-208	4.31E+00	3.18E+00
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	8/19/2008	1	PB-212	9.79E+00	4.22E+00
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	11/18/2008	1	BI-214	1.29E+01	6.37E+00
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	11/18/2008	1	PB-214	1.16E+01	5.88E+00
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	11/18/2008	1	PB-212	5.93E+00	3.47E+00
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	11/18/2008	1	RA-226	5.12E+01	4.79E+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*
70	E SECTOR 0.4 MILES FROM SITE, ON N SIDE OF PLANT E	11/18/2008	1	K-40	1.09E+02	4.42E+01
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	2/19/2008	1	PB-212	4.60E+00	4.40E+00
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	2/19/2008	1	BI-214	2.86E+01	8.78E+00
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	5/20/2008	1	TH-234	2.00E+02	1.83E+02
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	8/19/2008	1	BI-214	1.59E+01	6.83E+00
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	8/19/2008	1	TH-234	7.88E+01	5.28E+01
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	8/19/2008	1	RA-226	1.18E+02	4.95E+01
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	8/19/2008	1	PB-214	1.55E+01	7.07E+00
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	8/19/2008	1	PB-212	8.51E+00	3.49E+00
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	8/19/2008	1	TL-208	3.87E+00	2.56E+00
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	8/19/2008	1	K-40	1.30E+02	4.60E+01
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	11/18/2008	1	K-40	4.76E+02	9.39E+01
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	11/18/2008	1	TL-208	5.95E+00	4.40E+00
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	11/18/2008	1	BI-214	7.66E+01	1.35E+01
71	SE SECTOR 0.3 MILES FROM SITE LOCATED S OF SWITC	11/18/2008	1	PB-214	5.81E+01	1.34E+01
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	2/19/2008	1	BI-212	2.34E+01	2.16E+01
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	2/19/2008	1	PB-214	1.33E+01	9.23E+00
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	2/19/2008	1	PB-212	9.73E+00	6.11E+00
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	2/19/2008	1	BI-214	2.41E+01	1.18E+01
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	5/20/2008	1	PB-214	1.52E+01	8.67E+00
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	5/20/2008	1	K-40	2.72E+02	8.42E+01
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	5/20/2008	1	TL-208	5.44E+00	4.19E+00
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	5/20/2008	1	BI-214	2.06E+01	6.89E+00
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	5/20/2008	1	RA-226	8.16E+01	6.43E+01
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	5/20/2008	1	PB-212	1.26E+01	6.71E+00
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	8/19/2008	1	K-40	4.28E+02	8.14E+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
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	8/19/2008	1	BI-214	8.49E+00	7.61E+00
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	11/18/2008	1	BI-214	9.19E+01	1.56E+01
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	11/18/2008	1	PB-214	6.28E+01	1.17E+01
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	11/18/2008	1	K-40	3.14E+02	6.93E+01
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	11/18/2008	1	TL-208	4.50E+00	3.88E+00
72	SE SECTOR 0.2 MILES FROM SITE, N OF INTAKE STRUC	11/18/2008	1	PB-212	1.35E+01	4.98E+00

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	1/8/2008	1	K-40	1.40E+03	1.56E+02
5	PITTSBORO - CONTROL	1/8/2008	1	BI-214	1.27E+01	1.23E+01
5	PITTSBORO - CONTROL	2/4/2008	1	K-40	1.28E+03	1.98E+02
5	PITTSBORO - CONTROL	3/3/2008	1	K-40	1.29E+03	1.55E+02
5	PITTSBORO - CONTROL	4/7/2008	1	K-40	1.13E+03	1.46E+02
5	PITTSBORO - CONTROL	5/5/2008	1	K-40	1.35E+03	1.55E+02
5	PITTSBORO - CONTROL	6/2/2008	1	K-40	1.15E+03	1.90E+02
5	PITTSBORO - CONTROL	7/7/2008	1	RA-226	1.05E+02	9.91E+01
5	PITTSBORO - CONTROL	7/7/2008	1	PB-212	1.73E+01	8.25E+00
5	PITTSBORO - CONTROL	7/7/2008	1	K-40	1.58E+03	1.78E+02
5	PITTSBORO - CONTROL	8/4/2008	1	PB-212	1.24E+01	1.15E+01
5	PITTSBORO - CONTROL	8/4/2008	1	K-40	2.00E+03	2.03E+02
5	PITTSBORO - CONTROL	9/8/2008	1	K-40	1.88E+03	2.14E+02
5	PITTSBORO - CONTROL	9/8/2008	1	BI-214	2.30E+01	1.39E+01
5	PITTSBORO - CONTROL	10/6/2008	1	K-40	1.88E+03	2.11E+02
5	PITTSBORO - CONTROL	10/6/2008	1	RA-226	1.44E+02	1.34E+02
5	PITTSBORO - CONTROL	11/3/2008	1	K-40	1.90E+03	2.01E+02
5	PITTSBORO - CONTROL	11/3/2008	1	BI-214	3.26E+01	1.41E+01
5	PITTSBORO - CONTROL	12/1/2008	1	K-40	2.33E+03	2.42E+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	1/24/2008	1375.6	TL-208	7.49E-02	2.83E-02
26	SPILLWAY ON MAIN RES	1/24/2008	1375.6	K-40	1.10E+01	1.05E+00
26	SPILLWAY ON MAIN RES	1/24/2008	1375.6	PB-212	2.42E-01	7.72E-02
26	SPILLWAY ON MAIN RES	1/24/2008	1375.6	BI-214	1.89E-01	7.04E-02
26	SPILLWAY ON MAIN RES	1/24/2008	1375.6	PB-214	2.19E-01	7.18E-02
26	SPILLWAY ON MAIN RES	1/24/2008	1375.6	RA-226	1.09E+00	6.23E-01
26	SPILLWAY ON MAIN RES	1/24/2008	1375.6	AC-228	2.54E-01	1.12E-01
26	SPILLWAY ON MAIN RES	8/20/2008	1334.9	BI-214	1.86E-01	6.45E-02
26	SPILLWAY ON MAIN RES	8/20/2008	1334.9	K-40	1.06E+01	1.15E+00
26	SPILLWAY ON MAIN RES	8/20/2008	1334.9	TL-208	8.83E-02	2.96E-02
26	SPILLWAY ON MAIN RES	8/20/2008	1334.9	AC-228	4.09E-01	1.23E-01
26	SPILLWAY ON MAIN RES	8/20/2008	1334.9	PB-212	3.11E-01	4.95E-02
26	SPILLWAY ON MAIN RES	8/20/2008	1334.9	PB-214	2.46E-01	7.16E-02
26	SPILLWAY ON MAIN RES	8/20/2008	1334.9	BI-212	2.08E-01	1.96E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/24/2008	1317.4	BI-212	2.51E-01	2.13E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/24/2008	1317.4	TL-208	5.24E-02	3.39E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/24/2008	1317.4	AC-228	2.43E-01	9.18E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/24/2008	1317.4	PB-212	2.26E-01	4.96E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/24/2008	1317.4	BI-214	2.05E-01	7.17E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/24/2008	1317.4	K-40	1.17E+01	1.02E+00
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/24/2008	1317.4	PB-214	3.03E-01	7.20E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/24/2008	1317.4	RA-226	8.04E-01	5.47E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	8/20/2008	1475.2	K-40	1.39E+01	1.33E+00
41	SHORELINE OF COOLING TOWER MIXING ZONE	8/20/2008	1475.2	RA-226	1.04E+00	6.94E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	8/20/2008	1475.2	PB-214	2.64E-01	8.46E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	8/20/2008	1475.2	BI-214	2.98E-01	6.67E-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
41	SHORELINE OF COOLING TOWER MIXING ZONE	8/20/2008	1475.2	PB-212	1.83E-01	5.56E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	8/20/2008	1475.2	TL-208	8.02E-02	3.67E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	8/20/2008	1475.2	AC-228	2.87E-01	1.48E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
26	SPILLWAY ON MAIN RES	1/14/2008	1	NO-ACT		
26	SPILLWAY ON MAIN RES	2/11/2008	1	PB-212	4.84E+00	2.93E+00
26	SPILLWAY ON MAIN RES	3/13/2008	1	NO-ACT		
26	SPILLWAY ON MAIN RES	4/14/2008	1	NO-ACT		
26	SPILLWAY ON MAIN RES	5/12/2008	1	NO-ACT		
26	SPILLWAY ON MAIN RES	6/13/2008	1	K-40	5.02E+02	4.66E+01
26	SPILLWAY ON MAIN RES	6/13/2008	1	RA-226	4.08E+01	2.75E+01
26	SPILLWAY ON MAIN RES	6/13/2008	1	PB-214	1.52E+01	3.59E+00
26	SPILLWAY ON MAIN RES	6/13/2008	1	BI-214	2.30E+01	4.38E+00
26	SPILLWAY ON MAIN RES	6/13/2008	1	TL-208	5.05E+00	1.70E+00
26	SPILLWAY ON MAIN RES	6/13/2008	1	PB-212	1.03E+01	1.98E+00
26	SPILLWAY ON MAIN RES	7/14/2008	1	PB-212	3.13E+00	2.55E+00
26	SPILLWAY ON MAIN RES	7/14/2008	1	BI-214	1.15E+01	4.38E+00
26	SPILLWAY ON MAIN RES	7/14/2008	1	RA-226	4.24E+01	3.25E+01
26	SPILLWAY ON MAIN RES	7/14/2008	1	TH-234	6.16E+01	4.13E+01
26	SPILLWAY ON MAIN RES	7/14/2008	1	K-40	4.79E+02	4.77E+01
26	SPILLWAY ON MAIN RES	7/14/2008	1	TL-208	2.87E+00	2.39E+00
26	SPILLWAY ON MAIN RES	8/11/2008	1	BI-214	1.14E+01	3.99E+00
26	SPILLWAY ON MAIN RES	8/11/2008	1	K-40	2.98E+02	3.16E+01
26	SPILLWAY ON MAIN RES	8/11/2008	1	TL-208	4.80E+00	1.77E+00
26	SPILLWAY ON MAIN RES	8/11/2008	1	PB-212	6.65E+00	2.51E+00
26	SPILLWAY ON MAIN RES	8/11/2008	1	PB-214	6.87E+00	3.50E+00
26	SPILLWAY ON MAIN RES	8/11/2008	1	RA-226	6.23E+01	3.02E+01
26	SPILLWAY ON MAIN RES	8/11/2008	1	TH-234	7.72E+01	4.52E+01
26	SPILLWAY ON MAIN RES	8/11/2008	1	BI-212	1.16E+01	1.03E+01
26	SPILLWAY ON MAIN RES	9/11/2008	1	TH-234	6.54E+01	3.76E+01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
26	SPILLWAY ON MAIN RES	9/11/2008	1	K-40	2.62E+02	3.50E+01
26	SPILLWAY ON MAIN RES	9/11/2008	1	TL-208	3.14E+00	1.50E+00
26	SPILLWAY ON MAIN RES	9/11/2008	1	PB-212	4.95E+00	2.59E+00
26	SPILLWAY ON MAIN RES	9/11/2008	1	BI-214	1.50E+01	4.31E+00
26	SPILLWAY ON MAIN RES	9/11/2008	1	PB-214	1.02E+01	3.42E+00
26	SPILLWAY ON MAIN RES	9/11/2008	1	RA-226	4.39E+01	2.78E+01
26	SPILLWAY ON MAIN RES	10/13/2008	1	PB-214	9.48E+00	3.33E+00
26	SPILLWAY ON MAIN RES	10/13/2008	1	K-40	2.80E+02	3.42E+01
26	SPILLWAY ON MAIN RES	10/13/2008	1	TL-208	2.53E+00	2.03E+00
26	SPILLWAY ON MAIN RES	10/13/2008	1	BI-214	1.26E+01	3.60E+00
26	SPILLWAY ON MAIN RES	10/13/2008	1	RA-226	3.34E+01	2.76E+01
26	SPILLWAY ON MAIN RES	10/13/2008	1	TH-234	6.08E+01	4.52E+01
26	SPILLWAY ON MAIN RES	10/13/2008	1	PB-212	4.76E+00	2.16E+00
26	SPILLWAY ON MAIN RES	11/10/2008	1	TL-208	2.22E+00	1.18E+00
26	SPILLWAY ON MAIN RES	11/10/2008	1	RA-226	8.68E+01	2.14E+01
26	SPILLWAY ON MAIN RES	11/10/2008	1	BI-214	1.72E+01	2.95E+00
26	SPILLWAY ON MAIN RES	11/10/2008	1	PB-212	7.06E+00	1.62E+00
26	SPILLWAY ON MAIN RES	11/10/2008	1	TH-234	6.85E+01	2.53E+01
26	SPILLWAY ON MAIN RES	11/10/2008	1	K-40	1.47E+02	2.09E+01
26	SPILLWAY ON MAIN RES	11/10/2008	1	PB-214	1.50E+01	3.22E+00
26	SPILLWAY ON MAIN RES	12/11/2008	1	TH-234	5.54E+01	3.87E+01
26	SPILLWAY ON MAIN RES	12/11/2008	1	K-40	4.45E+02	4.54E+01
26	SPILLWAY ON MAIN RES	12/11/2008	1	PB-212	4.00E+00	1.75E+00
26	SPILLWAY ON MAIN RES	12/11/2008	1	TL-208	4.21E+00	1.65E+00
26	SPILLWAY ON MAIN RES	12/11/2008	1	RA-226	4.66E+01	2.43E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/14/2008	1	TH-234	5.91E+01	4.73E+01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
38	CAPE FEAR PLANT INTAKE - CONTROL	2/11/2008	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	3/13/2008	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	4/14/2008	1	PB-214	4.48E+00	3.10E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/12/2008	1	NO-ACT		
38	CAPE FEAR PLANT INTAKE - CONTROL	6/13/2008	1	PB-212	6.60E+00	1.90E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/13/2008	1	TL-208	3.08E+00	1.48E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/13/2008	1	K-40	2.75E+02	3.25E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/13/2008	1	RA-226	3.25E+01	2.34E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/13/2008	1	TH-234	6.32E+01	2.94E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/13/2008	1	BI-214	7.31E+00	2.68E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2008	1	TL-208	1.96E+00	1.56E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2008	1	RA-226	4.07E+01	2.62E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2008	1	TH-234	5.61E+01	3.74E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2008	1	K-40	2.80E+02	3.40E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2008	1	PB-212	5.77E+00	2.23E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/14/2008	1	BI-214	6.95E+00	3.88E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	1	PB-214	1.09E+01	2.92E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	1	TL-208	2.95E+00	1.10E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	1	K-40	1.20E+02	2.02E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	1	RA-226	6.39E+01	2.22E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	1	TH-234	7.26E+01	2.19E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	1	PB-212	7.66E+00	1.95E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/11/2008	1	BI-214	1.42E+01	3.40E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	1	BI-214	1.49E+01	3.24E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	1	PB-214	1.05E+01	2.94E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	1	K-40	1.43E+02	2.62E+01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	1	TL-208	2.17E+00	1.24E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	1	TH-234	5.81E+01	2.53E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	1	PB-212	7.38E+00	1.68E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/11/2008	1	RA-226	1.06E+02	2.60E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	1	K-40	1.57E+02	2.30E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	1	PB-212	6.24E+00	1.82E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	1	BI-214	1.12E+01	2.94E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	1	PB-214	1.02E+01	2.68E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	1	RA-226	7.20E+01	2.35E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	1	TH-234	7.94E+01	2.15E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/13/2008	1	TL-208	2.59E+00	1.37E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	1	K-40	3.54E+02	4.16E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	1	TH-234	1.98E+02	8.91E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	1	AC-228	1.52E+01	7.99E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	1	TL-208	5.65E+00	2.63E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	1	PB-212	8.70E+00	3.29E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	1	BI-214	7.13E+00	3.59E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/10/2008	1	RA-226	7.19E+01	4.24E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1	RA-226	7.23E+01	1.92E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1	BI-214	1.24E+01	2.57E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1	AC-228	6.93E+00	3.68E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1	K-40	1.18E+02	1.84E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1	TL-208	2.63E+00	1.22E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1	PB-214	1.10E+01	2.64E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1	PB-212	6.60E+00	1.76E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/11/2008	1	TH-234	6.35E+01	2.32E+01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
40	LILLINGTON - CAPE FEAR RIVER	1/14/2008	1	PB-212	2.49E+00	2.08E+00
40	LILLINGTON - CAPE FEAR RIVER	1/14/2008	1	PB-214	4.29E+00	3.56E+00
40	LILLINGTON - CAPE FEAR RIVER	2/11/2008	1	PB-214	7.70E+00	2.99E+00
40	LILLINGTON - CAPE FEAR RIVER	2/11/2008	1	BI-214	8.36E+00	3.58E+00
40	LILLINGTON - CAPE FEAR RIVER	2/11/2008	1	PB-212	3.48E+00	1.96E+00
40	LILLINGTON - CAPE FEAR RIVER	3/13/2008	1	NO-ACT		
40	LILLINGTON - CAPE FEAR RIVER	4/14/2008	1	PB-214	5.11E+00	3.45E+00
40	LILLINGTON - CAPE FEAR RIVER	4/14/2008	1	BI-214	6.20E+00	3.65E+00
40	LILLINGTON - CAPE FEAR RIVER	5/12/2008	1	TL-208	3.42E+00	2.66E+00
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1	K-40	9.12E+01	1.80E+01
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1	RA-226	7.14E+01	1.95E+01
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1	PB-214	7.37E+00	1.99E+00
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1	BI-214	1.15E+01	2.85E+00
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1	PB-212	9.10E+00	1.22E+00
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1	BI-212	1.22E+01	7.36E+00
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1	TL-208	3.36E+00	1.27E+00
40	LILLINGTON - CAPE FEAR RIVER	6/13/2008	1	TH-234	6.43E+01	2.15E+01
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	1	RA-226	5.73E+01	2.07E+01
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	1	PB-214	8.11E+00	2.10E+00
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	1	TH-234	6.08E+01	2.72E+01
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	1	K-40	1.13E+02	2.09E+01
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	1	BI-214	1.12E+01	2.60E+00
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	1	PB-212	8.54E+00	1.51E+00
40	LILLINGTON - CAPE FEAR RIVER	7/14/2008	1	TL-208	3.80E+00	1.36E+00
40	LILLINGTON - CAPE FEAR RIVER	8/11/2008	1	TH-234	7.27E+01	6.41E+01
40	LILLINGTON - CAPE FEAR RIVER	8/11/2008	1	BI-214	1.27E+01	3.92E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
40	LILLINGTON - CAPE FEAR RIVER	8/11/2008	1	TL-208	3.60E+00	2.36E+00
40	LILLINGTON - CAPE FEAR RIVER	8/11/2008	1	K-40	3.17E+02	3.90E+01
40	LILLINGTON - CAPE FEAR RIVER	8/11/2008	1	PB-212	9.22E+00	2.77E+00
40	LILLINGTON - CAPE FEAR RIVER	8/11/2008	1	RA-226	7.34E+01	3.04E+01
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1	AC-228	9.78E+00	4.65E+00
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1	TH-234	5.40E+01	2.88E+01
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1	RA-226	6.14E+01	2.23E+01
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1	BI-214	1.25E+01	3.23E+00
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1	PB-212	7.13E+00	1.46E+00
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1	K-40	1.09E+02	1.88E+01
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1	PB-214	1.05E+01	2.45E+00
40	LILLINGTON - CAPE FEAR RIVER	9/11/2008	1	TL-208	3.60E+00	1.42E+00
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	1	TH-234	7.29E+01	3.43E+01
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	1	RA-226	6.60E+01	1.92E+01
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	1	PB-214	1.08E+01	2.89E+00
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	1	BI-214	1.12E+01	3.18E+00
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	1	PB-212	6.29E+00	1.64E+00
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	1	K-40	1.16E+02	2.04E+01
40	LILLINGTON - CAPE FEAR RIVER	10/13/2008	1	TL-208	2.52E+00	1.21E+00
40	LILLINGTON - CAPE FEAR RIVER	11/10/2008	1	TL-208	3.24E+00	1.46E+00
40	LILLINGTON - CAPE FEAR RIVER	11/10/2008	1	PB-212	7.90E+00	2.32E+00
40	LILLINGTON - CAPE FEAR RIVER	11/10/2008	1	K-40	2.99E+02	3.48E+01
40	LILLINGTON - CAPE FEAR RIVER	11/10/2008	1	RA-226	4.30E+01	2.68E+01
40	LILLINGTON - CAPE FEAR RIVER	12/11/2008	1	K-40	4.77E+02	5.03E+01
40	LILLINGTON - CAPE FEAR RIVER	12/11/2008	1	BI-214	7.52E+00	3.92E+00
40	LILLINGTON - CAPE FEAR RIVER	12/11/2008	1	TL-208	2.09E+00	1.70E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
40	LILLINGTON - CAPE FEAR RIVER	12/11/2008	1	RA-226	3.11E+01	2.98E+01
40	LILLINGTON - CAPE FEAR RIVER	12/11/2008	1	PB-212	5.73E+00	2.98E+00