Progress Energy

APR 2 7 2010

SERIAL: HNP-10-043

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

SHEARON HARRIS NUCLEAR POWER PLANT
DOCKET NO. 50-400/RENEWED 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 2009.

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)
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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, 2009

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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, 2009, through December 31, 2009.

The Radiological Environmental Monitoring Program (REMP) was established in 1982. Radiation and radioactivity in various environmental media have been monitored for more than 25 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 Environmental 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 Environmental Monitoring Program with the following:

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

Additional guidance regarding the Radiological Environmental 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.

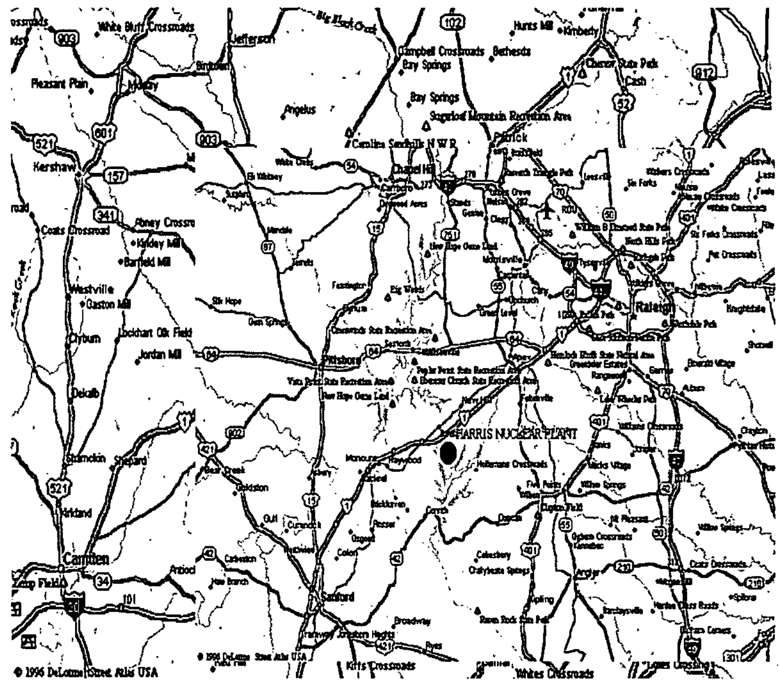


Figure 1: Location of Harris Nuclear Plant

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

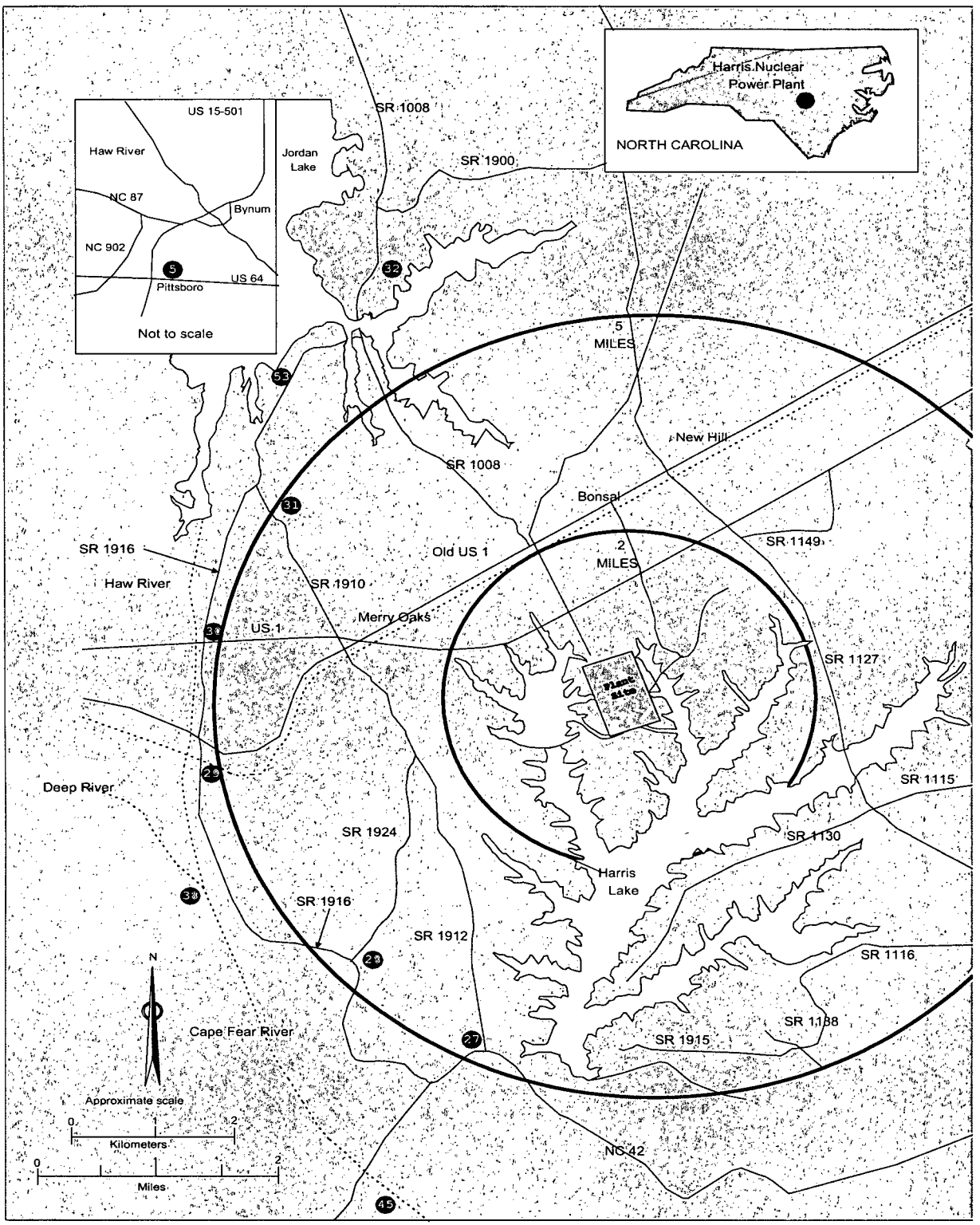


Figure 2a: Radiological Environmental Sampling Locations (Distant from Plant)

Radiological Environmental Sampling Locations

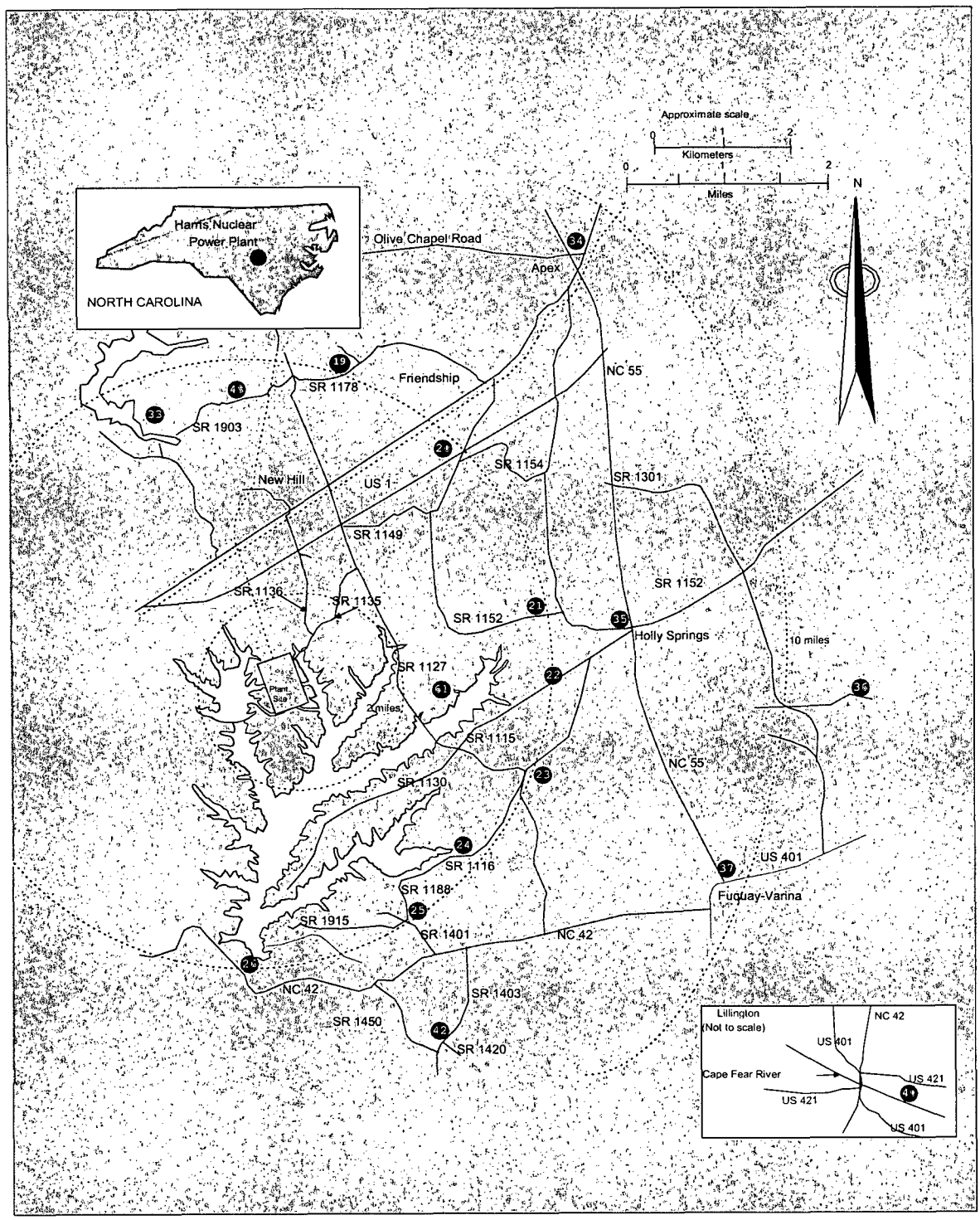


Figure 2b: Radiological Environmental Sampling Locations (Distant from Plant)

Radiological Environmental Sampling Locations

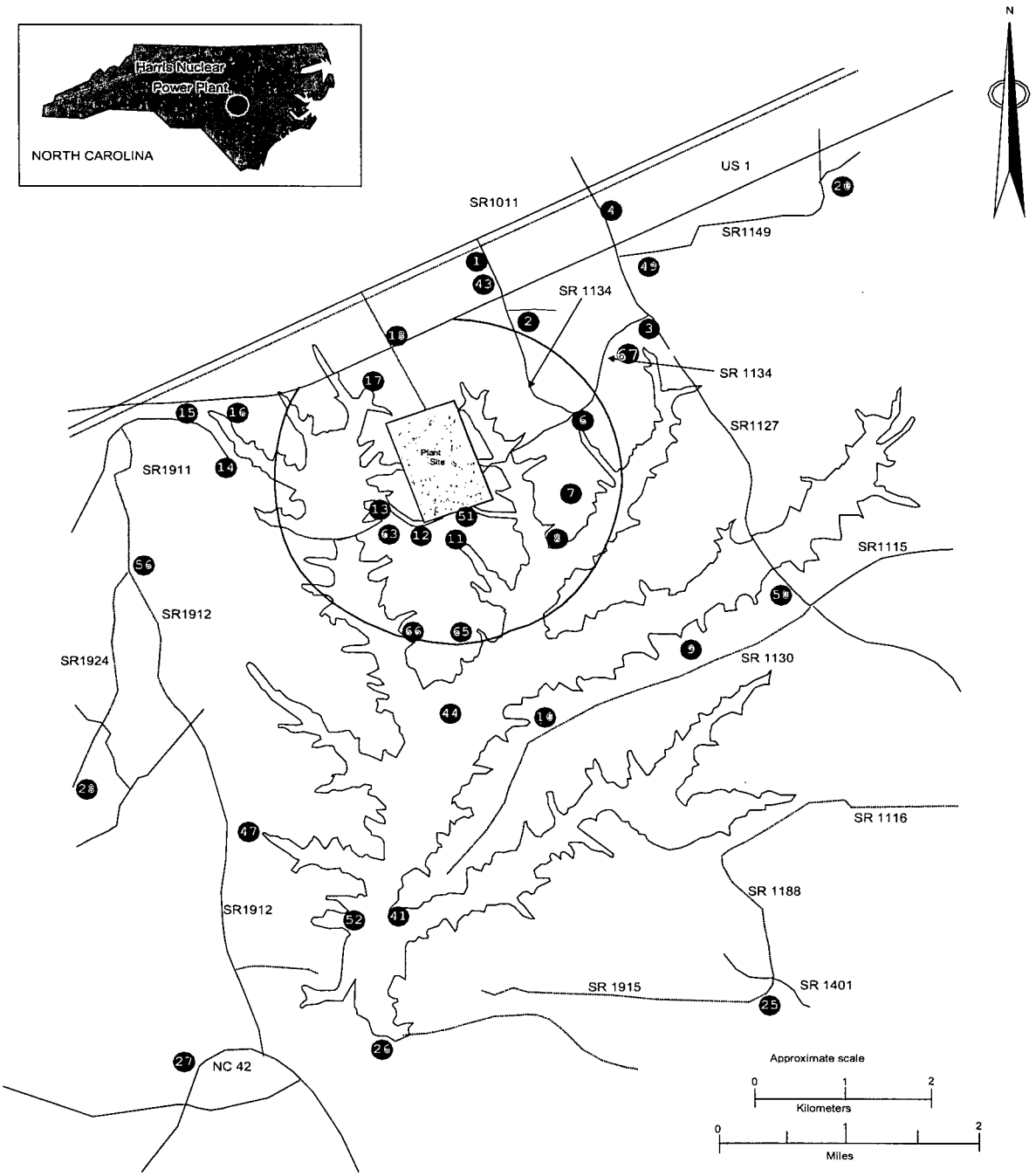


Figure 3a: Radiological Environmental Sampling Locations (Nearest Plant)

Radiological Environmental Sampling Locations

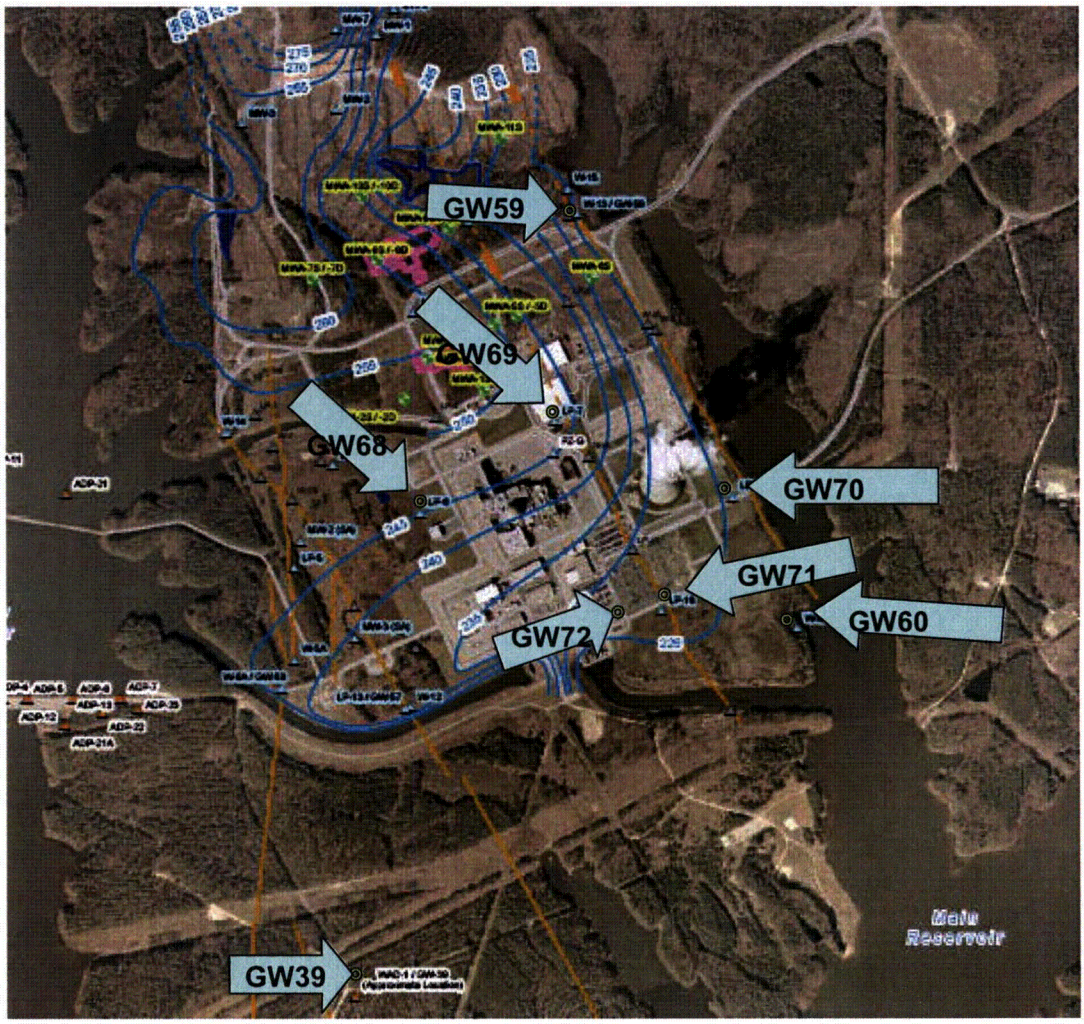


Figure 3b: Radiological Environmental Ground Water (GW) Sampling Locations

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/Deleted	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, BL	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, BL	3a
30	TL	2a	64	FC/Deleted	n/a
31	TL	2a	65	BL/Deleted	3a
32	TL	2a	66	BL/Deleted	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-- >12 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-- >12 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 Building (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-- > 12 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* 12--0.9 miles SSW 63--0.6 miles SW	Monthly	350 grams	Gamma
Food Crop (FC) or Food Products (FP) (Not required per ODCM)	5-- > 12 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

**Deleted per Revision 20 of HNP ODCM

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

SUMMARY OF RADIOLOGICAL MONITORING PROGRAM

This report presents the results of the Radiological Environmental Monitoring Program conducted during 2009 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 1160 total samples of 14 different media types from approximately 928 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 2009 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	5,500 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.	0.012 Total Body

The radiological environmental data indicates that HNP operations in 2009 had no significant impact on the environment or public health and safety.

A statistical summary of all the data for 2009 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 2009. 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: 2009

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Typical Lower Limit of Detection (LLD) [1]	All Indicator Locations Mean [2] Range	Location w/Highest Annual Mean: Name, Distance, and Direction	Location w/Highest Annual Mean: Mean [2] Range	Control Locations Mean [2] Range
Air Cartridge (pCi/m^3)	I-131 312	5.98E-2	All less than LLD	N/A	N/A	All less than LLD
Air Particulate (pCi/m^3)	Gross Beta 312	5.7E-3	1.98E-2 (260/260) 7.35E-3 – 3.23E-2	Dixie Pipeline 2.6 miles N	2.07E-2 (52/52) 7.35E-3 – 3.23E-2	1.92E-2 (52/52) 7.60E-3 - 3.05E-2
	Gamma 24	Refer to Table 5	All less than LLD	N/A	N/A	All less than LLD
Drinking Water [4] (pCi/l)	I-131 78	8.6E-1	All less than LLD	N/A	N/A	5.55E-1 (2/26) 5.10E-1 – 6.01E-1
	Gross Beta 36	1.2E+0	4.29E+0 (24/24) 1.34E+0 – 7.98E+0	Lillington Cape Fear River 17.2 miles SSE	5.37E+0 (12/12) 3.20E+0 – 7.98E+0	5.58E+0 (12/12) 3.66E+0 – 7.71E+0
	Gamma 36	Refer to Table 5	All less than LLD	N/A	N/A	All less than LLD
	Tritium 36	2.50E+2 [6]	3.95E+3 (12/24) 2.87E+3 – 5.55E+3	Water Treatment Building on Site	3.95E+3 (12/24) 2.87E+3 – 5.55E+3	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: 2009

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	N/A	All less than LLD
Fish Free-Swimmers (pCi/g, wet)	Gamma 8	Refer to Table 5	All less than LLD	N/A	N/A	All less than LLD
Food Crop (pCi/g, wet)	Gamma 21[3]	Refer to Table 5	All less than LLD	N/A	N/A	All less than LLD
Broadleaf Vegetation (pCi/g, wet)	Gamma 54[3]	Refer to Table 5	All less than LLD	N/A	N/A	All less than LLD
Aquatic Vegetation (pCi/g, wet)	Gamma 3	Refer to Table 5	All less than LLD	N/A	N/A	No control
Shoreline Sediments (pCi/g, dry)	Gamma 4	Refer to Table 5	All less than LLD	N/A	N/A	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: 2009

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Typical Lower Limit of Detection (LLD) [1]	All Indicator Locations Mean[2] Range	Location w/Highest Annual Mean: Name, Distance, and Direction	Location w/Highest Annual Mean: Mean[2] Range	Control Locations Mean[2] Range
Ground Water (pCi/l)	Gamma 29	Refer to Table 5	All less than LLD	N/A	N/A	No control
	Tritium 29	2.50E+2[6]	All less than LLD	N/A	N/A	No control
Milk (pCi/l)	I-131 12	7.7E-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
Bottom Sediment (pCi/g, dry)	Gamma 2 Co-60	6.74E-2	7.50E-1 (2/2) 5.00E-1 – 1.00E+0	Harris Lake Cooling Tower Mixing Zone 3.8 miles S	7.50E+0 (2/2) 5.00E-1 – 1.00E+0	No Control
	Cs-137	1.10E-1	1.50E-1 (2/2) 1.10E-1 – 1.91E-1	Harris Lake Cooling Tower Mixing Zone 3.8 miles S	1.50E-1 (2/2) 1.10E-1 – 1.91E-1	No Control
	Co-58	5.56E-2	2.67E-2 (1/2) Single value	Harris Lake Cooling Tower Mixing Zone 3.8 miles S	2.67E-2 (1/2) Single value	No Control
	Sb-125	5.32E-2	1.21E-1 (1/2) Single value	Harris Lake Cooling Tower Mixing Zone 3.8 miles S	1.21E-1 (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: 2009

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Typical Lower Limit of Detection (LLD)[1]	All Indicator Locations Mean[2] Range	Location w/Highest Annual Mean: Name, Distance, and Direction	Location w/Highest Annual Mean: Mean[2] Range	Control Locations Mean[2] Range
Surface Water[4] (pCi/l)	I-131 52	8.6E-1	N/A	N/A	N/A	5.55E-1 (2/26) 5.10E-1 – 6.01E-1
	Gross Beta 36	1.2 E+0	5.50E+0 (24/24) 3.20E+0 - 7.98E+0	Harris Lake Spillway 4.7 miles S	5.62E+0 (12/12) 4.59E+0 - 7.07E+0	5.58E+0 (12/12) 3.66E+0 – 7.71E+0
	Gamma 36	Refer to Table 5	All less than LLD	N/A	N/A	All less than LLD
	Tritium 36	2.50E+2[6]	5.50E+3 (12/24) 4.15E+3 – 7.74E+3	Harris Lake Spillway 4.7 miles S	5.50E+3 (12/12) 4.15E+3 – 7.74E+3	All less than LLD
Direct Radiation (mR/qtr) [5]	TLD 173[3]		1.18E+1 (169/172) 9.00E+0 – 1.70E+1	Apex at Population Center 8.7 miles NE	1.66E+1 (3/4) 1.58E+1 – 1.70E+1	1.51E+1 (4/4) 1.42E+1 – 1.60E+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 being included as of 2009 even though 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 5.98E-2 pCi/m^3. The air samplers operated for a total of 100% availability for the 2009 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 2009, which is the entire operating history of the plant.

Due to weather changes, the meteorology produced a change from previous ODCM revisions in two of the three highest D/Q sectors for collecting air samples in 2009 (NCR # 309988). Refer to the Missed Surveillance Section of the report for additional information.

For the period of January 1, 2009, to December 31, 2009, the gross beta activity was detectable in all airborne particulate (AP) samples, with acceptable runtime, from the five indicator locations. The 260 indicator samples had an average concentration of 1.98E-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 1.92E-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 2009. 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 2009. 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, the 26 water treatment building samples at the Harris Plant, and the 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 2009, except for two control samples (DW/SW-38) during the March 9, 2009, to March 23, 2009, composite period (NCR # 327410) and during March 23, 2009, to April 6, 2009, composite period (NCR # 329793). During the first time period 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 6.0E-1 pCi/L) (NCR # 327410). This location is upstream of the discharge of Harris Lake. 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 23, 2009, to April 6, 2009, with a small concentration of I-131 detected (5.1E-1 pCi/L) and a similar sample was taken from downstream of the Harris Lake Spillway discharge with no detectable I-131 (NCR # 329793). 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). Three DW-51 samples (January 5, 2009; May 11, 2009; and September 14, 2009) may not have met the I-131 LLD required by the ODCM due to possible low recoveries on the I-131 separation method (NCR # 341246). 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 99.0% availability for the 2009 year. Refer to the Missed Surveillance Section on the missed drinking/surface water samples (NCR # 329441 and 354581) in 2009 collection year.

The average annual gross beta concentrations at the indicator and control locations were similar with concentrations of 4.29E+0 pCi/L and 5.58E+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 2009 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 2009, other than naturally occurring nuclides. This is consistent with the data for 1989-2008. 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 0.012 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	0.008	0.009	0.012

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 0.008, 0.009, and 0.012 mrem/year respectively.

Milk/Broadleaf Vegetation

During 2009, 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 1.49E+3 pCi/L-2.62E+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) until May 13, 2009, with the issue of HNP ODCM Revision 20. Revision 20 of the ODCM deleted broadleaf sample

locations 65 and 66 from the HNP REMP and broadleaf locations 12 (0.9 miles SSW) and 63 (0.6 miles SW) were added based on new meteorology data (NCR # 309988). 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 (Fig Leaf, Holly, Maple, Persimmons, Sweet Bay, Sweetgum, and Wax Myrtle) in 2009. Refer to the Missed Surveillance Section for the missed (unavailable) surveillances (NCR # 337442 and 374145).

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 2009, except for two control samples (DW/SW-38) during the March 9, 2009, to March 23, 2009, composite period (NCR # 327410) and during March 23, 2009, to April 6, 2009, composite period (NCR # 329793). During the first time period 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 6.0E-1 pCi/L). This location is upstream of the discharge of Harris Lake. 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 23, 2009, to April 6, 2009, with a small concentration of I-131 detected (5.1E-1 pCi/L) and a similar sample was taken from downstream of the Harris Lake Spillway discharge with no detectable I-131 (NCR # 329793). 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). The water samplers operated for a total of 99.0% availability for the 2009 year. Refer to the Missed Surveillance Section on the missed drinking/surface water samples (NCR # 329441 and 354581).

Average gross beta concentrations at the indicator and control locations were 5.50E+0 pCi/L and 5.58E+0 pCi/L, respectively, in 2009, 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 5.50E+3 pCi/L with minimum and maximum values of 4.15E+3 pCi/L and 7.74E+3 pCi/L, respectively (see Figure 11). The average Harris Lake Spillway tritium concentration showed a decrease in tritium compared to the annual average of 6.68E+3 pCi/L in 2008. 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 decrease in average tritium concentration from 2008 to 2009 is partially due to the tritium release program and the increase rainfall in 2009.

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 2009.

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 2009. The ground water wells, located on site at HNP, are all abandoned wells and are not a water supply for drinking or irrigation. Therefore, there is no radiological dose via this pathway. Revision 20 of the ODCM issued May 13, 2009, deleted GW-39 from the HNP REMP while GW-68 thru GW-72 were added in the previous ODCM revision.

Shoreline Sediment

Shoreline sediment samples were collected semiannually in 2009 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 2009. No long-term trends are readily observed in these samples.

Bottom Sediment

The 2009 data shows Cobalt (Co)-58 (2.67E-2 pCi/gm dry – single value), Cobalt (Co)-60 (5.00E-1 – 1.00E+0 pCi/gm dry), Cesium (Cs)-137 (1.10E-1 - 1.91E-1 pCi/gm dry), and Antimony (Sb)-125 (1.21E-1 pCi/gm dry – single value) 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 2009 included broccoli, cabbage, collards, eggplants, and tomatoes. Gamma analyses of the food crops detected no plant-related activity in 13 samples from indicator locations and 8 samples from control locations collected in 2009.

Aquatic Vegetation

The 2009 data shows that there were three 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 three indicator samples collected during 2009. No long-term trends are readily observed in these samples.

External Radiation Exposure

Thermoluminescent dosimeters (TLDs) were used to monitor ambient radiation exposures in the plant environs. The average quarterly exposure at the indicator and control locations was 11.8 mR and 15.1 mR, respectively. The highest indicator location was 8.7 miles NE of the plant (Apex at Population Center) and its average was 16.6 mR/qtr. The differences among these locations are attributed to variations in soils, local geology, and are not the result of plant operations.

Comparison of the quarterly TLD exposure within approximately 2 miles (inner ring) of the plant with that at approximately 5 miles (outer ring) is presented in Figure 12. These data illustrate that the quarterly inner ring TLD exposures are slightly less than the quarterly outer ring TLD exposures (differences range from 0.04 mR to 0.63 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 2009 from the established air samplers. The air samplers operated for a total of 100% availability in 2009.

Missed Samples:

- None in 2009 from established air samplers
- In May 2009, due to weather changes, the meteorology in ODCM Revision 20 was updated using the five year average meteorology (2003 through 2007). The meteorology previously used in the ODCM for Revision 0 through Revision 19 used the average ten year meteorology from 1976 through 1987. This change in the meteorology produced a change from previous ODCM revisions in two of the three highest D/Q sectors for collecting air samples (air cartridges and air particulates). Therefore, as of May 2009, two of the three highest D/Q sectors have not been monitored (no air samples have been analyzed in those two sectors for radioiodine and gross beta). The 2009 air samplers' locations are based on the pre-Revision 20 ODCM meteorology. The installation of air samplers for the new highest D/Q sectors is currently in progress and is being tracked in the plant's corrective action program (NCR # 309988).

Missed Surveillances:

- None in 2009 from established air samplers

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 2009 did not plant or produce three (3) different kinds of food crops in 2009. This was mostly due to seasonal unavailability, lack of sufficient quantity planted or lack of a variety of crops planted, and crops being too small to harvest at the time of collection.

Drinking / Surface Water

DW/SW-38 (March 30 – April 6, 2009) had missed surveillances (NCR # 329441).

The drinking/surface water environmental sample (at Cape Fear Plant) for collection period March 30 through April 6, 2009, was found continuously running, but not collecting any water sample. Upon closer examination, the water sampler hose had cracked. Prior to this event the sampler had collected over a gallon of sample. The sampler was reset, the hose replaced, and proper operation was verified with an estimated down time of 95 hours. It is believed that a power surge may have occurred while the sampler was performing one of the incremental samples, which led to the continuous running of the pump thus causing the sample line to crack.

DW/SW-40 (September 8, 2009) placed out of service (NCR # 354581).

The drinking/surface water environmental water sampler (Lillington) was placed out of service due to construction at the Lillington Water Plant Facility. The duration of the construction project is estimated to be approximately one week. Compensatory sampling (daily grab samples) was initiated. Power was restored and the water sampler restarted after being down for one week. Downtime was 168 hours.

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 2009 (NCR # 337442 and 374145).

TLDs

Three TLD samples, out of a possible 176 TLD samples (indicator and control locations), were missing during 2009.

TLD # 34 Second Quarter 2009
TLD # 34 was missing in the field. The area was searched, but the TLD could not be located (NCR # 343594).

TLD # 15 Third Quarter 2009
TLD # 15 was missing in the field. The area was searched, but the TLD could not be located (NCR # 361006).

TLD # 14 Fourth Quarter 2009
TLD # 14 was missing in the field. The tree that the TLD was located on was cut down. The area was searched, but the TLD could not be located. The cage and TLD were replaced (NCR # 374146).

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 5.7E-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 a 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 5.98E-2 pCi/m^3.

Iodine-131 in milk and drinking water is determined by an instrumental method. Analysis involves passing 4 liters of sample 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 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 10,000 seconds and the SW/DW samples for 60,000 seconds. One-liter milk samples are analyzed in a 1-liter Marinelli beaker for 12,600 seconds. The direct gamma scan of all non-drinking water samples began in October 2008 (NCR # 303063).

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 2009, 94 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 94 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 (see below results).

All of the 94 analyses were within the acceptance criteria. During 2009, the individual measurements were evaluated and results falling outside the acceptable ratio criteria had an evaluation performed to identify any recommended remedial actions and to reduce anomalous errors (NCR # 334599, 360485, and 376364). Complete documentation of any evaluation will be available and provided to the NRC upon request.

HEEC - Interlaboratory Comparison Program Data for 2009

Results are compared to the criteria established in the NRC Inspection Manual (Procedure 84750) for Radioactive Waste Treatment, Effluents, and Environmental monitoring. The acceptable ratio range is typically 0.80 to 1.25 unless otherwise noted.

Gamma Emitters + I-131 in Milk

	4th Quarter 2008			1st Quarter 2009 E6526-668			2nd Quarter 2009			3rd Quarter 2009		
Nuclide	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known
I-131				77.5	79.3	0.98						
Ce-141				92.8	94.9	0.98						
Cr-51				304	305	1.00						
Cs-134				85.4	93.7	0.91						
Cs-137				113	111	1.02						
Co-58				119	119	1.00						
Mn-54				135	128	1.05						
Fe-59				110	99.9	1.10						
Zn-65				161	156	1.03						
Co-60				148	142	1.04						

Gamma Emitters + I-131 in Water

	4th Quarter 2008			1st Quarter 2009 E6527-668			2nd Quarter 2009 E6685-668			3rd Quarter 2009 E6885-668		
Nuclide	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known
I-131				70.1	69.0	1.02	88	88.3	1.00	99	98.4	1.01
Ce-141				121	120	1.01	219	216	1.01	265	264	1.00
Cr-51				402	387	1.04	306	304	1.01	220	212	1.04
Cs-134				109	119	0.92	119	126	0.94	111	118	0.94
Cs-137				144	141	1.02	153	146	1.05	183	177	1.03
Co-58				151	151	1.00	71	69.8	1.02	97	95.4	1.02
Mn-54				173	162	1.07	108	104	1.04	202	198	1.02
Fe-59				138	127	1.09	98	92.9	1.05	156	141	1.11
Zn-65				206	197	1.05	147	133	1.11	217	195	1.11
Co-60				189	180	1.05	246	237	1.04	160	154	1.04

Gross Beta (Cs-137) in Water

	4th Quarter 2008 E6413-668			1st Quarter 2009 E6525-668			2nd Quarter 2009			3rd Quarter 2009 E6886-668		
Nuclide	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known
Gross Beta	145	130	1.12	239	235	1.02				215	223	0.96

Tritium in Water

	4th Quarter 2008 E6411-668			1st Quarter 2009 E6524-668			2nd Quarter 2009			3rd Quarter 2009		
Nuclide	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known
H-3	10100	10200	0.99	4560	4480.0	1.02						

Gamma Emitters in Simulated Vegetation

	4th Quarter 2008			1st Quarter 2009 E6528-668			2nd Quarter 2009			3rd Quarter 2009		
Nuclide	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/gram)	Known Value (pCi/gram)	Ratio to Known	HEEC Value (pCi/gram)	Known Value (pCi/gram)	Ratio to Known	HEEC Value (pCi/gram)	Known Value (pCi/gram)	Ratio to Known
Ce-141				0.125	0.123	1.02						
Cr-51				0.401	0.395	1.02						
Cs-134				0.113	0.121	0.93						
Cs-137				0.145	0.144	1.01						
Co-58				0.153	0.154	0.99						
Mn-54				0.170	0.165	1.03						
Fe-59				0.143	0.129	1.11						
Zn-65				0.212	0.202	1.05						
Co-60				0.187	0.184	1.02						

Gross Beta Filter

	4th Quarter 2008 E6412-668			1st Quarter 2009			2nd Quarter 2009 E6689-668			3rd Quarter 2009		
Nuclide	HEEC Value (pCi/Filter)	Known Value (pCi/Filter)	Ratio to Known	HEEC Value (pCi/Filter)	Known Value (pCi/Filter)	Ratio to Known	HEEC Value (pCi/Filter)	Known Value (pCi/Filter)	Ratio to Known	HEEC Value (pCi/Filter)	Known Value (pCi/Filter)	Ratio to Known
Gross Beta	111	106	1.05				83.5	84.8	0.98			

I-131 on Face Loaded Charcoal Cartridge

	4th Quarter 2008 E6414-668			1st Quarter 2009			2nd Quarter 2009 E6688-668			3rd Quarter 2009		
Nuclide	HEEC Value (pCi/Unit)	Known Value (pCi/Unit)	Ratio to Known	HEEC Value (pCi/Unit)	Known Value (pCi/Unit)	Ratio to Known	HEEC Value (pCi/Unit)	Known Value (pCi/Unit)	Ratio to Known	HEEC Value (pCi/Unit)	Known Value (pCi/Unit)	Ratio to Known
I-131	55.4	53.3	1.04				94.1	95.7	0.98			

Gamma Filter

	4th Quarter 2008			1st Quarter 2009			2nd Quarter 2009 E6686-668			3rd Quarter 2009 E6888-668		
Nuclide	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/gram)	Known Value (pCi/gram)	Ratio to Known	HEEC Value (pCi/gram)	Known Value (pCi/gram)	Ratio to Known	HEEC Value (pCi/gram)	Known Value (pCi/gram)	Ratio to Known
Ce-141							186	188	0.99	181	180	1.01
Cr-51							249	265	0.94	145	145	1.00
Cs-134							108	110	0.98	79	80.6	0.98
Cs-137							127	127	1.00	125	121	1.03
Co-58							61	60.8	1.00	66	65.1	1.01
Mn-54							95	90.7	1.05	147	135	1.09
Fe-59							92	81	1.14	114	96.3	1.18
Zn-65							137	116	1.18	158	133	1.19
Co-60							211	206	1.02	104	105	0.99

Gamma 13 Filter Composite

	4th Quarter 2008			1st Quarter 2009			2nd Quarter 2009 E6687-668			3rd Quarter 2009		
Nuclide	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/gram)	Known Value (pCi/gram)	Ratio to Known	HEEC Value (pCi/gram)	Known Value (pCi/gram)	Ratio to Known	HEEC Value (pCi/gram)	Known Value (pCi/gram)	Ratio to Known
Ce-141							273	280	0.98			
Cr-51							388	394	0.98			
Cs-134							158	163	0.97			
Cs-137							190	189	1.01			
Co-58							90	90.5	0.99			
Mn-54							143	135	1.06			
Fe-59							134	120	1.12			
Zn-65							202	173	1.17			
Co-60							311	307	1.01			

Gamma Emitters in Soil

	4th Quarter 2008			1st Quarter 2009			2nd Quarter 2009			3rd Quarter 2009 E6887-668		
Nuclide	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/gram)	Known Value (pCi/gram)	Ratio to Known	HEEC Value (pCi/gram)	Known Value (pCi/gram)	Ratio to Known	HEEC Value (pCi/gram)	Known Value (pCi/gram)	Ratio to Known
Ce-141										0.643	0.644	1.00
Cr-51										0.594	0.518	1.15
Cs-134										0.274	0.288	0.95
Cs-137										0.534	0.526	1.02
Co-58										0.235	0.233	1.01
Mn-54										0.484	0.483	1.00
Fe-59										0.369	0.345	1.07
Zn-65										0.500	0.477	1.05
Co-60										0.363	0.375	0.97

Lower Limits of Detection

All samples analyzed met the LLD required by the ODCM. However, the I-131 in a drinking water environmental sample may not have met the LLD required by the ODCM in a few of the samples. This is due to the possible low recoveries on the I-131 separation method for three reported DW-51 sample results (January 5, 2009; May 11, 2009; and September 14, 2009) (NCR # 341246).

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

Drinking Water/Surface Water Samples	
Isotope	**LLD (pCi/L)**
Mn-54	4
Co-58	4
Fe-59	9
Co-60	4
Zn-65	8
Zr-Nb-95	7 / 5
I-131	13.8
Cs-134	4
Cs-137	4
Ba-La-140	31 / 10
*I-131 (Separation Procedure)	*0.86
Air Particulates (Quarterly Composite)	
Isotope	**LLD (pCi/m^3)**
Cs-134	0.002
Cs-137	0.001
Milk	
Isotope	**LLD (pCi/L)**
Cs-134	8
Cs-137	6
Ba-La-140	25 / 9
*I-131 (Separation Procedure)	*0.77
Sediment	
Isotope	**LLD (pCi/kg dry)**
Cs-134	105
Cs-137	108
Fish	
Isotope	**LLD (pCi/kg wet)**
Mn-54	45
Co-58	45
Fe-59	130
Co-60	61
Zn-65	120
Cs-134	68
Cs-137	48

* 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	57
Cs-134	47
Cs-137	41
Aquatic Vegetation	
Isotope	**LLD (pCi/kg wet)**
I-131	29
Cs-134	16
Cs-137	13
Ground Water	
Isotope	**LLD (pCi/L)**
Mn-54	8
Co-58	9
Fe-59	22
Co-60	9
Zn-65	16
Zr-Nb-95	15 / 14
I-131	14.8
Cs-134	10
Cs-137	8
Ba-La-140	39 / 14.3

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.

2009 Land-Use Census Results

The 2008 and 2009 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 2008 to 2009. No gardens were located within 5 miles of the plant for the NE, SSE, S, and WNW sectors. All the gardens located in 2009 were the same as the gardens located in 2008. All meat animals located in 2009 were the same as 2008, except for the new meat animals found in the NW sector at 2.4 miles. No meat animals were found in the NNE, NE, SSE, S, SSW, W, and WNW sectors in 2009. 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 2009 survey, even though there are not yet permanent residents on site. There are plans in the future for rangers and a campground. Although technically just outside the 5-mile radius, the resident in the S sector has again been included in the data because of the historical prevailing winds.

Table 6

Land-Use Census Comparison (2008-2009)
Nearest Pathway (Miles)

SECTOR	RESIDENT		GARDEN		MEAT ANIMAL		MILK ANIMAL	
	2009	2008	2009	2008	2009	2008	2009	2008
N	2.2	2.2	2.2	2.2	2.2	2.2	---	---
NNE	1.9	1.9	1.9	1.9	---	---	---	---
NE	2.3	2.3	---	---	---	---	---	---
ENE	1.6	1.6	1.6	1.6	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	---	---	---	---	---	---
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	---	---	---	---
WNW	2.5	2.5	---	---	---	---	---	---
NW	2.4	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.

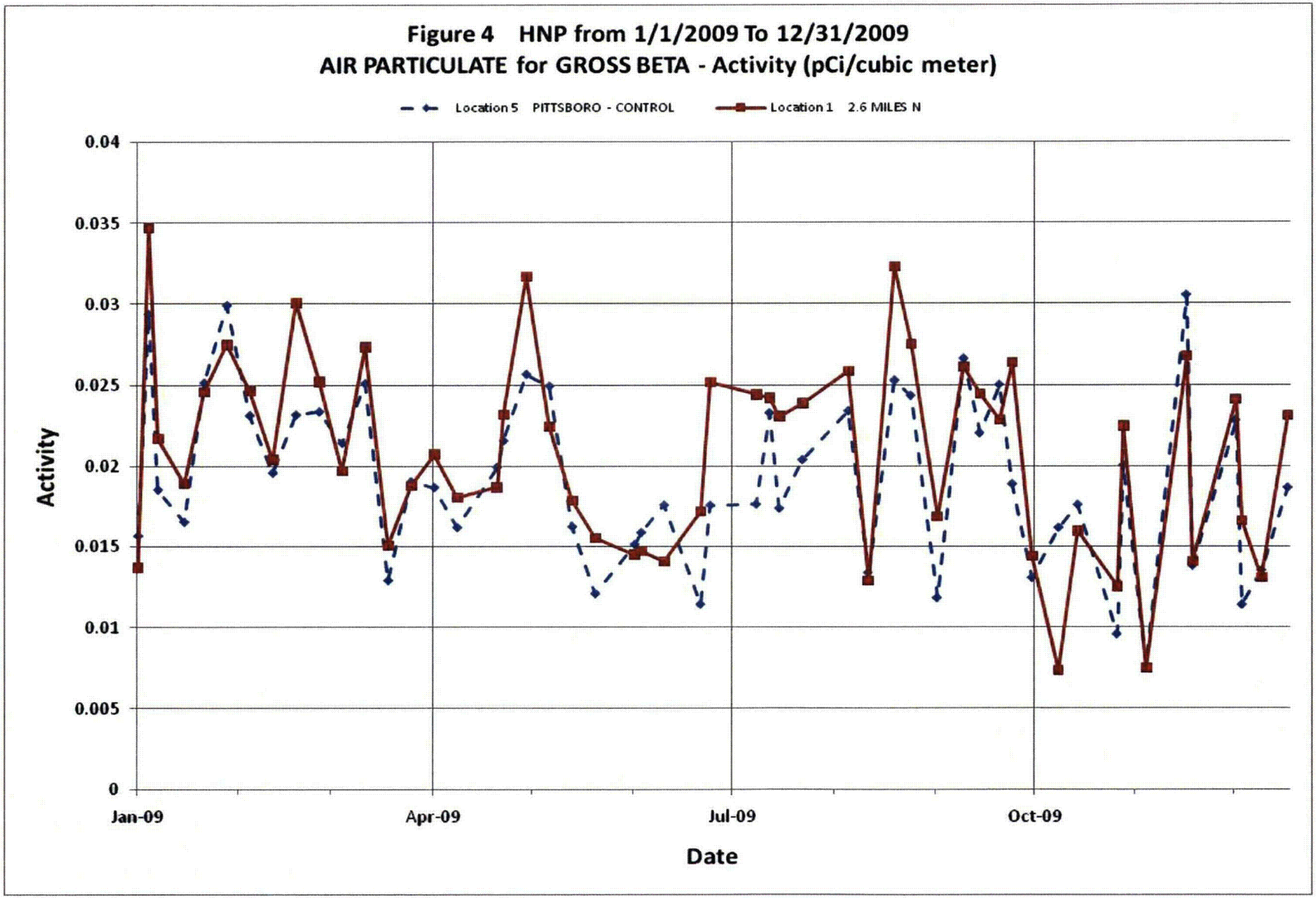


Figure 4 HNP from 1/1/2009 To 12/31/2009
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)
Location 5 PITTSBORO - CONTROL
Location 1 2.6 MILES N
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
Activity
Jan-09
Apr-09
Jul-09
Oct-09
Date

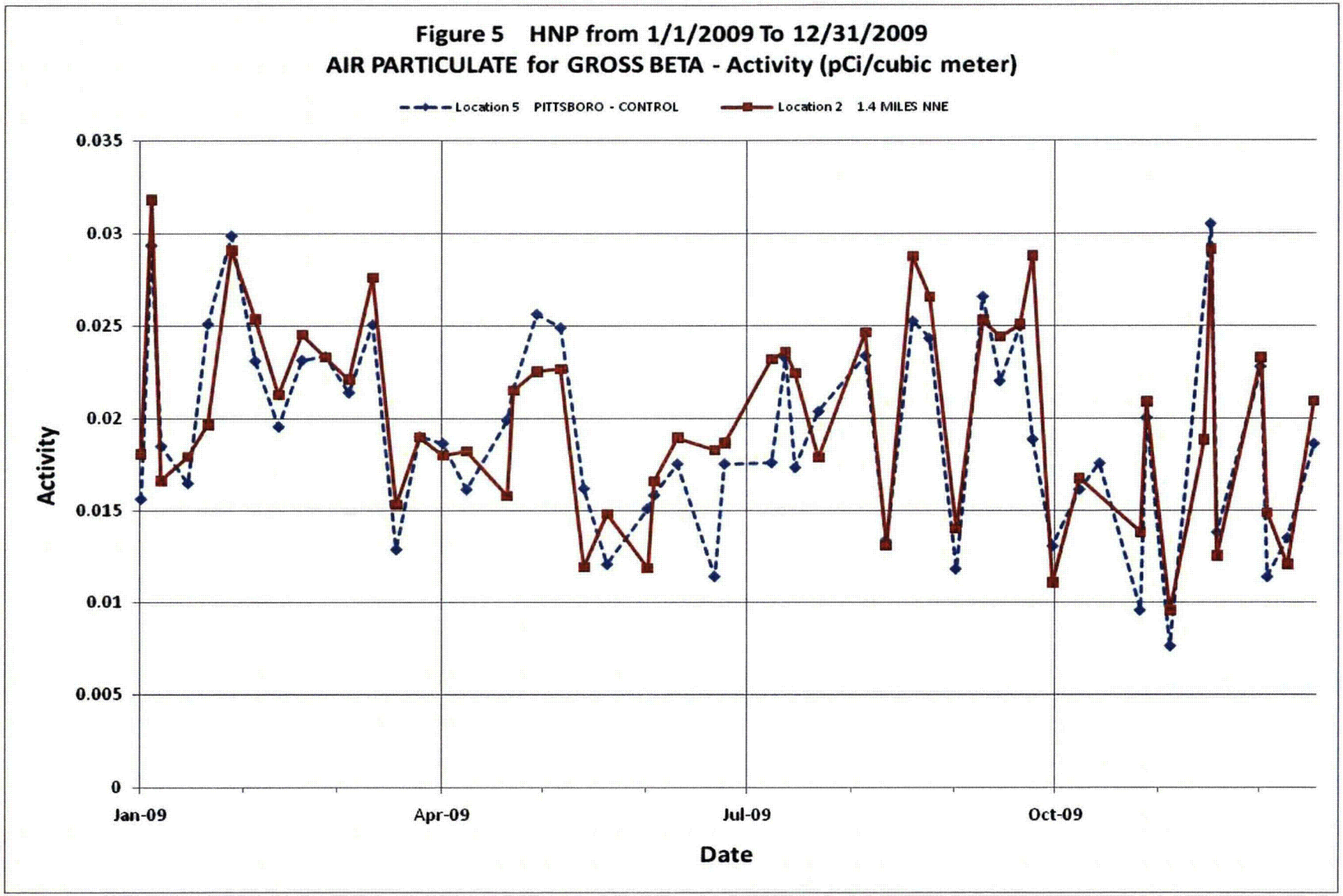


Figure 5 HNP from 1/1/2009 To 12/31/2009
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)
Location 5 PITTSBORO - CONTROL
Location 2 1.4 MILES NNE
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
Activity
Jan-09
Apr-09
Jul-09
Oct-09
Date

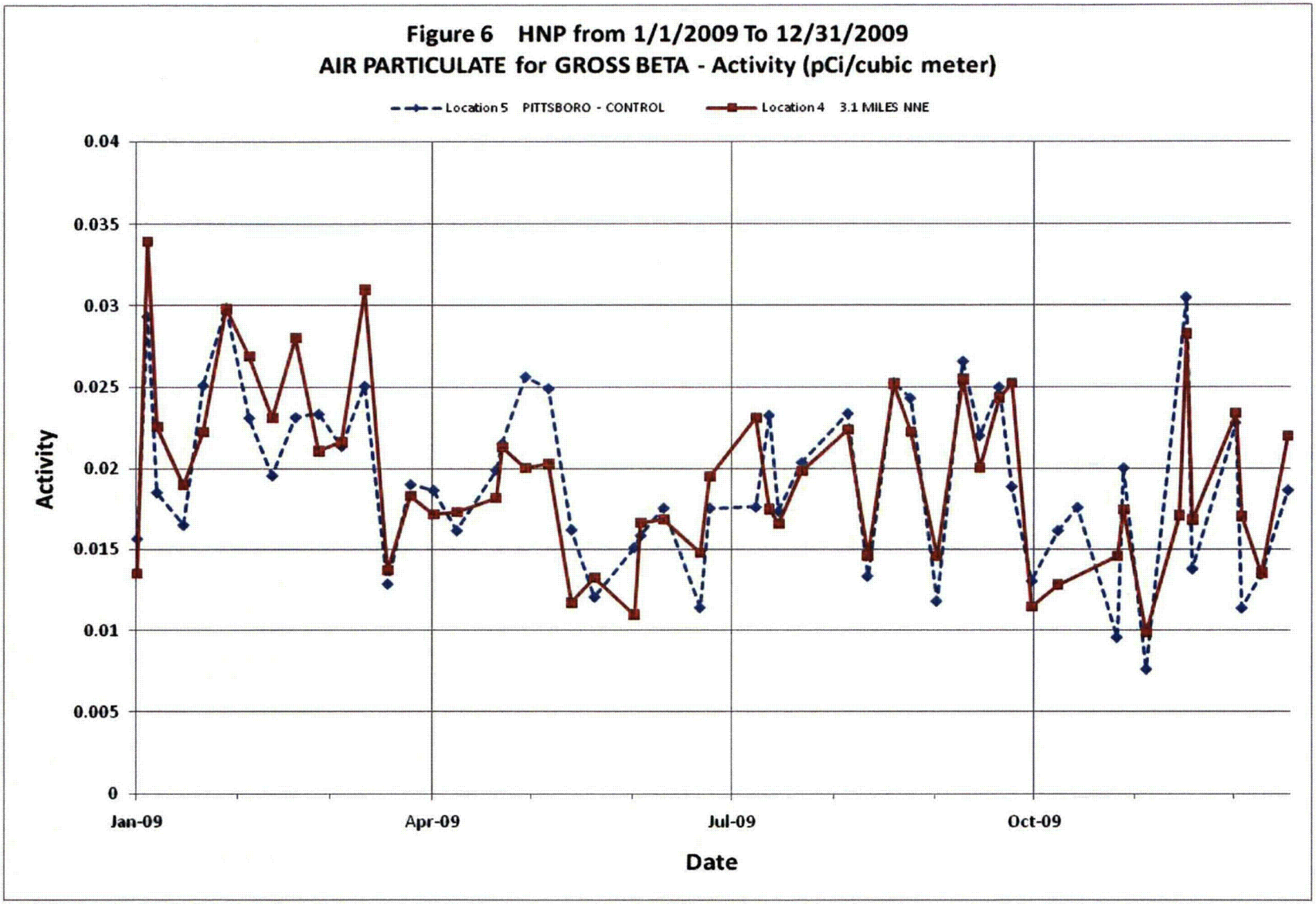


Figure 6 HNP from 1/1/2009 To 12/31/2009
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)
Location 5 PITTSBORO - CONTROL
Location 4 3.1 MILES NNE
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
Activity
Jan-09
Apr-09
Jul-09
Oct-09
Date

Figure 7 HNP from 1/1/2009 To 12/31/2009
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)

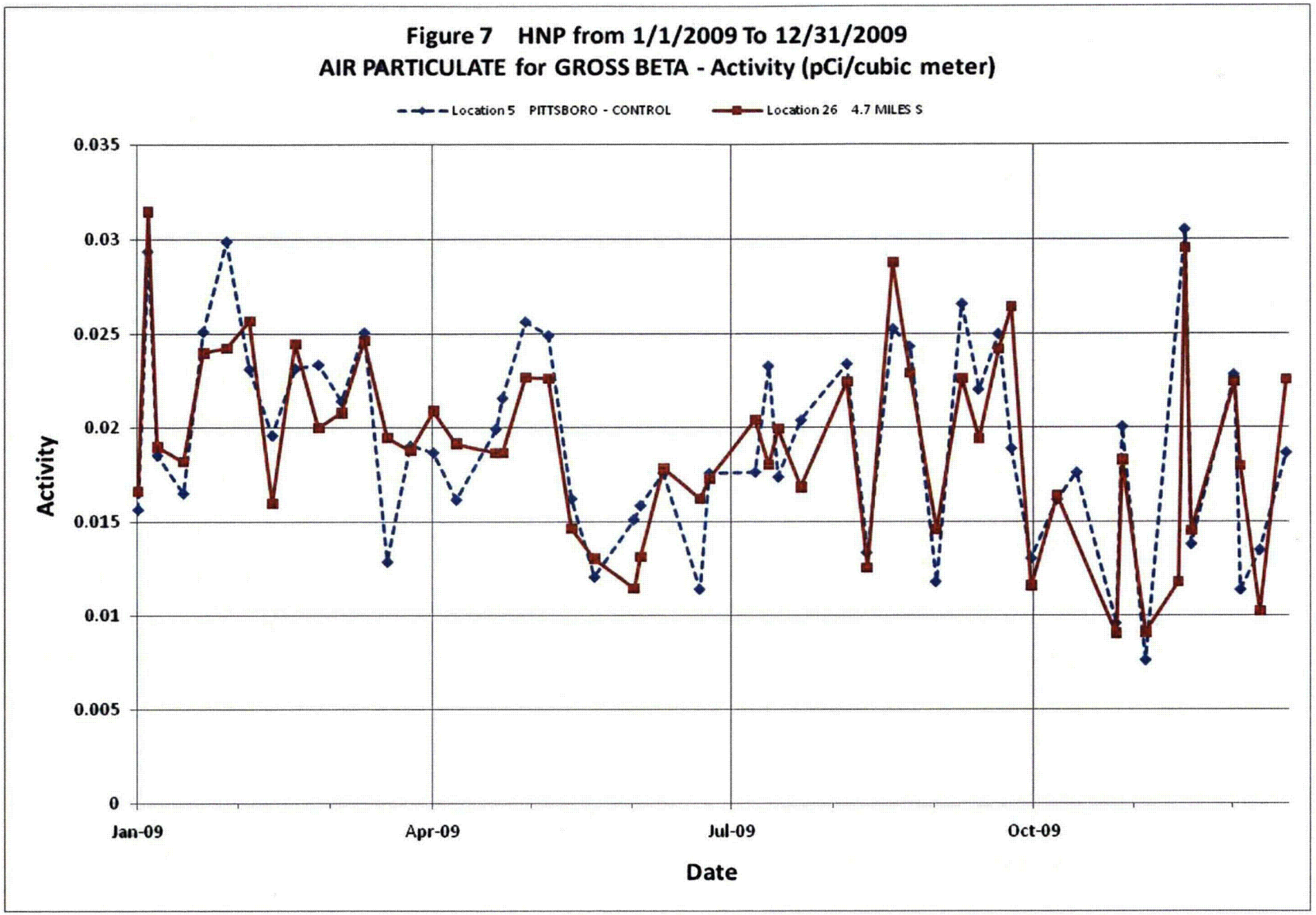


Figure 8 HNP from 1/1/2009 To 12/31/2009
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)

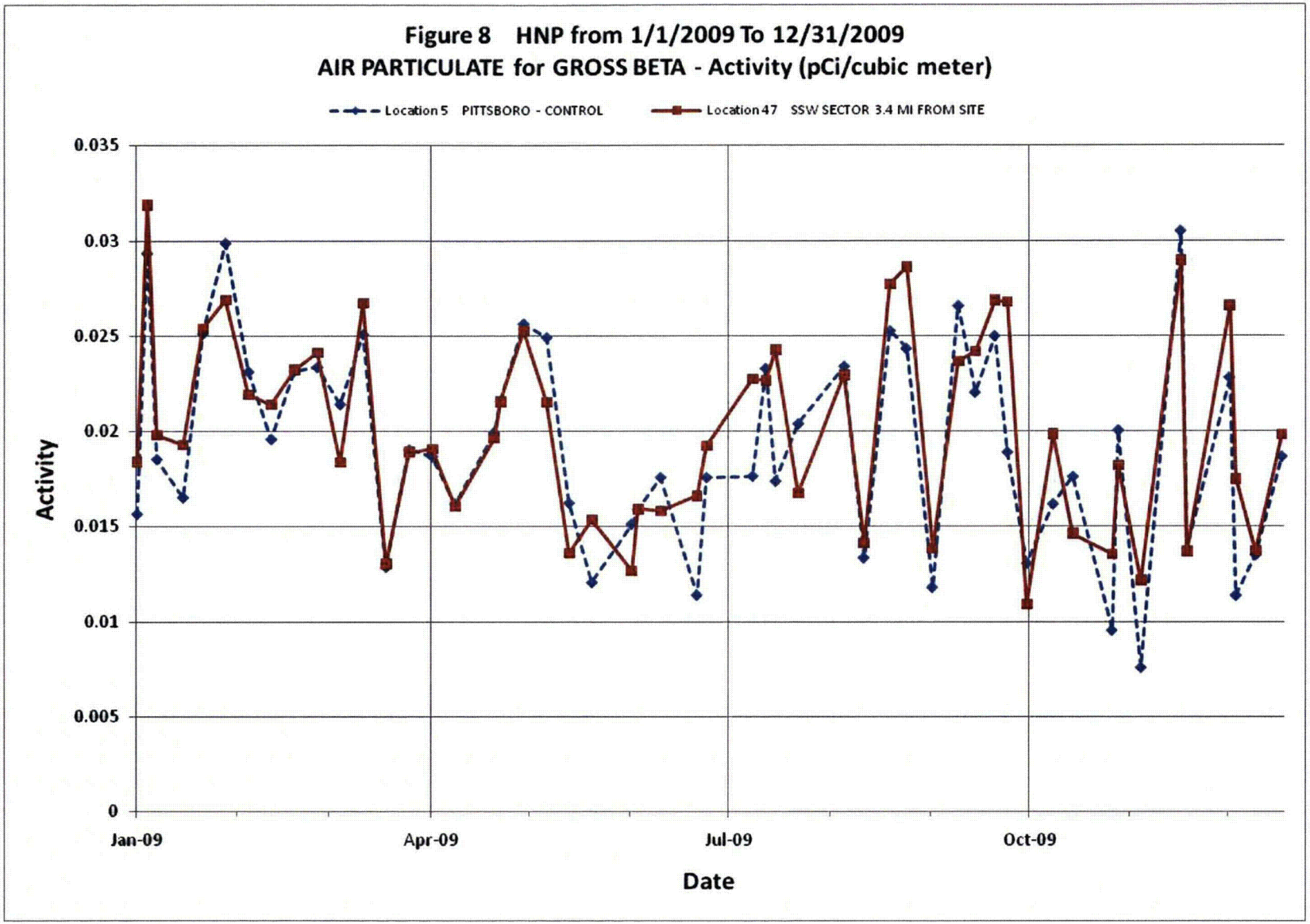


Figure 9 HNP from 1/1/2009 To 12/31/2009
DRINKING WATER for GROSS BETA - Activity (pCi/Liter)

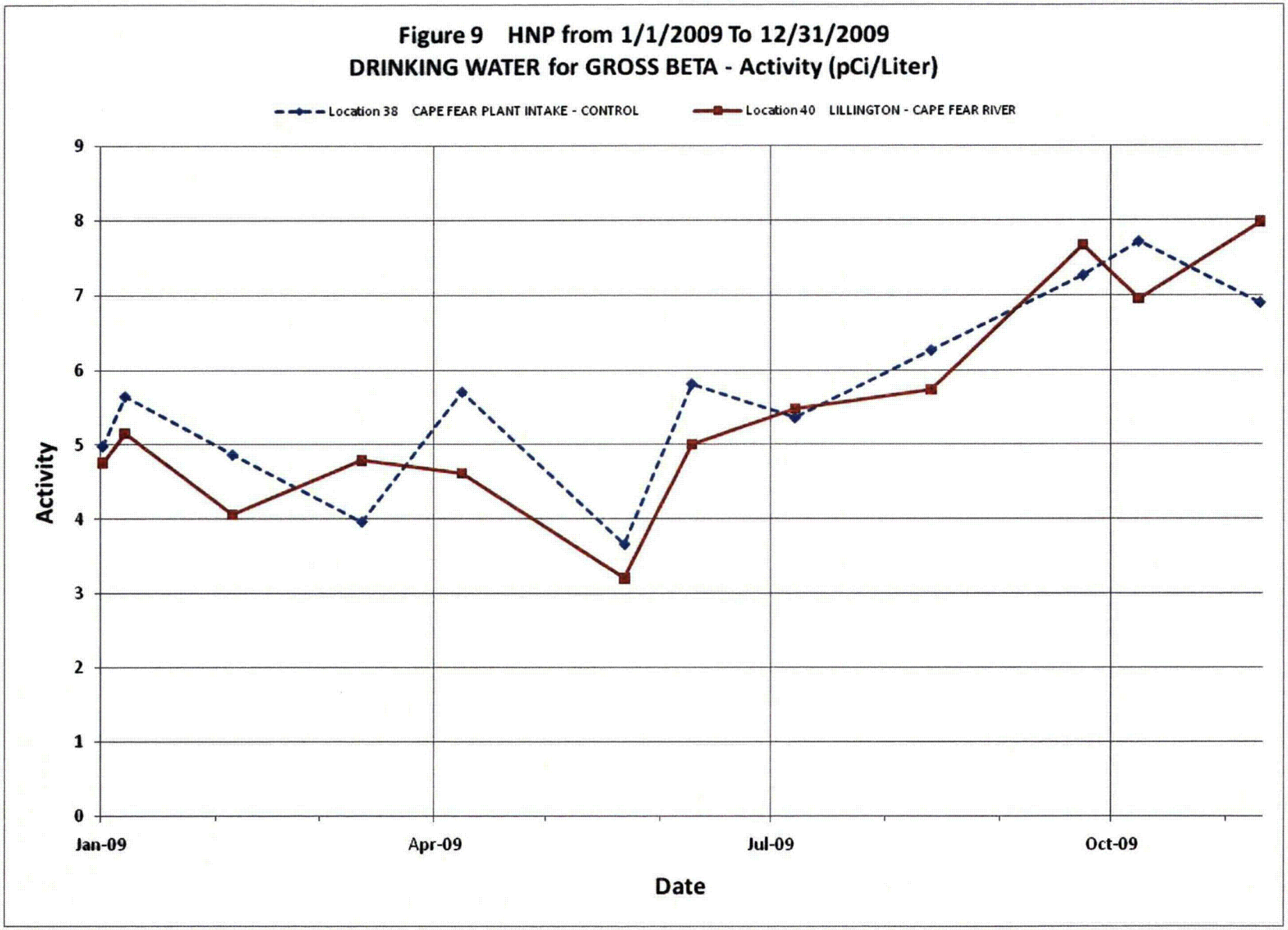


Figure 10 HNP from 1/1/2009 To 12/31/2009
SURFACE WATER for GROSS BETA - Activity (pCi/Liter)

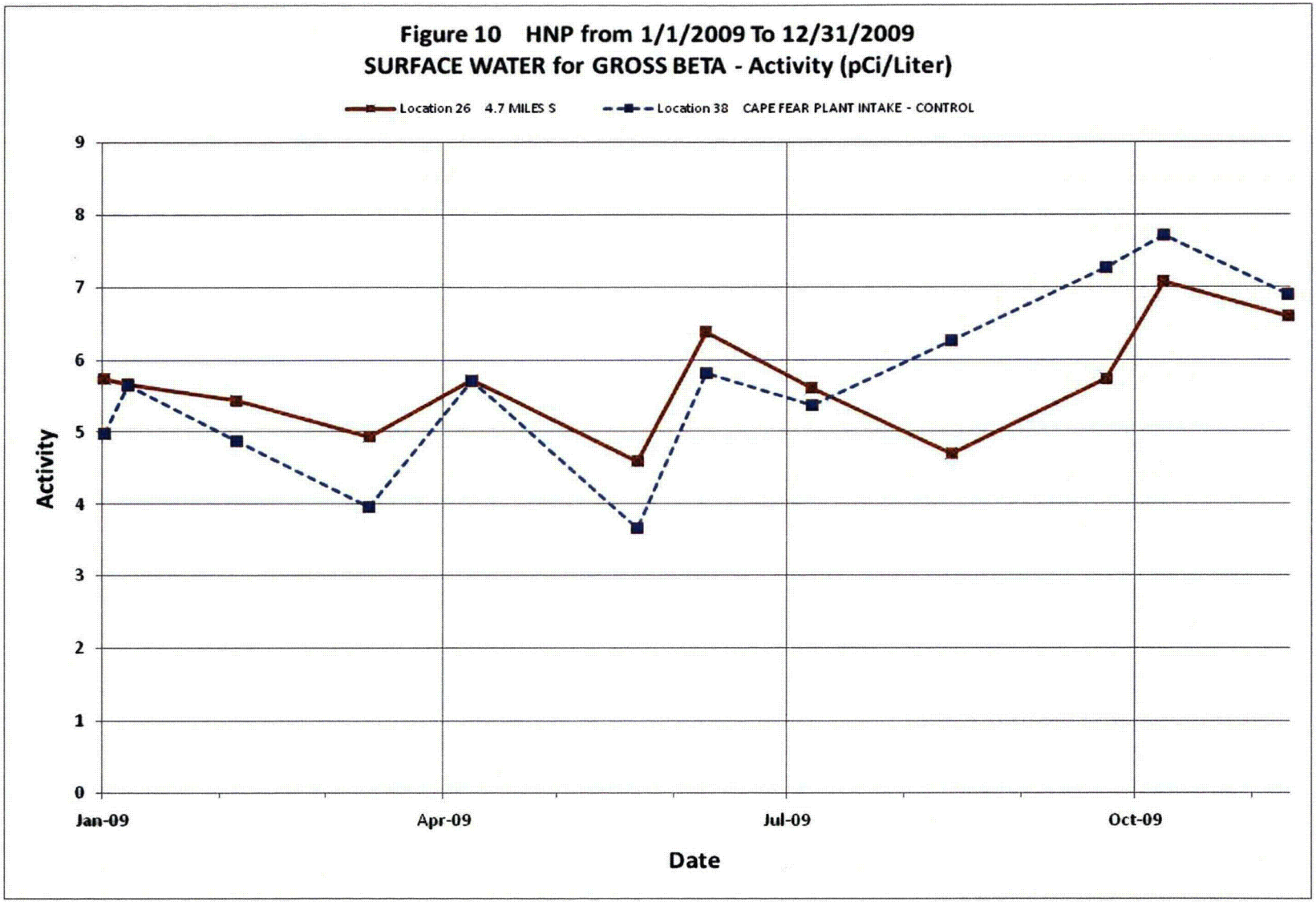


Figure 11 HNP 2009 Surface Water Tritium Activity

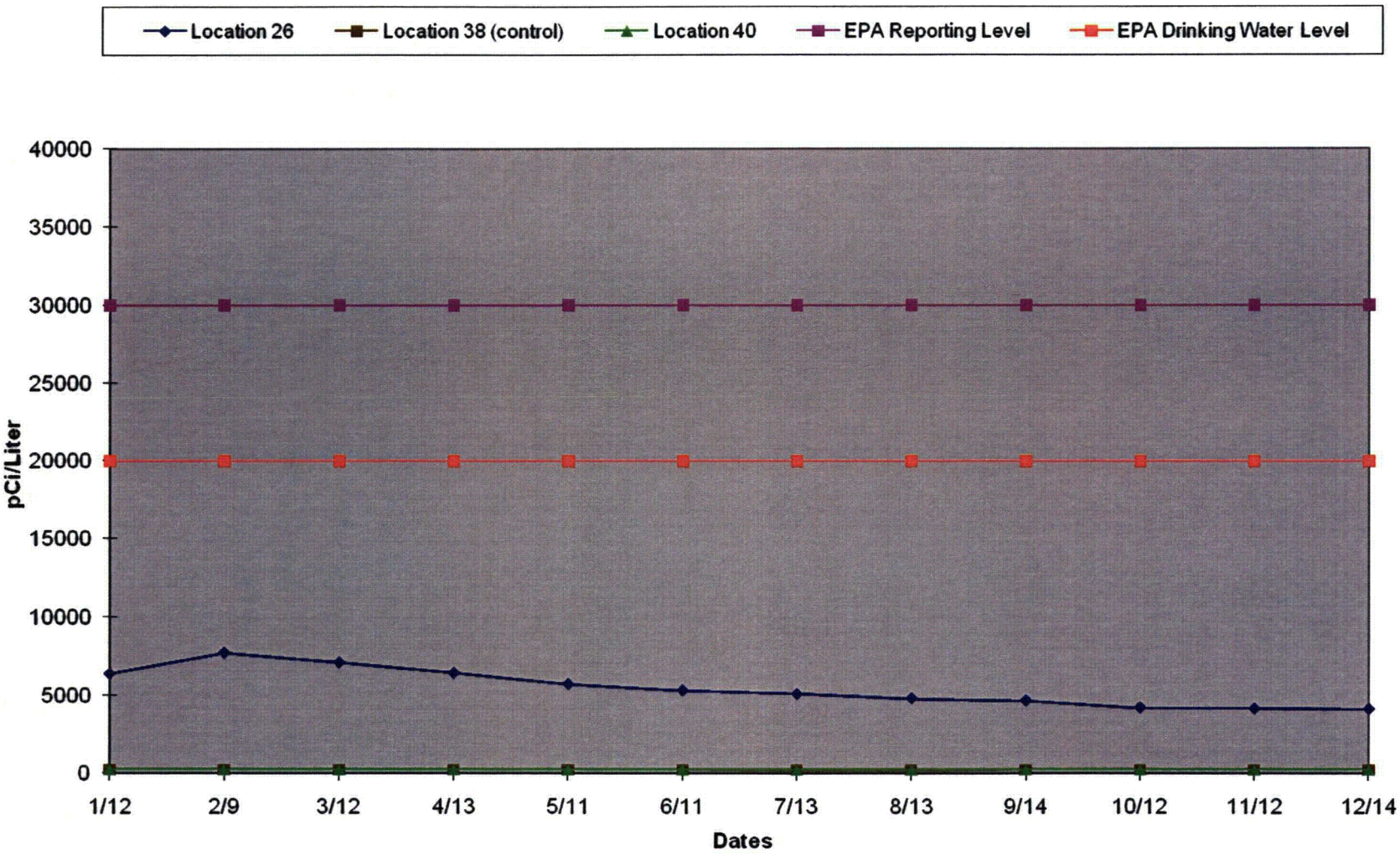
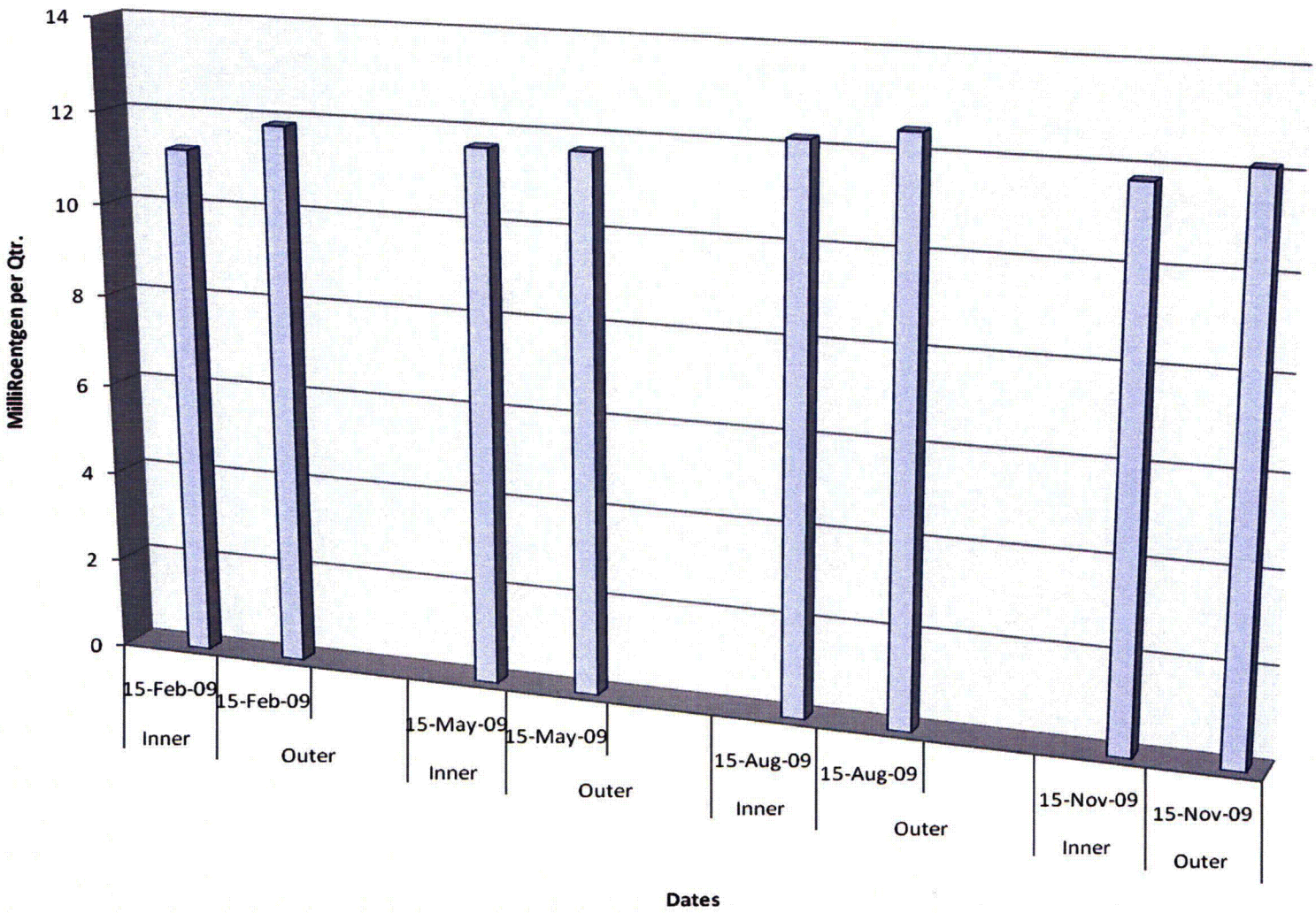


Figure 12 HNP 2009 TLD Averages for Inner and Outer Ring Locations



2009 HNP
Radiological Environmental Monitoring TLD Report

Comments

- All HNP Environmental TLDS were present in 2009, except for the following TLDs:
  - TLD # 34 Second Quarter of 2009
  - TLD # 15 Third Quarter of 2009
  - TLD # 14 Fourth Quarter of 2009

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	2/15/2009	12.3	2.2
1	2.6 MILES N	5/15/2009	12.6	1.4
1	2.6 MILES N	8/15/2009	13.2	0.9
1	2.6 MILES N	11/15/2009	13.3	2.2
2	1.4 MILES NNE	2/15/2009	13.5	1.5
2	1.4 MILES NNE	5/15/2009	13.6	0.8
2	1.4 MILES NNE	8/15/2009	14	0.9
2	1.4 MILES NNE	11/15/2009	13.6	1.2
3	1.9 MILES ENE - HE&EC	2/15/2009	11.2	1
3	1.9 MILES ENE - HE&EC	5/15/2009	11.6	1.3
3	1.9 MILES ENE - HE&EC	8/15/2009	12.3	1.8
3	1.9 MILES ENE - HE&EC	11/15/2009	11.5	1.6
4	3.1 MILES NNE	2/15/2009	10.9	1.8
4	3.1 MILES NNE	5/15/2009	11.2	0.8
4	3.1 MILES NNE	8/15/2009	11.7	1.3
4	3.1 MILES NNE	11/15/2009	11.1	1.4
5	>12 MILES WNW - PITTSBORO - CONTROL	2/15/2009	15.2	1
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2009	14.2	0.6
5	>12 MILES WNW - PITTSBORO - CONTROL	8/15/2009	16	1.3
5	>12 MILES WNW - PITTSBORO - CONTROL	11/15/2009	15.1	0.7
6	0.8 MILES NE	2/15/2009	11.2	1.5

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
6	0.8 MILES NE	5/15/2009	11.7	1.3
6	0.8 MILES NE	8/15/2009	12.6	1.3
6	0.8 MILES NE	11/15/2009	12.2	2
7	0.7 MILES E	2/15/2009	12.5	1.1
7	0.7 MILES E	5/15/2009	12.6	1
7	0.7 MILES E	8/15/2009	13.1	1.2
7	0.7 MILES E	11/15/2009	13.1	0.7
8	0.6 MILES ESE	2/15/2009	12.7	1
8	0.6 MILES ESE	5/15/2009	11.4	0.8
8	0.6 MILES ESE	8/15/2009	13.9	1.8
8	0.6 MILES ESE	11/15/2009	12.1	1.7
9	2.2 MILES SE	2/15/2009	9.2	1.7
9	2.2 MILES SE	5/15/2009	10	1.6
9	2.2 MILES SE	8/15/2009	10.1	1.3
9	2.2 MILES SE	11/15/2009	10	1.8
10	2.2 MILES SSE	2/15/2009	10.6	1.4
10	2.2 MILES SSE	5/15/2009	10.6	0.9
10	2.2 MILES SSE	8/15/2009	11.1	0.8
10	2.2 MILES SSE	11/15/2009	10.9	1.2
11	0.6 MILES S	2/15/2009	10.1	0.8
11	0.6 MILES S	5/15/2009	11	0.7
11	0.6 MILES S	8/15/2009	11.6	1.2
11	0.6 MILES S	11/15/2009	10.4	1.1
12	0.9 MILES SSW	2/15/2009	9.7	1.8

Dose: mR/std. qtr.

TLD	TLD Location Description	Sample Date	Dose	2 Sigma Error
12	0.9 MILES SSW	5/15/2009	10.8	0.8
12	0.9 MILES SSW	8/15/2009	10.2	1.1
12	0.9 MILES SSW	11/15/2009	10.1	0.9
13	0.7 MILES WSW	2/15/2009	10	1
13	0.7 MILES WSW	5/15/2009	11	2.6
13	0.7 MILES WSW	8/15/2009	11.1	0.9
13	0.7 MILES WSW	11/15/2009	11	0.8
14	1.5 MILES W	2/15/2009	10	2.1
14	1.5 MILES W	5/15/2009	10	0.9
14	1.5 MILES W	8/15/2009	11.3	2.5
15	2.0 MILES W	2/15/2009	9.3	1.7
15	2.0 MILES W	5/15/2009	10.2	0.7
15	2.0 MILES W	11/15/2009	9.9	1.1
16	1.9 MILES WNW	2/15/2009	11	1.5
16	1.9 MILES WNW	5/15/2009	11.4	1.8
16	1.9 MILES WNW	8/15/2009	12.1	1.3
16	1.9 MILES WNW	11/15/2009	11.7	0.8
17	1.5 MILES NW	2/15/2009	11.1	1.4
17	1.5 MILES NW	5/15/2009	11.3	1
17	1.5 MILES NW	8/15/2009	11.1	1.3
17	1.5 MILES NW	11/15/2009	11.1	0.8
18	1.4 MILES NNW	2/15/2009	11.7	1.5
18	1.4 MILES NNW	5/15/2009	12.2	0.6
18	1.4 MILES NNW	8/15/2009	12.3	2.1

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
18	1.4 MILES NNW	11/15/2009	12.4	2.2
19	5.0 MILES NNE	2/15/2009	10.4	0.9
19	5.0 MILES NNE	5/15/2009	11.2	1.4
19	5.0 MILES NNE	8/15/2009	11	1.7
19	5.0 MILES NNE	11/15/2009	11.2	1.6
20	4.5 MILES NE	2/15/2009	13.3	1.4
20	4.5 MILES NE	5/15/2009	13.2	2.3
20	4.5 MILES NE	8/15/2009	14	1.5
20	4.5 MILES NE	11/15/2009	13.6	1.5
21	4.8 MILES ENE	2/15/2009	13.4	1.9
21	4.8 MILES ENE	5/15/2009	11	2
21	4.8 MILES ENE	8/15/2009	13.3	1.1
21	4.8 MILES ENE	11/15/2009	11.6	2.2
22	4.3 MILES E	2/15/2009	10.4	1.1
22	4.3 MILES E	5/15/2009	10.4	2.5
22	4.3 MILES E	8/15/2009	11	1.6
22	4.3 MILES E	11/15/2009	10.8	1.1
23	4.8 MILES ESE	2/15/2009	11.8	1.8
23	4.8 MILES ESE	5/15/2009	12.3	1.7
23	4.8 MILES ESE	8/15/2009	12.9	0.8
23	4.8 MILES ESE	11/15/2009	12.4	1.1
24	4.0 MILES SE	2/15/2009	11.2	0.8
24	4.0 MILES SE	5/15/2009	10.6	0.8
24	4.0 MILES SE	8/15/2009	11.4	1

Dose: mR/std. qtr.

TLD	TLD Location Description	Sample Date	Dose	2 Sigma Error
24	4.0 MILES SE	11/15/2009	11.9	1.1
25	4.7 MILES SSE	2/15/2009	13.6	2.3
25	4.7 MILES SSE	5/15/2009	11.2	0.7
25	4.7 MILES SSE	8/15/2009	13.2	1.3
25	4.7 MILES SSE	11/15/2009	11.4	1
26	4.7 MILES S	2/15/2009	11.6	1.5
26	4.7 MILES S	5/15/2009	12.6	0.7
26	4.7 MILES S	8/15/2009	12.3	1.5
26	4.7 MILES S	11/15/2009	12.2	1
27	4.8 MILES SW	2/15/2009	9.5	1.2
27	4.8 MILES SW	5/15/2009	9.4	1.5
27	4.8 MILES SW	8/15/2009	9.4	1.1
27	4.8 MILES SW	11/15/2009	9.7	1.8
28	4.8 MILES SSW	2/15/2009	10.3	1.2
28	4.8 MILES SSW	5/15/2009	10.3	1.4
28	4.8 MILES SSW	8/15/2009	11.2	1.3
28	4.8 MILES SSW	11/15/2009	11.2	2.5
29	5.7 MILES WSW	2/15/2009	13.7	0.8
29	5.7 MILES WSW	5/15/2009	13.6	1
29	5.7 MILES WSW	8/15/2009	13.9	0.7
29	5.7 MILES WSW	11/15/2009	14	0.6
30	5.6 MILES W	2/15/2009	9	1.4
30	5.6 MILES W	5/15/2009	10.1	1.9
30	5.6 MILES W	8/15/2009	10.2	0.9

Dose: mR/std. qtr.

TLD	TLD Location Description	Sample Date	Dose	2 Sigma Error
30	5.6 MILES W	11/15/2009	10.2	2
31	4.7 MILES WNW	2/15/2009	9.5	0.9
31	4.7 MILES WNW	5/15/2009	10	0.5
31	4.7 MILES WNW	8/15/2009	10.5	1.3
31	4.7 MILES WNW	11/15/2009	9.7	1.6
32	6.4 MILES NNW	2/15/2009	11.6	1.7
32	6.4 MILES NNW	5/15/2009	13.6	2.2
32	6.4 MILES NNW	8/15/2009	12.8	1.4
32	6.4 MILES NNW	11/15/2009	12.8	0.5
33	4.5 MILES NNW	2/15/2009	9.6	1
33	4.5 MILES NNW	5/15/2009	10.7	0.8
33	4.5 MILES NNW	8/15/2009	10.6	1.1
33	4.5 MILES NNW	11/15/2009	10.5	0.6
34	8.7 MILES NE - APEX (POP. CENTER)	2/15/2009	15.8	1.3
34	8.7 MILES NE - APEX (POP. CENTER)	8/15/2009	17	2.1
34	8.7 MILES NE - APEX (POP. CENTER)	11/15/2009	17	2.4
35	6.9 MILES E - HOLLY SPRINGS (POP. CENTER)	2/15/2009	13.4	1.7
35	6.9 MILES E - HOLLY SPRINGS (POP. CENTER)	5/15/2009	12.2	1.6
35	6.9 MILES E - HOLLY SPRINGS (POP. CENTER)	8/15/2009	13.7	1.6
35	6.9 MILES E - HOLLY SPRINGS (POP. CENTER)	11/15/2009	13.1	2
36	10.9 MILES E	2/15/2009	9.9	1.2
36	10.9 MILES E	5/15/2009	10.2	0.6
36	10.9 MILES E	8/15/2009	10.3	1
36	10.9 MILES E	11/15/2009	9.8	0.6

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
37	9.2 MILES ESE - FV AT OLD CP&L OFFICE	2/15/2009	15.2	2
37	9.2 MILES ESE - FV AT OLD CP&L OFFICE	5/15/2009	15.1	1.1
37	9.2 MILES ESE - FV AT OLD CP&L OFFICE	8/15/2009	15.1	1.4
37	9.2 MILES ESE - FV AT OLD CP&L OFFICE	11/15/2009	15.5	3.3
48	4.5 MILES N	2/15/2009	12.5	1.4
48	4.5 MILES N	5/15/2009	12.8	1
48	4.5 MILES N	8/15/2009	13.8	1.4
48	4.5 MILES N	11/15/2009	13.1	1.3
49	2.5 MILES NNE	2/15/2009	13.7	2.5
49	2.5 MILES NNE	5/15/2009	14.8	0.7
49	2.5 MILES NNE	8/15/2009	14.6	1.3
49	2.5 MILES NNE	11/15/2009	14.4	2
50	2.6 MILES ESE - HOLLEMANS CROSSROADS	2/15/2009	10.9	1.5
50	2.6 MILES ESE - HOLLEMANS CROSSROADS	5/15/2009	10.8	0.6
50	2.6 MILES ESE - HOLLEMANS CROSSROADS	8/15/2009	11.5	1.5
50	2.6 MILES ESE - HOLLEMANS CROSSROADS	11/15/2009	10.9	0.7
53	5.8 MILES NW	2/15/2009	9.9	1.4
53	5.8 MILES NW	5/15/2009	10.9	0.9
53	5.8 MILES NW	8/15/2009	10.9	1
53	5.8 MILES NW	11/15/2009	10.5	0.6
56	3.0 MILES WSW	2/15/2009	11.8	1.4
56	3.0 MILES WSW	5/15/2009	12.3	0.5
56	3.0 MILES WSW	8/15/2009	12.9	0.9
56	3.0 MILES WSW	11/15/2009	11.7	1.4

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
63	0.6 MILES SW	2/15/2009	12	1.1
63	0.6 MILES SW	5/15/2009	13.2	2.1
63	0.6 MILES SW	8/15/2009	13.6	1.2
63	0.6 MILES SW	11/15/2009	13.8	1.3
67	1.2 MILES ENE - HEEC SEWAGE TREATMENT FACILITY	2/15/2009	11.6	0.8
67	1.2 MILES ENE - HEEC SEWAGE TREATMENT FACILITY	5/15/2009	12	0.8
67	1.2 MILES ENE - HEEC SEWAGE TREATMENT FACILITY	8/15/2009	12	1
67	1.2 MILES ENE - HEEC SEWAGE TREATMENT FACILITY	11/15/2009	11.9	1.6

2009 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	1/5/2009	264.9	2.17E-02	3.51E-03	3.47E-03
1	2.6 MILES N	1/12/2009	260.7	1.89E-02	3.27E-03	3.16E-03
1	2.6 MILES N	1/19/2009	268.4	2.46E-02	3.59E-03	3.32E-03
1	2.6 MILES N	1/26/2009	268.3	2.75E-02	3.71E-03	3.27E-03
1	2.6 MILES N	2/2/2009	266.8	2.46E-02	3.52E-03	3.09E-03
1	2.6 MILES N	2/9/2009	267.8	2.04E-02	3.40E-03	3.38E-03
1	2.6 MILES N	2/16/2009	265.2	3.01E-02	3.90E-03	3.41E-03
1	2.6 MILES N	2/23/2009	267.5	2.52E-02	3.71E-03	3.56E-03
1	2.6 MILES N	3/1/2009	230.6	1.97E-02	3.70E-03	3.83E-03
1	2.6 MILES N	3/9/2009	302.2	2.73E-02	3.47E-03	2.99E-03
1	2.6 MILES N	3/16/2009	366.6	1.50E-02	2.42E-03	2.27E-03
1	2.6 MILES N	3/23/2009	261.8	1.88E-02	3.33E-03	3.38E-03
1	2.6 MILES N	3/30/2009	255.5	2.07E-02	3.47E-03	3.37E-03
1	2.6 MILES N	4/6/2009	254.8	1.81E-02	3.48E-03	3.79E-03
1	2.6 MILES N	4/13/2009	256.4	1.87E-02	3.39E-03	3.47E-03
1	2.6 MILES N	4/20/2009	255.4	2.32E-02	3.69E-03	3.62E-03
1	2.6 MILES N	4/27/2009	277.3	3.17E-02	3.87E-03	3.26E-03
1	2.6 MILES N	5/4/2009	276.7	2.25E-02	3.41E-03	3.22E-03
1	2.6 MILES N	5/11/2009	276.5	1.79E-02	3.08E-03	2.98E-03
1	2.6 MILES N	5/18/2009	280.5	1.55E-02	3.01E-03	3.18E-03
1	2.6 MILES N	5/26/2009	315.7	1.45E-02	2.71E-03	2.82E-03
1	2.6 MILES N	6/1/2009	235.1	1.48E-02	3.23E-03	3.44E-03
1	2.6 MILES N	6/8/2009	276	1.41E-02	2.95E-03	3.20E-03
1	2.6 MILES N	6/15/2009	276.3	1.72E-02	3.19E-03	3.37E-03
1	2.6 MILES N	6/22/2009	275.6	2.52E-02	3.53E-03	3.15E-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	6/29/2009	275.3	2.44E-02	3.52E-03	3.24E-03
1	2.6 MILES N	7/6/2009	275.7	2.42E-02	3.59E-03	3.48E-03
1	2.6 MILES N	7/13/2009	277.7	2.31E-02	3.47E-03	3.31E-03
1	2.6 MILES N	7/20/2009	276.5	2.39E-02	3.56E-03	3.44E-03
1	2.6 MILES N	7/27/2009	276.8	2.58E-02	3.64E-03	3.35E-03
1	2.6 MILES N	8/3/2009	277.3	1.29E-02	3.11E-03	3.73E-03
1	2.6 MILES N	8/10/2009	276.9	3.23E-02	3.97E-03	3.42E-03
1	2.6 MILES N	8/17/2009	277.7	2.75E-02	3.71E-03	3.31E-03
1	2.6 MILES N	8/24/2009	277.4	1.69E-02	3.21E-03	3.44E-03
1	2.6 MILES N	8/31/2009	277.5	2.61E-02	3.62E-03	3.26E-03
1	2.6 MILES N	9/8/2009	318.7	2.44E-02	3.24E-03	2.84E-03
1	2.6 MILES N	9/14/2009	239	2.28E-02	3.86E-03	3.88E-03
1	2.6 MILES N	9/21/2009	278.4	2.64E-02	3.65E-03	3.30E-03
1	2.6 MILES N	9/28/2009	277.1	1.44E-02	3.03E-03	3.34E-03
1	2.6 MILES N	10/5/2009	279.9	7.35E-03	2.49E-03	3.13E-03
1	2.6 MILES N	10/12/2009	276	1.60E-02	3.17E-03	3.46E-03
1	2.6 MILES N	10/19/2009	279.7	1.25E-02	2.97E-03	3.46E-03
1	2.6 MILES N	10/26/2009	277.8	2.25E-02	3.52E-03	3.48E-03
1	2.6 MILES N	11/2/2009	277.7	7.49E-03	2.56E-03	3.26E-03
1	2.6 MILES N	11/9/2009	278.9	2.68E-02	3.73E-03	3.49E-03
1	2.6 MILES N	11/16/2009	277.1	1.40E-02	3.00E-03	3.32E-03
1	2.6 MILES N	11/23/2009	277.4	2.41E-02	3.52E-03	3.24E-03
1	2.6 MILES N	11/30/2009	278.5	1.66E-02	3.05E-03	3.07E-03
1	2.6 MILES N	12/7/2009	279.3	1.31E-02	2.96E-03	3.37E-03
1	2.6 MILES N	12/14/2009	280.7	2.31E-02	3.48E-03	3.30E-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	12/20/2009	240.8	2.40E-02	3.78E-03	3.51E-03
1	2.6 MILES N	12/28/2009	321	1.75E-02	2.87E-03	2.80E-03
2	1.4 MILES NNE	1/5/2009	264.7	1.67E-02	3.24E-03	3.47E-03
2	1.4 MILES NNE	1/12/2009	262.8	1.80E-02	3.20E-03	3.14E-03
2	1.4 MILES NNE	1/19/2009	265.6	1.97E-02	3.36E-03	3.35E-03
2	1.4 MILES NNE	1/26/2009	264	2.91E-02	3.83E-03	3.32E-03
2	1.4 MILES NNE	2/2/2009	262.9	2.54E-02	3.60E-03	3.14E-03
2	1.4 MILES NNE	2/9/2009	263.9	2.13E-02	3.48E-03	3.43E-03
2	1.4 MILES NNE	2/16/2009	261.3	2.45E-02	3.67E-03	3.46E-03
2	1.4 MILES NNE	2/23/2009	263.6	2.33E-02	3.65E-03	3.61E-03
2	1.4 MILES NNE	3/1/2009	226.6	2.21E-02	3.87E-03	3.90E-03
2	1.4 MILES NNE	3/9/2009	297.3	2.76E-02	3.52E-03	3.04E-03
2	1.4 MILES NNE	3/16/2009	260.7	1.53E-02	3.07E-03	3.19E-03
2	1.4 MILES NNE	3/23/2009	261.1	1.90E-02	3.35E-03	3.39E-03
2	1.4 MILES NNE	3/30/2009	259.4	1.80E-02	3.28E-03	3.32E-03
2	1.4 MILES NNE	4/6/2009	257.7	1.82E-02	3.46E-03	3.75E-03
2	1.4 MILES NNE	4/13/2009	259.3	1.58E-02	3.20E-03	3.44E-03
2	1.4 MILES NNE	4/20/2009	257.5	2.15E-02	3.58E-03	3.59E-03
2	1.4 MILES NNE	4/27/2009	280.1	2.25E-02	3.41E-03	3.23E-03
2	1.4 MILES NNE	5/4/2009	279.6	2.27E-02	3.40E-03	3.19E-03
2	1.4 MILES NNE	5/11/2009	279.1	1.19E-02	2.71E-03	2.96E-03
2	1.4 MILES NNE	5/18/2009	282.6	1.48E-02	2.95E-03	3.15E-03
2	1.4 MILES NNE	5/26/2009	317.7	1.18E-02	2.55E-03	2.80E-03
2	1.4 MILES NNE	6/1/2009	238	1.66E-02	3.31E-03	3.40E-03
2	1.4 MILES NNE	6/8/2009	280.7	1.90E-02	3.19E-03	3.15E-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	1.4 MILES NNE	6/15/2009	281.6	1.83E-02	3.21E-03	3.31E-03
2	1.4 MILES NNE	6/22/2009	278.6	1.87E-02	3.17E-03	3.12E-03
2	1.4 MILES NNE	6/29/2009	278.3	2.32E-02	3.44E-03	3.20E-03
2	1.4 MILES NNE	7/6/2009	278.5	2.36E-02	3.54E-03	3.44E-03
2	1.4 MILES NNE	7/13/2009	280.3	2.24E-02	3.42E-03	3.28E-03
2	1.4 MILES NNE	7/20/2009	278.5	1.79E-02	3.24E-03	3.42E-03
2	1.4 MILES NNE	7/27/2009	277.2	2.46E-02	3.58E-03	3.34E-03
2	1.4 MILES NNE	8/3/2009	278.8	1.31E-02	3.11E-03	3.71E-03
2	1.4 MILES NNE	8/10/2009	277.2	2.88E-02	3.80E-03	3.42E-03
2	1.4 MILES NNE	8/17/2009	278.1	2.66E-02	3.66E-03	3.31E-03
2	1.4 MILES NNE	8/24/2009	277.9	1.40E-02	3.05E-03	3.43E-03
2	1.4 MILES NNE	8/31/2009	277.6	2.53E-02	3.58E-03	3.26E-03
2	1.4 MILES NNE	9/8/2009	318.8	2.44E-02	3.24E-03	2.84E-03
2	1.4 MILES NNE	9/14/2009	239.2	2.51E-02	3.97E-03	3.87E-03
2	1.4 MILES NNE	9/21/2009	278.7	2.88E-02	3.76E-03	3.30E-03
2	1.4 MILES NNE	9/28/2009	276.8	1.11E-02	2.84E-03	3.35E-03
2	1.4 MILES NNE	10/5/2009	281.8	1.68E-02	3.06E-03	3.11E-03
2	1.4 MILES NNE	10/12/2009	277.9	1.89E-02	3.31E-03	3.43E-03
2	1.4 MILES NNE	10/19/2009	282.1	1.38E-02	3.02E-03	3.43E-03
2	1.4 MILES NNE	10/26/2009	281.1	2.09E-02	3.41E-03	3.44E-03
2	1.4 MILES NNE	11/2/2009	274.5	9.54E-03	2.72E-03	3.30E-03
2	1.4 MILES NNE	11/9/2009	277	2.92E-02	3.86E-03	3.52E-03
2	1.4 MILES NNE	11/16/2009	275.7	1.25E-02	2.92E-03	3.34E-03
2	1.4 MILES NNE	11/23/2009	276.5	2.33E-02	3.48E-03	3.25E-03
2	1.4 MILES NNE	11/30/2009	278.2	1.49E-02	2.95E-03	3.07E-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	1.4 MILES NNE	12/7/2009	278.6	1.20E-02	2.90E-03	3.38E-03
2	1.4 MILES NNE	12/14/2009	279.5	2.09E-02	3.37E-03	3.32E-03
2	1.4 MILES NNE	12/20/2009	239.7	2.10E-02	3.63E-03	3.53E-03
2	1.4 MILES NNE	12/28/2009	319	2.04E-02	3.03E-03	2.82E-03
4	3.1 MILES NNE	1/5/2009	271.8	2.26E-02	3.50E-03	3.38E-03
4	3.1 MILES NNE	1/12/2009	274.9	1.90E-02	3.16E-03	3.00E-03
4	3.1 MILES NNE	1/19/2009	279.3	2.23E-02	3.38E-03	3.19E-03
4	3.1 MILES NNE	1/26/2009	278	2.98E-02	3.74E-03	3.15E-03
4	3.1 MILES NNE	2/2/2009	276.5	2.69E-02	3.56E-03	2.98E-03
4	3.1 MILES NNE	2/9/2009	277.2	2.31E-02	3.46E-03	3.26E-03
4	3.1 MILES NNE	2/16/2009	273.9	2.81E-02	3.73E-03	3.30E-03
4	3.1 MILES NNE	2/23/2009	277.5	2.11E-02	3.42E-03	3.43E-03
4	3.1 MILES NNE	3/1/2009	238.4	2.16E-02	3.72E-03	3.71E-03
4	3.1 MILES NNE	3/9/2009	312.5	3.10E-02	3.56E-03	2.90E-03
4	3.1 MILES NNE	3/16/2009	273.9	1.37E-02	2.87E-03	3.04E-03
4	3.1 MILES NNE	3/23/2009	274.6	1.83E-02	3.20E-03	3.22E-03
4	3.1 MILES NNE	3/30/2009	273.2	1.72E-02	3.12E-03	3.16E-03
4	3.1 MILES NNE	4/6/2009	272.4	1.73E-02	3.28E-03	3.54E-03
4	3.1 MILES NNE	4/13/2009	274	1.82E-02	3.21E-03	3.25E-03
4	3.1 MILES NNE	4/20/2009	272.4	2.13E-02	3.43E-03	3.40E-03
4	3.1 MILES NNE	4/27/2009	301.8	2.00E-02	3.12E-03	3.00E-03
4	3.1 MILES NNE	5/4/2009	301.1	2.03E-02	3.12E-03	2.96E-03
4	3.1 MILES NNE	5/11/2009	298.3	1.17E-02	2.57E-03	2.77E-03
4	3.1 MILES NNE	5/18/2009	304.5	1.33E-02	2.71E-03	2.93E-03
4	3.1 MILES NNE	5/26/2009	342.6	1.10E-02	2.36E-03	2.60E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
4	3.1 MILES NNE	6/1/2009	255.7	1.67E-02	3.16E-03	3.17E-03
4	3.1 MILES NNE	6/8/2009	300	1.69E-02	2.93E-03	2.95E-03
4	3.1 MILES NNE	6/15/2009	299.1	1.48E-02	2.89E-03	3.12E-03
4	3.1 MILES NNE	6/22/2009	298.4	1.95E-02	3.07E-03	2.91E-03
4	3.1 MILES NNE	6/29/2009	298	2.31E-02	3.28E-03	2.99E-03
4	3.1 MILES NNE	7/6/2009	298.7	1.75E-02	3.07E-03	3.21E-03
4	3.1 MILES NNE	7/13/2009	300.4	1.66E-02	2.96E-03	3.06E-03
4	3.1 MILES NNE	7/20/2009	298.7	1.98E-02	3.19E-03	3.19E-03
4	3.1 MILES NNE	7/27/2009	297.7	2.24E-02	3.31E-03	3.11E-03
4	3.1 MILES NNE	8/3/2009	299.4	1.46E-02	3.03E-03	3.45E-03
4	3.1 MILES NNE	8/10/2009	298.2	2.52E-02	3.46E-03	3.18E-03
4	3.1 MILES NNE	8/17/2009	299.1	2.23E-02	3.28E-03	3.08E-03
4	3.1 MILES NNE	8/24/2009	298.8	1.46E-02	2.92E-03	3.19E-03
4	3.1 MILES NNE	8/31/2009	298.9	2.55E-02	3.42E-03	3.03E-03
4	3.1 MILES NNE	9/8/2009	343.3	2.00E-02	2.88E-03	2.64E-03
4	3.1 MILES NNE	9/14/2009	257.5	2.43E-02	3.75E-03	3.60E-03
4	3.1 MILES NNE	9/21/2009	300.4	2.53E-02	3.42E-03	3.06E-03
4	3.1 MILES NNE	9/28/2009	299	1.15E-02	2.70E-03	3.10E-03
4	3.1 MILES NNE	10/5/2009	303.4	1.28E-02	2.69E-03	2.89E-03
4	3.1 MILES NNE	10/12/2009	300.9	1.71E-02	3.04E-03	3.17E-03
4	3.1 MILES NNE	10/19/2009	303.6	1.46E-02	2.91E-03	3.19E-03
4	3.1 MILES NNE	10/26/2009	302.6	1.75E-02	3.07E-03	3.20E-03
4	3.1 MILES NNE	11/2/2009	270.4	9.87E-03	2.78E-03	3.35E-03
4	3.1 MILES NNE	11/9/2009	272	2.83E-02	3.86E-03	3.58E-03
4	3.1 MILES NNE	11/16/2009	269.3	1.68E-02	3.23E-03	3.42E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
4	3.1 MILES NNE	11/23/2009	270	2.34E-02	3.54E-03	3.33E-03
4	3.1 MILES NNE	11/30/2009	271.6	1.70E-02	3.13E-03	3.14E-03
4	3.1 MILES NNE	12/7/2009	272.6	1.36E-02	3.04E-03	3.45E-03
4	3.1 MILES NNE	12/14/2009	274	2.20E-02	3.47E-03	3.38E-03
4	3.1 MILES NNE	12/20/2009	235.3	2.29E-02	3.78E-03	3.60E-03
4	3.1 MILES NNE	12/28/2009	312.7	2.43E-02	3.26E-03	2.87E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	1/5/2009	282.1	1.85E-02	3.20E-03	3.26E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	1/12/2009	282.9	1.65E-02	2.96E-03	2.92E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	1/19/2009	286.7	2.51E-02	3.46E-03	3.11E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	1/26/2009	286	2.99E-02	3.68E-03	3.07E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	2/2/2009	284.5	2.31E-02	3.31E-03	2.90E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	2/9/2009	285.4	1.96E-02	3.21E-03	3.17E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	2/16/2009	281.9	2.32E-02	3.42E-03	3.21E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	2/23/2009	285.7	2.34E-02	3.46E-03	3.33E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	3/1/2009	245.3	2.14E-02	3.63E-03	3.60E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	3/9/2009	321.7	2.51E-02	3.23E-03	2.81E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	3/16/2009	282.5	1.29E-02	2.76E-03	2.95E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	3/23/2009	283.5	1.90E-02	3.17E-03	3.12E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	3/30/2009	264.4	1.87E-02	3.27E-03	3.26E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	4/6/2009	263.7	1.62E-02	3.29E-03	3.66E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	4/13/2009	265.9	1.99E-02	3.37E-03	3.35E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	4/20/2009	264.8	2.16E-02	3.51E-03	3.50E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	4/27/2009	288.3	2.57E-02	3.49E-03	3.14E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	5/4/2009	250.3	2.49E-02	3.78E-03	3.56E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	5/11/2009	251	1.62E-02	3.19E-03	3.29E-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	>12 MILES WNW - PITTSBORO - CONTROL	5/18/2009	249.7	1.21E-02	3.06E-03	3.57E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	5/26/2009	286.8	1.51E-02	2.94E-03	3.11E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	6/1/2009	214.2	1.59E-02	3.52E-03	3.78E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	6/8/2009	249.6	1.76E-02	3.38E-03	3.54E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	6/15/2009	251.4	1.14E-02	3.07E-03	3.71E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	6/22/2009	248.3	1.76E-02	3.37E-03	3.50E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	6/29/2009	248.7	1.76E-02	3.40E-03	3.58E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	7/6/2009	248.4	2.33E-02	3.81E-03	3.86E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	7/13/2009	249.7	1.74E-02	3.42E-03	3.68E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	7/20/2009	247	2.04E-02	3.66E-03	3.86E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	7/27/2009	247	2.34E-02	3.80E-03	3.75E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	8/3/2009	276.8	1.34E-02	3.14E-03	3.73E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	8/10/2009	276.1	2.53E-02	3.65E-03	3.43E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	8/17/2009	276.7	2.43E-02	3.56E-03	3.32E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	8/24/2009	275.9	1.18E-02	2.93E-03	3.46E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	8/31/2009	275.2	2.66E-02	3.67E-03	3.29E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	9/8/2009	315.7	2.20E-02	3.14E-03	2.87E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	9/14/2009	236	2.50E-02	4.01E-03	3.93E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	9/21/2009	274.8	1.89E-02	3.30E-03	3.35E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	9/28/2009	272	1.31E-02	3.00E-03	3.41E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	10/5/2009	278.7	1.62E-02	3.05E-03	3.14E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	10/12/2009	272.7	1.76E-02	3.29E-03	3.50E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	10/19/2009	276.6	9.56E-03	2.81E-03	3.50E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	10/26/2009	273.6	2.00E-02	3.43E-03	3.54E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	11/2/2009	286.6	7.60E-03	2.50E-03	3.16E-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	>12 MILES WNW - PITTSBORO - CONTROL	11/9/2009	287.1	3.05E-02	3.83E-03	3.40E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	11/16/2009	287.2	1.38E-02	2.91E-03	3.20E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	11/23/2009	285.6	2.28E-02	3.39E-03	3.15E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	11/30/2009	286.2	1.14E-02	2.68E-03	2.98E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	12/7/2009	284.8	1.35E-02	2.94E-03	3.30E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	12/14/2009	287.4	1.87E-02	3.19E-03	3.22E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	12/20/2009	246.7	2.33E-02	3.69E-03	3.43E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	12/28/2009	329.2	1.95E-02	2.92E-03	2.73E-03
26	4.7 MILES S	1/5/2009	261.5	1.90E-02	3.40E-03	3.51E-03
26	4.7 MILES S	1/12/2009	259.5	1.82E-02	3.24E-03	3.18E-03
26	4.7 MILES S	1/19/2009	264.2	2.40E-02	3.60E-03	3.37E-03
26	4.7 MILES S	1/26/2009	260.5	2.42E-02	3.62E-03	3.37E-03
26	4.7 MILES S	2/2/2009	258	2.57E-02	3.65E-03	3.20E-03
26	4.7 MILES S	2/9/2009	257.9	1.60E-02	3.24E-03	3.51E-03
26	4.7 MILES S	2/16/2009	255.8	2.45E-02	3.72E-03	3.54E-03
26	4.7 MILES S	2/23/2009	256.9	2.00E-02	3.54E-03	3.71E-03
26	4.7 MILES S	3/1/2009	220.2	2.08E-02	3.88E-03	4.01E-03
26	4.7 MILES S	3/9/2009	286.3	2.47E-02	3.46E-03	3.16E-03
26	4.7 MILES S	3/16/2009	252.3	1.95E-02	3.38E-03	3.30E-03
26	4.7 MILES S	3/23/2009	251.2	1.88E-02	3.43E-03	3.52E-03
26	4.7 MILES S	3/30/2009	250.2	2.09E-02	3.52E-03	3.45E-03
26	4.7 MILES S	4/6/2009	249.1	1.91E-02	3.60E-03	3.88E-03
26	4.7 MILES S	4/13/2009	250.4	1.87E-02	3.44E-03	3.56E-03
26	4.7 MILES S	4/20/2009	247.8	1.87E-02	3.52E-03	3.74E-03
26	4.7 MILES S	4/27/2009	280.4	2.27E-02	3.41E-03	3.23E-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	4.7 MILES S	5/4/2009	279.2	2.26E-02	3.40E-03	3.19E-03
26	4.7 MILES S	5/11/2009	279.7	1.46E-02	2.87E-03	2.95E-03
26	4.7 MILES S	5/18/2009	281	1.30E-02	2.86E-03	3.17E-03
26	4.7 MILES S	5/26/2009	320.1	1.14E-02	2.51E-03	2.78E-03
26	4.7 MILES S	6/1/2009	238.9	1.31E-02	3.08E-03	3.39E-03
26	4.7 MILES S	6/8/2009	277.2	1.78E-02	3.15E-03	3.19E-03
26	4.7 MILES S	6/15/2009	279.5	1.62E-02	3.11E-03	3.34E-03
26	4.7 MILES S	6/22/2009	276.5	1.72E-02	3.11E-03	3.14E-03
26	4.7 MILES S	6/29/2009	276.2	2.04E-02	3.31E-03	3.23E-03
26	4.7 MILES S	7/6/2009	276.8	1.80E-02	3.27E-03	3.46E-03
26	4.7 MILES S	7/13/2009	278	1.99E-02	3.31E-03	3.31E-03
26	4.7 MILES S	7/20/2009	276.4	1.68E-02	3.20E-03	3.45E-03
26	4.7 MILES S	7/27/2009	276	2.24E-02	3.48E-03	3.36E-03
26	4.7 MILES S	8/3/2009	277	1.25E-02	3.09E-03	3.73E-03
26	4.7 MILES S	8/10/2009	274.9	2.88E-02	3.82E-03	3.45E-03
26	4.7 MILES S	8/17/2009	276.7	2.29E-02	3.49E-03	3.32E-03
26	4.7 MILES S	8/24/2009	273.6	1.46E-02	3.12E-03	3.49E-03
26	4.7 MILES S	8/31/2009	275.9	2.26E-02	3.46E-03	3.28E-03
26	4.7 MILES S	9/8/2009	316.9	1.94E-02	3.00E-03	2.86E-03
26	4.7 MILES S	9/14/2009	237.9	2.42E-02	3.94E-03	3.90E-03
26	4.7 MILES S	9/21/2009	275.9	2.64E-02	3.67E-03	3.33E-03
26	4.7 MILES S	9/28/2009	272.7	1.16E-02	2.90E-03	3.40E-03
26	4.7 MILES S	10/5/2009	280.9	1.64E-02	3.05E-03	3.12E-03
26	4.7 MILES S	10/12/2009	275.9	1.18E-02	2.93E-03	3.46E-03
26	4.7 MILES S	10/19/2009	279.7	9.02E-03	2.75E-03	3.46E-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	4.7 MILES S	10/26/2009	276	1.83E-02	3.32E-03	3.51E-03
26	4.7 MILES S	11/2/2009	310	9.08E-03	2.45E-03	2.92E-03
26	4.7 MILES S	11/9/2009	297.7	2.95E-02	3.70E-03	3.27E-03
26	4.7 MILES S	11/16/2009	278.5	1.45E-02	3.02E-03	3.30E-03
26	4.7 MILES S	11/23/2009	278.2	2.24E-02	3.43E-03	3.23E-03
26	4.7 MILES S	11/30/2009	278.4	1.79E-02	3.13E-03	3.07E-03
26	4.7 MILES S	12/7/2009	280.2	1.02E-02	2.78E-03	3.36E-03
26	4.7 MILES S	12/14/2009	275.7	2.26E-02	3.49E-03	3.36E-03
26	4.7 MILES S	12/20/2009	236.9	2.07E-02	3.64E-03	3.57E-03
26	4.7 MILES S	12/28/2009	314.2	2.10E-02	3.09E-03	2.86E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/5/2009	285.5	1.98E-02	3.24E-03	3.22E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/12/2009	279.4	1.93E-02	3.14E-03	2.95E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/19/2009	287.4	2.54E-02	3.47E-03	3.10E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/26/2009	287.2	2.69E-02	3.53E-03	3.05E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/2/2009	285.7	2.19E-02	3.23E-03	2.89E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/9/2009	286	2.14E-02	3.30E-03	3.16E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/16/2009	285.3	2.32E-02	3.40E-03	3.17E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/23/2009	290.7	2.41E-02	3.46E-03	3.28E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/1/2009	244	1.84E-02	3.48E-03	3.62E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/9/2009	324.5	2.67E-02	3.29E-03	2.79E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/16/2009	286.4	1.30E-02	2.74E-03	2.91E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/23/2009	286.6	1.89E-02	3.14E-03	3.08E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/30/2009	286.7	1.91E-02	3.12E-03	3.01E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/6/2009	285.6	1.60E-02	3.10E-03	3.38E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/13/2009	258.6	1.97E-02	3.42E-03	3.45E-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	4/20/2009	258.4	2.15E-02	3.57E-03	3.58E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/27/2009	283.7	2.53E-02	3.51E-03	3.19E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/4/2009	282.5	2.15E-02	3.32E-03	3.15E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/11/2009	283.2	1.36E-02	2.78E-03	2.91E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/18/2009	284.5	1.53E-02	2.97E-03	3.13E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/26/2009	323.8	1.26E-02	2.56E-03	2.75E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/1/2009	242.5	1.59E-02	3.23E-03	3.34E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/8/2009	280.8	1.58E-02	3.01E-03	3.15E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/15/2009	283.1	1.66E-02	3.11E-03	3.29E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/22/2009	280.5	1.92E-02	3.19E-03	3.10E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/29/2009	280.7	2.27E-02	3.39E-03	3.17E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/6/2009	280.8	2.26E-02	3.47E-03	3.42E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/13/2009	282.9	2.43E-02	3.49E-03	3.25E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/20/2009	280.5	1.67E-02	3.16E-03	3.40E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/27/2009	279.7	2.29E-02	3.47E-03	3.31E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/3/2009	280.7	1.41E-02	3.15E-03	3.68E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/10/2009	279.1	2.77E-02	3.74E-03	3.40E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/17/2009	281.2	2.86E-02	3.73E-03	3.27E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/24/2009	277.8	1.38E-02	3.04E-03	3.44E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/31/2009	280.3	2.37E-02	3.48E-03	3.23E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/8/2009	321.9	2.42E-02	3.21E-03	2.81E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/14/2009	242.2	2.69E-02	4.03E-03	3.83E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/21/2009	281.4	2.68E-02	3.64E-03	3.27E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/28/2009	277.9	1.09E-02	2.82E-03	3.34E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/5/2009	286.3	1.98E-02	3.20E-03	3.06E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
47	SSW SECTOR 3.4 MI FROM SITE	10/12/2009	281.6	1.46E-02	3.05E-03	3.39E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/19/2009	286.2	1.35E-02	2.97E-03	3.38E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/26/2009	284.1	1.82E-02	3.25E-03	3.41E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/2/2009	288	1.22E-02	2.79E-03	3.14E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/9/2009	289.8	2.90E-02	3.74E-03	3.36E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/16/2009	290	1.37E-02	2.89E-03	3.17E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/23/2009	291.7	2.66E-02	3.52E-03	3.08E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/30/2009	291.6	1.75E-02	3.00E-03	2.93E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/7/2009	280.7	1.37E-02	2.99E-03	3.35E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/14/2009	267.9	1.98E-02	3.41E-03	3.46E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/20/2009	227	2.37E-02	3.92E-03	3.73E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/28/2009	310	2.28E-02	3.21E-03	2.90E-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	1/12/2009	1.00	5.64E+00	9.40E-01	8.08E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	1.00	4.86E+00	8.79E-01	7.59E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2009	1.00	3.96E+00	8.32E-01	8.02E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	1.00	5.70E+00	9.45E-01	8.22E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1.00	3.66E+00	8.13E-01	7.95E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	1.00	5.81E+00	9.70E-01	8.59E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	1.00	5.36E+00	9.24E-01	7.76E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1.00	6.26E+00	1.04E+00	7.96E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1.00	7.26E+00	1.13E+00	8.61E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1.00	7.71E+00	1.19E+00	9.66E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	1.00	6.89E+00	1.05E+00	7.76E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1.00	3.82E+00	8.51E-01	8.70E-01
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	1.00	5.15E+00	9.03E-01	7.98E-01
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	1.00	4.06E+00	8.18E-01	7.49E-01
40	LILLINGTON - CAPE FEAR RIVER	3/12/2009	1.00	4.79E+00	8.83E-01	7.97E-01
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1.00	4.62E+00	8.72E-01	8.14E-01
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1.00	3.20E+00	7.67E-01	7.77E-01
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	1.00	5.01E+00	9.17E-01	8.53E-01
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1.00	5.48E+00	9.11E-01	7.49E-01
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	1.00	5.74E+00	9.75E-01	7.62E-01
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	1.00	7.67E+00	1.15E+00	8.48E-01
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	1.00	6.96E+00	1.11E+00	9.13E-01
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1.00	7.98E+00	1.12E+00	7.82E-01
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	1.00	3.76E+00	8.28E-01	8.43E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/12/2009	1.00	3.26E+00	7.66E-01	7.83E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/9/2009	1.00	2.23E+00	6.45E-01	6.98E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2009	1.00	2.71E+00	7.27E-01	7.82E-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	4/13/2009	1.00	2.64E+00	7.27E-01	8.02E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/11/2009	1.00	1.34E+00	5.91E-01	7.42E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2009	1.00	3.84E+00	8.25E-01	8.30E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/13/2009	1.00	3.51E+00	7.69E-01	7.35E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2009	1.00	2.49E+00	6.74E-01	6.80E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/14/2009	1.00	3.46E+00	7.74E-01	7.24E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/12/2009	1.00	5.37E+00	9.58E-01	8.42E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2009	1.00	2.73E+00	7.28E-01	7.34E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/14/2009	1.00	4.80E+00	9.30E-01	8.90E-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	4.7 MILES S	1/12/2009	1.00	5.67E+00	9.33E-01	7.96E-01
26	4.7 MILES S	2/9/2009	1.00	5.44E+00	9.07E-01	7.47E-01
26	4.7 MILES S	3/12/2009	1.00	4.94E+00	8.80E-01	7.80E-01
26	4.7 MILES S	4/13/2009	1.00	5.72E+00	9.33E-01	8.04E-01
26	4.7 MILES S	5/11/2009	1.00	4.59E+00	8.45E-01	7.51E-01
26	4.7 MILES S	6/11/2009	1.00	6.39E+00	9.84E-01	8.32E-01
26	4.7 MILES S	7/13/2009	1.00	5.61E+00	9.03E-01	7.28E-01
26	4.7 MILES S	8/13/2009	1.00	4.70E+00	8.58E-01	7.02E-01
26	4.7 MILES S	9/14/2009	1.00	5.74E+00	9.44E-01	7.40E-01
26	4.7 MILES S	10/12/2009	1.00	7.07E+00	1.07E+00	8.48E-01
26	4.7 MILES S	11/12/2009	1.00	6.60E+00	9.96E-01	7.30E-01
26	4.7 MILES S	12/14/2009	1.00	4.99E+00	9.36E-01	8.81E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/12/2009	1.00	5.64E+00	9.40E-01	8.08E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	1.00	4.86E+00	8.79E-01	7.59E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2009	1.00	3.96E+00	8.32E-01	8.02E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	1.00	5.70E+00	9.45E-01	8.22E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1.00	3.66E+00	8.13E-01	7.95E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	1.00	5.81E+00	9.70E-01	8.59E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	1.00	5.36E+00	9.24E-01	7.76E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1.00	6.26E+00	1.04E+00	7.96E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1.00	7.26E+00	1.13E+00	8.61E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1.00	7.71E+00	1.19E+00	9.66E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	1.00	6.89E+00	1.05E+00	7.76E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1.00	3.82E+00	8.51E-01	8.70E-01
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	1.00	5.15E+00	9.03E-01	7.98E-01
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	1.00	4.06E+00	8.18E-01	7.49E-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	3/12/2009	1.00	4.79E+00	8.83E-01	7.97E-01
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1.00	4.62E+00	8.72E-01	8.14E-01
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1.00	3.20E+00	7.67E-01	7.77E-01
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	1.00	5.01E+00	9.17E-01	8.53E-01
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1.00	5.48E+00	9.11E-01	7.49E-01
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	1.00	5.74E+00	9.75E-01	7.62E-01
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	1.00	7.67E+00	1.15E+00	8.48E-01
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	1.00	6.96E+00	1.11E+00	9.13E-01
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1.00	7.98E+00	1.12E+00	7.82E-01
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	1.00	3.76E+00	8.28E-01	8.43E-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	1/5/2009	264.90	<LLD		1.97E-02
1	2.6 MILES N	1/12/2009	260.70	<LLD		2.26E-02
1	2.6 MILES N	1/19/2009	268.40	<LLD		2.27E-02
1	2.6 MILES N	1/26/2009	268.30	<LLD		2.71E-02
1	2.6 MILES N	2/2/2009	266.80	<LLD		1.80E-02
1	2.6 MILES N	2/9/2009	267.80	<LLD		2.16E-02
1	2.6 MILES N	2/16/2009	265.20	<LLD		1.98E-02
1	2.6 MILES N	2/23/2009	267.50	<LLD		2.47E-02
1	2.6 MILES N	3/1/2009	230.60	<LLD		3.14E-02
1	2.6 MILES N	3/9/2009	302.20	<LLD		2.02E-02
1	2.6 MILES N	3/16/2009	366.60	<LLD		1.96E-02
1	2.6 MILES N	3/23/2009	261.80	<LLD		2.46E-02
1	2.6 MILES N	3/30/2009	255.50	<LLD		2.18E-02
1	2.6 MILES N	4/6/2009	254.80	<LLD		2.35E-02
1	2.6 MILES N	4/13/2009	256.40	<LLD		2.42E-02
1	2.6 MILES N	4/20/2009	255.40	<LLD		2.78E-02
1	2.6 MILES N	4/27/2009	277.30	<LLD		2.53E-02
1	2.6 MILES N	5/4/2009	276.70	<LLD		1.68E-02
1	2.6 MILES N	5/11/2009	276.50	<LLD		2.76E-02
1	2.6 MILES N	5/18/2009	280.50	<LLD		1.78E-02
1	2.6 MILES N	5/26/2009	315.70	<LLD		2.04E-02
1	2.6 MILES N	6/1/2009	235.10	<LLD		2.56E-02
1	2.6 MILES N	6/8/2009	276.00	<LLD		2.09E-02
1	2.6 MILES N	6/15/2009	276.30	<LLD		2.11E-02
1	2.6 MILES N	6/22/2009	275.60	<LLD		1.79E-02
1	2.6 MILES N	6/29/2009	275.30	<LLD		2.53E-02
1	2.6 MILES N	7/6/2009	275.70	<LLD		2.05E-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	7/13/2009	277.70	<LLD		1.96E-02
1	2.6 MILES N	7/20/2009	276.50	<LLD		1.91E-02
1	2.6 MILES N	7/27/2009	276.80	<LLD		2.49E-02
1	2.6 MILES N	8/3/2009	277.30	<LLD		2.35E-02
1	2.6 MILES N	8/10/2009	276.90	<LLD		2.24E-02
1	2.6 MILES N	8/17/2009	277.70	<LLD		2.16E-02
1	2.6 MILES N	8/24/2009	277.40	<LLD		2.75E-02
1	2.6 MILES N	8/31/2009	277.50	<LLD		2.62E-02
1	2.6 MILES N	9/8/2009	318.70	<LLD		2.28E-02
1	2.6 MILES N	9/14/2009	239.00	<LLD		1.86E-02
1	2.6 MILES N	9/21/2009	278.40	<LLD		2.16E-02
1	2.6 MILES N	9/28/2009	277.10	<LLD		1.86E-02
1	2.6 MILES N	10/5/2009	279.90	<LLD		2.15E-02
1	2.6 MILES N	10/12/2009	276.00	<LLD		2.22E-02
1	2.6 MILES N	10/19/2009	279.70	<LLD		2.10E-02
1	2.6 MILES N	10/26/2009	277.80	<LLD		2.11E-02
1	2.6 MILES N	11/2/2009	277.70	<LLD		2.06E-02
1	2.6 MILES N	11/9/2009	278.90	<LLD		1.59E-02
1	2.6 MILES N	11/16/2009	277.10	<LLD		2.16E-02
1	2.6 MILES N	11/23/2009	277.40	<LLD		2.09E-02
1	2.6 MILES N	11/30/2009	278.50	<LLD		2.41E-02
1	2.6 MILES N	12/7/2009	279.30	<LLD		2.64E-02
1	2.6 MILES N	12/14/2009	280.70	<LLD		1.90E-02
1	2.6 MILES N	12/20/2009	240.80	<LLD		2.35E-02
1	2.6 MILES N	12/28/2009	321.00	<LLD		1.43E-02
2	1.4 MILES NNE	1/5/2009	264.70	<LLD		1.78E-02
2	1.4 MILES NNE	1/12/2009	262.80	<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*
2	1.4 MILES NNE	1/19/2009	265.60	<LLD		1.94E-02
2	1.4 MILES NNE	1/26/2009	264.00	<LLD		1.82E-02
2	1.4 MILES NNE	2/2/2009	262.90	<LLD		2.05E-02
2	1.4 MILES NNE	2/9/2009	263.90	<LLD		2.14E-02
2	1.4 MILES NNE	2/16/2009	261.30	<LLD		1.97E-02
2	1.4 MILES NNE	2/23/2009	263.60	<LLD		2.08E-02
2	1.4 MILES NNE	3/1/2009	226.60	<LLD		2.48E-02
2	1.4 MILES NNE	3/9/2009	297.30	<LLD		1.80E-02
2	1.4 MILES NNE	3/16/2009	260.70	<LLD		2.22E-02
2	1.4 MILES NNE	3/23/2009	261.10	<LLD		2.17E-02
2	1.4 MILES NNE	3/30/2009	259.40	<LLD		2.47E-02
2	1.4 MILES NNE	4/6/2009	257.70	<LLD		2.41E-02
2	1.4 MILES NNE	4/13/2009	259.30	<LLD		2.11E-02
2	1.4 MILES NNE	4/20/2009	257.50	<LLD		2.00E-02
2	1.4 MILES NNE	4/27/2009	280.10	<LLD		1.96E-02
2	1.4 MILES NNE	5/4/2009	279.60	<LLD		1.59E-02
2	1.4 MILES NNE	5/11/2009	279.10	<LLD		1.88E-02
2	1.4 MILES NNE	5/18/2009	282.60	<LLD		2.68E-02
2	1.4 MILES NNE	5/26/2009	317.70	<LLD		2.17E-02
2	1.4 MILES NNE	6/1/2009	238.00	<LLD		3.06E-02
2	1.4 MILES NNE	6/8/2009	280.70	<LLD		2.06E-02
2	1.4 MILES NNE	6/15/2009	281.60	<LLD		2.10E-02
2	1.4 MILES NNE	6/22/2009	278.60	<LLD		1.26E-02
2	1.4 MILES NNE	6/29/2009	278.30	<LLD		2.17E-02
2	1.4 MILES NNE	7/6/2009	278.50	<LLD		1.85E-02
2	1.4 MILES NNE	7/13/2009	280.30	<LLD		1.69E-02
2	1.4 MILES NNE	7/20/2009	278.50	<LLD		2.07E-02

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
2	1.4 MILES NNE	7/27/2009	277.20	<LLD		2.00E-02
2	1.4 MILES NNE	8/3/2009	278.80	<LLD		2.14E-02
2	1.4 MILES NNE	8/10/2009	277.20	<LLD		1.80E-02
2	1.4 MILES NNE	8/17/2009	278.10	<LLD		1.77E-02
2	1.4 MILES NNE	8/24/2009	277.90	<LLD		1.85E-02
2	1.4 MILES NNE	8/31/2009	277.60	<LLD		2.09E-02
2	1.4 MILES NNE	9/8/2009	318.80	<LLD		1.88E-02
2	1.4 MILES NNE	9/14/2009	239.20	<LLD		2.27E-02
2	1.4 MILES NNE	9/21/2009	278.70	<LLD		2.50E-02
2	1.4 MILES NNE	9/28/2009	276.80	<LLD		2.04E-02
2	1.4 MILES NNE	10/5/2009	281.80	<LLD		1.71E-02
2	1.4 MILES NNE	10/12/2009	277.90	<LLD		2.29E-02
2	1.4 MILES NNE	10/19/2009	282.10	<LLD		1.82E-02
2	1.4 MILES NNE	10/26/2009	281.10	<LLD		2.09E-02
2	1.4 MILES NNE	11/2/2009	274.50	<LLD		1.88E-02
2	1.4 MILES NNE	11/9/2009	277.00	<LLD		2.19E-02
2	1.4 MILES NNE	11/16/2009	275.70	<LLD		1.70E-02
2	1.4 MILES NNE	11/23/2009	276.50	<LLD		1.96E-02
2	1.4 MILES NNE	11/30/2009	278.20	<LLD		1.59E-02
2	1.4 MILES NNE	12/7/2009	278.60	<LLD		2.00E-02
2	1.4 MILES NNE	12/14/2009	279.50	<LLD		1.44E-02
2	1.4 MILES NNE	12/20/2009	239.70	<LLD		2.57E-02
2	1.4 MILES NNE	12/28/2009	319.00	<LLD		1.73E-02
4	3.1 MILES NNE	1/5/2009	271.80	<LLD		1.73E-02
4	3.1 MILES NNE	1/12/2009	274.90	<LLD		1.67E-02
4	3.1 MILES NNE	1/19/2009	279.30	<LLD		2.12E-02
4	3.1 MILES NNE	1/26/2009	278.00	<LLD		2.69E-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	3.1 MILES NNE	2/2/2009	276.50	<LLD		2.13E-02
4	3.1 MILES NNE	2/9/2009	277.20	<LLD		2.17E-02
4	3.1 MILES NNE	2/16/2009	273.90	<LLD		2.70E-02
4	3.1 MILES NNE	2/23/2009	277.50	<LLD		1.91E-02
4	3.1 MILES NNE	3/1/2009	238.40	<LLD		2.41E-02
4	3.1 MILES NNE	3/9/2009	312.50	<LLD		1.33E-02
4	3.1 MILES NNE	3/16/2009	273.90	<LLD		1.54E-02
4	3.1 MILES NNE	3/23/2009	274.60	<LLD		2.08E-02
4	3.1 MILES NNE	3/30/2009	273.20	<LLD		2.12E-02
4	3.1 MILES NNE	4/6/2009	272.40	<LLD		1.98E-02
4	3.1 MILES NNE	4/13/2009	274.00	<LLD		1.69E-02
4	3.1 MILES NNE	4/20/2009	272.40	<LLD		1.38E-02
4	3.1 MILES NNE	4/27/2009	301.80	<LLD		1.67E-02
4	3.1 MILES NNE	5/4/2009	301.10	<LLD		1.73E-02
4	3.1 MILES NNE	5/11/2009	298.30	<LLD		2.35E-02
4	3.1 MILES NNE	5/18/2009	304.50	<LLD		1.65E-02
4	3.1 MILES NNE	5/26/2009	342.60	<LLD		1.25E-02
4	3.1 MILES NNE	6/1/2009	255.70	<LLD		2.40E-02
4	3.1 MILES NNE	6/8/2009	300.00	<LLD		1.78E-02
4	3.1 MILES NNE	6/15/2009	299.10	<LLD		2.00E-02
4	3.1 MILES NNE	6/22/2009	298.40	<LLD		1.69E-02
4	3.1 MILES NNE	6/29/2009	298.00	<LLD		1.75E-02
4	3.1 MILES NNE	7/6/2009	298.70	<LLD		1.85E-02
4	3.1 MILES NNE	7/13/2009	300.40	<LLD		1.66E-02
4	3.1 MILES NNE	7/20/2009	298.70	<LLD		1.34E-02
4	3.1 MILES NNE	7/27/2009	297.70	<LLD		1.41E-02
4	3.1 MILES NNE	8/3/2009	299.40	<LLD		2.15E-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	3.1 MILES NNE	8/10/2009	298.20	<LLD		2.01E-02
4	3.1 MILES NNE	8/17/2009	299.10	<LLD		1.34E-02
4	3.1 MILES NNE	8/24/2009	298.80	<LLD		2.15E-02
4	3.1 MILES NNE	8/31/2009	298.90	<LLD		2.15E-02
4	3.1 MILES NNE	9/8/2009	343.30	<LLD		1.71E-02
4	3.1 MILES NNE	9/14/2009	257.50	<LLD		1.50E-02
4	3.1 MILES NNE	9/21/2009	300.40	<LLD		1.84E-02
4	3.1 MILES NNE	9/28/2009	299.00	<LLD		1.79E-02
4	3.1 MILES NNE	10/5/2009	303.40	<LLD		2.02E-02
4	3.1 MILES NNE	10/12/2009	300.90	<LLD		1.65E-02
4	3.1 MILES NNE	10/19/2009	303.60	<LLD		2.01E-02
4	3.1 MILES NNE	10/26/2009	302.60	<LLD		1.91E-02
4	3.1 MILES NNE	11/2/2009	270.40	<LLD		2.01E-02
4	3.1 MILES NNE	11/9/2009	272.00	<LLD		2.13E-02
4	3.1 MILES NNE	11/16/2009	269.30	<LLD		1.98E-02
4	3.1 MILES NNE	11/23/2009	270.00	<LLD		1.98E-02
4	3.1 MILES NNE	11/30/2009	271.60	<LLD		2.25E-02
4	3.1 MILES NNE	12/7/2009	272.60	<LLD		2.12E-02
4	3.1 MILES NNE	12/14/2009	274.00	<LLD		1.47E-02
4	3.1 MILES NNE	12/20/2009	235.30	<LLD		1.84E-02
4	3.1 MILES NNE	12/28/2009	312.70	<LLD		1.78E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	1/5/2009	282.10	<LLD		2.20E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	1/12/2009	282.90	<LLD		1.56E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	1/19/2009	286.70	<LLD		1.85E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	1/26/2009	286.00	<LLD		1.61E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	2/2/2009	284.50	<LLD		1.59E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	2/9/2009	285.40	<LLD		2.05E-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	>12 MILES WNW - PITTSBORO - CONTROL	2/16/2009	281.90	<LLD		1.95E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	2/23/2009	285.70	<LLD		2.27E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	3/1/2009	245.30	<LLD		2.86E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	3/9/2009	321.70	<LLD		2.13E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	3/16/2009	282.50	<LLD		2.26E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	3/23/2009	283.50	<LLD		2.37E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	3/30/2009	264.40	<LLD		1.99E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	4/6/2009	263.70	<LLD		1.67E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	4/13/2009	265.90	<LLD		1.98E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	4/20/2009	264.80	<LLD		2.21E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	4/27/2009	288.30	<LLD		1.78E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/4/2009	250.30	<LLD		2.21E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/11/2009	251.00	<LLD		2.04E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/18/2009	249.70	<LLD		2.33E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/26/2009	286.80	<LLD		2.43E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/1/2009	214.20	<LLD		2.66E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/8/2009	249.60	<LLD		2.25E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/15/2009	251.40	<LLD		2.34E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/22/2009	248.30	<LLD		1.85E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/29/2009	248.70	<LLD		2.28E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/6/2009	248.40	<LLD		1.78E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/13/2009	249.70	<LLD		2.00E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/20/2009	247.00	<LLD		2.02E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/27/2009	247.00	<LLD		2.44E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/3/2009	276.80	<LLD		1.81E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/10/2009	276.10	<LLD		2.00E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/17/2009	276.70	<LLD		2.20E-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	>12 MILES WNW - PITTSBORO - CONTROL	8/24/2009	275.90	<LLD		1.94E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/31/2009	275.20	<LLD		1.98E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/8/2009	315.70	<LLD		1.69E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/14/2009	236.00	<LLD		1.82E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/21/2009	274.80	<LLD		2.39E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/28/2009	272.00	<LLD		2.32E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/5/2009	278.70	<LLD		1.66E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/12/2009	272.70	<LLD		1.94E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/19/2009	276.60	<LLD		2.27E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/26/2009	273.60	<LLD		2.27E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	11/2/2009	286.60	<LLD		1.98E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	11/9/2009	287.10	<LLD		2.08E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	11/16/2009	287.20	<LLD		2.08E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	11/23/2009	285.60	<LLD		2.17E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	11/30/2009	286.20	<LLD		2.75E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	12/7/2009	284.80	<LLD		2.17E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	12/14/2009	287.40	<LLD		1.32E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	12/20/2009	246.70	<LLD		2.49E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	12/28/2009	329.20	<LLD		1.82E-02
26	4.7 MILES S	1/5/2009	261.50	<LLD		2.31E-02
26	4.7 MILES S	1/12/2009	259.50	<LLD		2.10E-02
26	4.7 MILES S	1/19/2009	264.20	<LLD		2.18E-02
26	4.7 MILES S	1/26/2009	260.50	<LLD		2.27E-02
26	4.7 MILES S	2/2/2009	258.00	<LLD		2.30E-02
26	4.7 MILES S	2/9/2009	257.90	<LLD		2.04E-02
26	4.7 MILES S	2/16/2009	255.80	<LLD		2.37E-02
26	4.7 MILES S	2/23/2009	256.90	<LLD		1.99E-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	4.7 MILES S	3/1/2009	220.20	<LLD		3.07E-02
26	4.7 MILES S	3/9/2009	286.30	<LLD		2.23E-02
26	4.7 MILES S	3/16/2009	252.30	<LLD		2.11E-02
26	4.7 MILES S	3/23/2009	251.20	<LLD		2.45E-02
26	4.7 MILES S	3/30/2009	250.20	<LLD		2.62E-02
26	4.7 MILES S	4/6/2009	249.10	<LLD		2.00E-02
26	4.7 MILES S	4/13/2009	250.40	<LLD		2.45E-02
26	4.7 MILES S	4/20/2009	247.80	<LLD		2.80E-02
26	4.7 MILES S	4/27/2009	280.40	<LLD		1.90E-02
26	4.7 MILES S	5/4/2009	279.20	<LLD		2.48E-02
26	4.7 MILES S	5/11/2009	279.70	<LLD		2.20E-02
26	4.7 MILES S	5/18/2009	281.00	<LLD		2.09E-02
26	4.7 MILES S	5/26/2009	320.10	<LLD		1.43E-02
26	4.7 MILES S	6/1/2009	238.90	<LLD		1.85E-02
26	4.7 MILES S	6/8/2009	277.20	<LLD		2.25E-02
26	4.7 MILES S	6/15/2009	279.50	<LLD		1.88E-02
26	4.7 MILES S	6/22/2009	276.50	<LLD		2.08E-02
26	4.7 MILES S	6/29/2009	276.20	<LLD		2.36E-02
26	4.7 MILES S	7/6/2009	276.80	<LLD		1.98E-02
26	4.7 MILES S	7/13/2009	278.00	<LLD		1.82E-02
26	4.7 MILES S	7/20/2009	276.40	<LLD		1.85E-02
26	4.7 MILES S	7/27/2009	276.00	<LLD		1.87E-02
26	4.7 MILES S	8/3/2009	277.00	<LLD		2.33E-02
26	4.7 MILES S	8/10/2009	274.90	<LLD		2.20E-02
26	4.7 MILES S	8/17/2009	276.70	<LLD		2.30E-02
26	4.7 MILES S	8/24/2009	273.60	<LLD		2.56E-02
26	4.7 MILES S	8/31/2009	275.90	<LLD		1.65E-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	4.7 MILES S	9/8/2009	316.90	<LLD		1.71E-02
26	4.7 MILES S	9/14/2009	237.90	<LLD		2.27E-02
26	4.7 MILES S	9/21/2009	275.90	<LLD		2.39E-02
26	4.7 MILES S	9/28/2009	272.70	<LLD		2.45E-02
26	4.7 MILES S	10/5/2009	280.90	<LLD		1.99E-02
26	4.7 MILES S	10/12/2009	275.90	<LLD		2.71E-02
26	4.7 MILES S	10/19/2009	279.70	<LLD		2.19E-02
26	4.7 MILES S	10/26/2009	276.00	<LLD		2.41E-02
26	4.7 MILES S	11/2/2009	310.00	<LLD		1.59E-02
26	4.7 MILES S	11/9/2009	297.70	<LLD		1.53E-02
26	4.7 MILES S	11/16/2009	278.50	<LLD		1.92E-02
26	4.7 MILES S	11/23/2009	278.20	<LLD		1.96E-02
26	4.7 MILES S	11/30/2009	278.40	<LLD		2.26E-02
26	4.7 MILES S	12/7/2009	280.20	<LLD		1.49E-02
26	4.7 MILES S	12/14/2009	275.70	<LLD		2.08E-02
26	4.7 MILES S	12/20/2009	236.90	<LLD		2.33E-02
26	4.7 MILES S	12/28/2009	314.20	<LLD		1.52E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/5/2009	285.50	<LLD		1.65E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/12/2009	279.40	<LLD		2.21E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/19/2009	287.40	<LLD		1.66E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/26/2009	287.20	<LLD		2.07E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/2/2009	285.70	<LLD		1.87E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/9/2009	286.00	<LLD		1.60E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/16/2009	285.30	<LLD		2.31E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/23/2009	290.70	<LLD		2.35E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/1/2009	244.00	<LLD		2.28E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/9/2009	324.50	<LLD		2.02E-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	3/16/2009	286.40	<LLD		1.53E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/23/2009	286.60	<LLD		1.73E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/30/2009	286.70	<LLD		1.86E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/6/2009	285.60	<LLD		2.08E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/13/2009	258.60	<LLD		2.33E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/20/2009	258.40	<LLD		2.14E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/27/2009	283.70	<LLD		2.02E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/4/2009	282.50	<LLD		2.02E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/11/2009	283.20	<LLD		1.77E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/18/2009	284.50	<LLD		1.69E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/26/2009	323.80	<LLD		3.10E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/1/2009	242.50	<LLD		3.05E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/8/2009	280.80	<LLD		2.37E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/15/2009	283.10	<LLD		2.37E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/22/2009	280.50	<LLD		1.89E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/29/2009	280.70	<LLD		2.03E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/6/2009	280.80	<LLD		2.28E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/13/2009	282.90	<LLD		1.97E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/20/2009	280.50	<LLD		2.23E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/27/2009	279.70	<LLD		1.89E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/3/2009	280.70	<LLD		1.57E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/10/2009	279.10	<LLD		1.83E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/17/2009	281.20	<LLD		1.47E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/24/2009	277.80	<LLD		2.01E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/31/2009	280.30	<LLD		2.34E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/8/2009	321.90	<LLD		1.92E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/14/2009	242.20	<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*
47	SSW SECTOR 3.4 MI FROM SITE	9/21/2009	281.40	<LLD		1.66E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/28/2009	277.90	<LLD		1.27E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/5/2009	286.30	<LLD		1.40E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/12/2009	281.60	<LLD		2.06E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/19/2009	286.20	<LLD		1.74E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/26/2009	284.10	<LLD		1.80E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/2/2009	288.00	<LLD		2.22E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/9/2009	289.80	<LLD		1.89E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/16/2009	290.00	<LLD		2.02E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/23/2009	291.70	<LLD		2.26E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/30/2009	291.60	<LLD		1.84E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/7/2009	280.70	<LLD		2.30E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/14/2009	267.90	<LLD		2.16E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/20/2009	227.00	<LLD		2.60E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/28/2009	310.00	<LLD		2.12E-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	1/5/2009	4.00			5.03E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/19/2009	4.00			5.75E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/2/2009	4.00			5.57E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/16/2009	4.00			6.17E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/2/2009	4.00			6.15E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/16/2009	4.00	6.01E-01	3.55E-01	
38	CAPE FEAR PLANT INTAKE - CONTROL	3/30/2009	4.00	5.10E-01	3.21E-01	
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	4.00			6.03E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/27/2009	4.00			4.84E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	4.00			5.07E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/25/2009	4.00			6.63E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/8/2009	4.00			5.34E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/22/2009	4.00			5.03E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/6/2009	4.00			5.34E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/20/2009	4.00			4.86E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/3/2009	4.00			4.84E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/17/2009	4.00			4.60E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/31/2009	4.00			6.22E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	4.00			5.37E-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	9/28/2009	4.00			3.79E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	4.00			5.88E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/26/2009	4.00			5.91E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/9/2009	4.00			5.32E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/23/2009	4.00			5.83E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/7/2009	4.00			5.84E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/21/2009	4.00			6.83E-01
40	LILLINGTON - CAPE FEAR RIVER	1/5/2009	4.00			4.64E-01
40	LILLINGTON - CAPE FEAR RIVER	1/19/2009	4.00			5.04E-01
40	LILLINGTON - CAPE FEAR RIVER	2/2/2009	4.00			4.82E-01
40	LILLINGTON - CAPE FEAR RIVER	2/16/2009	4.00			5.33E-01
40	LILLINGTON - CAPE FEAR RIVER	3/2/2009	4.00			4.40E-01
40	LILLINGTON - CAPE FEAR RIVER	3/16/2009	4.00			6.36E-01
40	LILLINGTON - CAPE FEAR RIVER	3/30/2009	4.00			4.43E-01
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	4.00			5.18E-01
40	LILLINGTON - CAPE FEAR RIVER	4/27/2009	4.00			5.66E-01
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	4.00			5.42E-01
40	LILLINGTON - CAPE FEAR RIVER	5/25/2009	4.00			5.67E-01
40	LILLINGTON - CAPE FEAR RIVER	6/8/2009	4.00			5.22E-01

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
40	LILLINGTON - CAPE FEAR RIVER	6/22/2009	4.00			5.40E-01
40	LILLINGTON - CAPE FEAR RIVER	7/6/2009	4.00			5.74E-01
40	LILLINGTON - CAPE FEAR RIVER	7/20/2009	4.00			4.47E-01
40	LILLINGTON - CAPE FEAR RIVER	8/3/2009	4.00			5.42E-01
40	LILLINGTON - CAPE FEAR RIVER	8/17/2009	4.00			5.60E-01
40	LILLINGTON - CAPE FEAR RIVER	8/31/2009	4.00			5.42E-01
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	4.00			5.02E-01
40	LILLINGTON - CAPE FEAR RIVER	9/28/2009	4.00			4.68E-01
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	4.00			4.57E-01
40	LILLINGTON - CAPE FEAR RIVER	10/26/2009	4.00			4.93E-01
40	LILLINGTON - CAPE FEAR RIVER	11/9/2009	4.00			5.90E-01
40	LILLINGTON - CAPE FEAR RIVER	11/23/2009	4.00			4.63E-01
40	LILLINGTON - CAPE FEAR RIVER	12/7/2009	4.00			4.94E-01
40	LILLINGTON - CAPE FEAR RIVER	12/21/2009	4.00			4.48E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/5/2009	4.00			7.22E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/19/2009	4.00			4.67E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/2/2009	4.00			4.52E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/16/2009	4.00			4.75E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/2/2009	4.00			5.72E-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	3/16/2009	4.00			4.51E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/30/2009	4.00			4.56E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/13/2009	4.00			5.17E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/27/2009	4.00			5.17E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/11/2009	4.00			7.28E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/25/2009	4.00			5.63E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/8/2009	4.00			5.61E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/22/2009	4.00			5.54E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/6/2009	4.00			4.73E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/20/2009	4.00			5.12E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/3/2009	4.00			4.54E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/17/2009	4.00			4.40E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/31/2009	4.00			4.72E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/14/2009	4.00			7.62E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/28/2009	4.00			4.20E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/12/2009	4.00			5.04E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/26/2009	4.00			4.53E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/9/2009	4.00			4.66E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/23/2009	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	12/7/2009	4.00			4.46E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/21/2009	4.00			4.58E-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	>12 MILES WNW - PITTSBORO - CONTROL	1/5/2009	4.00	<LLD		4.09E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	2/2/2009	4.00	<LLD		4.15E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	3/2/2009	4.00	<LLD		3.01E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	4/6/2009	4.00	<LLD		4.41E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/4/2009	4.00	<LLD		3.18E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/1/2009	4.00	<LLD		4.91E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/6/2009	4.00	<LLD		2.75E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/3/2009	4.00	<LLD		3.10E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/8/2009	4.00	<LLD		2.60E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/5/2009	4.00	<LLD		2.87E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	11/2/2009	4.00	<LLD		3.47E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	12/7/2009	4.00	<LLD		3.09E-01

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
38	CAPE FEAR PLANT INTAKE - CONTROL	1/5/2009	4.00			5.03E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/19/2009	4.00			5.75E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/2/2009	4.00			5.57E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/16/2009	4.00			6.17E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/2/2009	4.00			6.15E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/16/2009	4.00	6.01E-01	3.55E-01	
38	CAPE FEAR PLANT INTAKE - CONTROL	3/30/2009	4.00	5.10E-01	3.21E-01	
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	4.00			6.03E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/27/2009	4.00			4.84E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	4.00			5.07E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/25/2009	4.00			6.63E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/8/2009	4.00			5.34E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/22/2009	4.00			5.03E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/6/2009	4.00			5.34E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/20/2009	4.00			4.86E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/3/2009	4.00			4.84E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/17/2009	4.00			4.60E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/31/2009	4.00			6.22E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	4.00			5.37E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/28/2009	4.00			3.79E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	4.00			5.88E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/26/2009	4.00			5.91E-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	11/9/2009	4.00			5.32E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/23/2009	4.00			5.83E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/7/2009	4.00			5.84E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/21/2009	4.00			6.83E-01
40	LILLINGTON - CAPE FEAR RIVER	1/5/2009	4.00			4.64E-01
40	LILLINGTON - CAPE FEAR RIVER	1/19/2009	4.00			5.04E-01
40	LILLINGTON - CAPE FEAR RIVER	2/2/2009	4.00			4.82E-01
40	LILLINGTON - CAPE FEAR RIVER	2/16/2009	4.00			5.33E-01
40	LILLINGTON - CAPE FEAR RIVER	3/2/2009	4.00			4.40E-01
40	LILLINGTON - CAPE FEAR RIVER	3/16/2009	4.00			6.36E-01
40	LILLINGTON - CAPE FEAR RIVER	3/30/2009	4.00			4.43E-01
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	4.00			5.18E-01
40	LILLINGTON - CAPE FEAR RIVER	4/27/2009	4.00			5.66E-01
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	4.00			5.42E-01
40	LILLINGTON - CAPE FEAR RIVER	5/25/2009	4.00			5.67E-01
40	LILLINGTON - CAPE FEAR RIVER	6/8/2009	4.00			5.22E-01
40	LILLINGTON - CAPE FEAR RIVER	6/22/2009	4.00			5.40E-01
40	LILLINGTON - CAPE FEAR RIVER	7/6/2009	4.00			5.74E-01
40	LILLINGTON - CAPE FEAR RIVER	7/20/2009	4.00			4.47E-01
40	LILLINGTON - CAPE FEAR RIVER	8/3/2009	4.00			5.42E-01
40	LILLINGTON - CAPE FEAR RIVER	8/17/2009	4.00			5.60E-01
40	LILLINGTON - CAPE FEAR RIVER	8/31/2009	4.00			5.42E-01

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	4.00			5.02E-01
40	LILLINGTON - CAPE FEAR RIVER	9/28/2009	4.00			4.68E-01
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	4.00			4.57E-01
40	LILLINGTON - CAPE FEAR RIVER	10/26/2009	4.00			4.93E-01
40	LILLINGTON - CAPE FEAR RIVER	11/9/2009	4.00			5.90E-01
40	LILLINGTON - CAPE FEAR RIVER	11/23/2009	4.00			4.63E-01
40	LILLINGTON - CAPE FEAR RIVER	12/7/2009	4.00			4.94E-01
40	LILLINGTON - CAPE FEAR RIVER	12/21/2009	4.00			4.48E-01

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Tritium

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
38	CAPE FEAR PLANT INTAKE - CONTROL	1/12/2009	0.005	<LLD		2.45E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	0.005	<LLD		2.36E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2009	0.005	<LLD		2.34E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	0.005	<LLD		2.31E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	0.005	<LLD		2.32E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	0.005	<LLD		2.36E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	0.005	<LLD		2.30E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	0.005	<LLD		2.29E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	0.005	<LLD		2.31E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	0.005	<LLD		2.39E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	0.005	<LLD		2.32E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	0.005	<LLD		2.36E+02
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	0.005	<LLD		2.44E+02
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	0.005	<LLD		2.37E+02
40	LILLINGTON - CAPE FEAR RIVER	3/12/2009	0.005	<LLD		2.33E+02
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	0.005	<LLD		2.31E+02
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	0.005	<LLD		2.31E+02
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	0.005	<LLD		2.37E+02
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	0.005	<LLD		2.32E+02
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	0.005	<LLD		2.32E+02
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	0.005	<LLD		2.31E+02
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	0.005	<LLD		2.40E+02
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	0.005	<LLD		2.32E+02
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	0.005	<LLD		2.35E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/12/2009	0.005	5.44E+03	1.95E+02	2.45E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/9/2009	0.005	5.47E+03	1.90E+02	2.36E+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	3/12/2009	0.005	5.55E+03	1.89E+02	2.33E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/13/2009	0.005	3.85E+03	1.75E+02	2.31E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/11/2009	0.005	3.17E+03	1.69E+02	2.31E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2009	0.005	3.18E+03	1.73E+02	2.37E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/13/2009	0.005	3.95E+03	1.76E+02	2.31E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2009	0.005	3.05E+03	1.67E+02	2.29E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/14/2009	0.005	2.87E+03	1.67E+02	2.32E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/12/2009	0.005	3.97E+03	1.79E+02	2.38E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2009	0.005	3.86E+03	1.76E+02	2.33E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/14/2009	0.005	3.05E+03	1.70E+02	2.35E+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	2/24/2009	0.005	<LLD		2.35E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	2/24/2009	0.005	<LLD		2.34E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	5/20/2009	0.005	<LLD		2.32E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	8/25/2009	0.005	<LLD		2.31E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	11/10/2009	0.005	<LLD		2.34E+02
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	2/24/2009	0.005	<LLD		2.35E+02
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	5/20/2009	0.005	<LLD		2.33E+02
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	8/25/2009	0.005	<LLD		2.32E+02
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	11/10/2009	0.005	<LLD		2.34E+02
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	2/24/2009	0.005	<LLD		2.35E+02
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	5/20/2009	0.005	<LLD		2.33E+02
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	8/25/2009	0.005	<LLD		2.31E+02
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	11/10/2009	0.005	<LLD		2.34E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	2/24/2009	0.005	<LLD		2.35E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	5/20/2009	0.005	<LLD		2.33E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	8/25/2009	0.005	<LLD		2.31E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	11/10/2009	0.005	<LLD		2.34E+02
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	2/24/2009	0.005	<LLD		2.35E+02
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	5/20/2009	0.005	<LLD		2.33E+02
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	8/25/2009	0.005	<LLD		2.32E+02
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	11/10/2009	0.005	<LLD		2.32E+02
71	0.3 MI SE (S OF SWITCH YARD)	2/24/2009	0.005	<LLD		2.35E+02
71	0.3 MI SE (S OF SWITCH YARD)	5/20/2009	0.005	<LLD		2.32E+02
71	0.3 MI SE (S OF SWITCH YARD)	8/25/2009	0.005	<LLD		2.32E+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	0.3 MI SE (S OF SWITCH YARD)	11/10/2009	0.005	<LLD		2.34E+02
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	2/24/2009	0.005	<LLD		2.35E+02
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	5/20/2009	0.005	<LLD		2.33E+02
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	8/25/2009	0.005	<LLD		2.32E+02
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	11/10/2009	0.005	<LLD		2.34E+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	4.7 MILES S	1/12/2009	0.005	6.40E+03	2.02E+02	2.45E+02
26	4.7 MILES S	2/9/2009	0.005	7.74E+03	2.06E+02	2.37E+02
26	4.7 MILES S	3/12/2009	0.005	7.13E+03	2.00E+02	2.33E+02
26	4.7 MILES S	4/13/2009	0.005	6.46E+03	1.94E+02	2.30E+02
26	4.7 MILES S	5/11/2009	0.005	5.74E+03	1.89E+02	2.30E+02
26	4.7 MILES S	6/11/2009	0.005	5.34E+03	1.90E+02	2.36E+02
26	4.7 MILES S	7/13/2009	0.005	5.10E+03	1.85E+02	2.32E+02
26	4.7 MILES S	8/13/2009	0.005	4.83E+03	1.81E+02	2.27E+02
26	4.7 MILES S	9/14/2009	0.005	4.68E+03	1.82E+02	2.32E+02
26	4.7 MILES S	10/12/2009	0.005	4.23E+03	1.82E+02	2.40E+02
26	4.7 MILES S	11/12/2009	0.005	4.17E+03	1.78E+02	2.33E+02
26	4.7 MILES S	12/14/2009	0.005	4.15E+03	1.80E+02	2.36E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	1/12/2009	0.005	<LLD		2.45E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	0.005	<LLD		2.36E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2009	0.005	<LLD		2.34E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	0.005	<LLD		2.31E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	0.005	<LLD		2.32E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	0.005	<LLD		2.36E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	0.005	<LLD		2.30E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	0.005	<LLD		2.29E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	0.005	<LLD		2.31E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	0.005	<LLD		2.39E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	0.005	<LLD		2.32E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	0.005	<LLD		2.36E+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	1/12/2009	0.005	<LLD		2.44E+02
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	0.005	<LLD		2.37E+02
40	LILLINGTON - CAPE FEAR RIVER	3/12/2009	0.005	<LLD		2.33E+02
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	0.005	<LLD		2.31E+02
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	0.005	<LLD		2.31E+02
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	0.005	<LLD		2.37E+02
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	0.005	<LLD		2.32E+02
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	0.005	<LLD		2.32E+02
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	0.005	<LLD		2.31E+02
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	0.005	<LLD		2.40E+02
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	0.005	<LLD		2.32E+02
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	0.005	<LLD		2.35E+02

2009 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	2/16/2009	3546.3	RA-226	1.30E-02	8.44E-03
1	2.6 MILES N	2/16/2009	3546.3	PB-214	5.27E-03	1.27E-03
1	2.6 MILES N	2/16/2009	3546.3	BI-214	3.51E-03	1.47E-03
1	2.6 MILES N	2/16/2009	3546.3	TH-234	1.39E-02	9.95E-03
1	2.6 MILES N	2/16/2009	3546.3	K-40	2.85E-02	8.35E-03
1	2.6 MILES N	2/16/2009	3546.3	BE-7	1.33E-01	1.63E-02
1	2.6 MILES N	5/18/2009	3531.6	K-40	6.20E-02	1.15E-02
1	2.6 MILES N	5/18/2009	3531.6	PB-212	1.32E-03	8.92E-04
1	2.6 MILES N	5/18/2009	3531.6	BI-214	2.23E-03	1.61E-03
1	2.6 MILES N	5/18/2009	3531.6	RA-226	2.00E-02	1.67E-02
1	2.6 MILES N	5/18/2009	3531.6	TH-234	2.13E-02	1.36E-02
1	2.6 MILES N	5/18/2009	3531.6	BE-7	1.33E-01	1.76E-02
1	2.6 MILES N	8/17/2009	3606.7	PB-212	1.34E-03	6.71E-04
1	2.6 MILES N	8/17/2009	3606.7	TH-234	1.77E-02	9.86E-03
1	2.6 MILES N	8/17/2009	3606.7	PB-214	6.81E-03	1.42E-03
1	2.6 MILES N	8/17/2009	3606.7	BI-214	6.45E-03	1.46E-03
1	2.6 MILES N	8/17/2009	3606.7	BE-7	1.29E-01	1.69E-02
1	2.6 MILES N	8/17/2009	3606.7	RA-226	2.33E-02	1.07E-02
1	2.6 MILES N	8/17/2009	3606.7	K-40	3.72E-02	8.77E-03
1	2.6 MILES N	11/16/2009	3624.8	BI-214	2.01E-03	1.51E-03
1	2.6 MILES N	11/16/2009	3624.8	K-40	6.48E-02	1.21E-02
1	2.6 MILES N	11/16/2009	3624.8	BE-7	8.95E-02	1.50E-02
2	1.4 MILES NNE	2/16/2009	3413.9	TH-234	2.16E-02	1.09E-02
2	1.4 MILES NNE	2/16/2009	3413.9	BE-7	1.34E-01	1.72E-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*
2	1.4 MILES NNE	2/16/2009	3413.9	K-40	2.35E-02	8.39E-03
2	1.4 MILES NNE	2/16/2009	3413.9	TL-208	8.34E-04	5.47E-04
2	1.4 MILES NNE	2/16/2009	3413.9	PB-212	8.87E-04	6.55E-04
2	1.4 MILES NNE	2/16/2009	3413.9	BI-214	2.56E-03	1.11E-03
2	1.4 MILES NNE	2/16/2009	3413.9	RA-226	9.75E-03	8.86E-03
2	1.4 MILES NNE	2/16/2009	3413.9	PB-214	3.37E-03	1.05E-03
2	1.4 MILES NNE	5/18/2009	3570.8	PB-212	1.23E-03	1.02E-03
2	1.4 MILES NNE	5/18/2009	3570.8	K-40	5.73E-02	1.26E-02
2	1.4 MILES NNE	5/18/2009	3570.8	BE-7	1.45E-01	1.95E-02
2	1.4 MILES NNE	8/17/2009	3617.6	TH-234	1.79E-02	1.30E-02
2	1.4 MILES NNE	8/17/2009	3617.6	PB-212	1.44E-03	7.36E-04
2	1.4 MILES NNE	8/17/2009	3617.6	K-40	1.98E-02	8.58E-03
2	1.4 MILES NNE	8/17/2009	3617.6	BE-7	1.15E-01	1.61E-02
2	1.4 MILES NNE	8/17/2009	3617.6	BI-214	4.86E-03	1.57E-03
2	1.4 MILES NNE	8/17/2009	3617.6	PB-214	6.80E-03	1.28E-03
2	1.4 MILES NNE	8/17/2009	3617.6	RA-226	1.35E-02	1.14E-02
2	1.4 MILES NNE	11/16/2009	3621.6	TH-234	1.30E-02	9.17E-03
2	1.4 MILES NNE	11/16/2009	3621.6	PB-214	6.48E-03	1.54E-03
2	1.4 MILES NNE	11/16/2009	3621.6	BI-214	5.88E-03	1.43E-03
2	1.4 MILES NNE	11/16/2009	3621.6	TL-208	5.85E-04	5.27E-04
2	1.4 MILES NNE	11/16/2009	3621.6	K-40	4.13E-02	8.92E-03
2	1.4 MILES NNE	11/16/2009	3621.6	BE-7	9.14E-02	1.55E-02
2	1.4 MILES NNE	11/16/2009	3621.6	RA-226	1.16E-02	1.01E-02
4	3.1 MILES NNE	2/16/2009	3581.7	RA-226	2.03E-02	8.64E-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	3.1 MILES NNE	2/16/2009	3581.7	BI-214	4.02E-03	1.56E-03
4	3.1 MILES NNE	2/16/2009	3581.7	PB-212	1.33E-03	1.10E-03
4	3.1 MILES NNE	2/16/2009	3581.7	K-40	3.05E-02	9.76E-03
4	3.1 MILES NNE	2/16/2009	3581.7	BE-7	1.34E-01	1.77E-02
4	3.1 MILES NNE	2/16/2009	3581.7	PB-214	4.67E-03	1.23E-03
4	3.1 MILES NNE	2/16/2009	3581.7	TL-208	1.14E-03	5.66E-04
4	3.1 MILES NNE	5/18/2009	3818.3	RA-226	1.64E-02	8.88E-03
4	3.1 MILES NNE	5/18/2009	3818.3	BE-7	1.30E-01	1.60E-02
4	3.1 MILES NNE	5/18/2009	3818.3	K-40	3.38E-02	8.80E-03
4	3.1 MILES NNE	5/18/2009	3818.3	TH-234	1.23E-02	8.71E-03
4	3.1 MILES NNE	5/18/2009	3818.3	PB-212	1.09E-03	5.83E-04
4	3.1 MILES NNE	5/18/2009	3818.3	BI-214	4.64E-03	1.45E-03
4	3.1 MILES NNE	5/18/2009	3818.3	PB-214	5.83E-03	1.27E-03
4	3.1 MILES NNE	8/17/2009	3890.1	RA-226	1.56E-02	9.74E-03
4	3.1 MILES NNE	8/17/2009	3890.1	K-40	6.00E-02	1.01E-02
4	3.1 MILES NNE	8/17/2009	3890.1	TL-208	6.01E-04	5.05E-04
4	3.1 MILES NNE	8/17/2009	3890.1	PB-212	1.61E-03	7.74E-04
4	3.1 MILES NNE	8/17/2009	3890.1	PB-214	1.51E-03	1.14E-03
4	3.1 MILES NNE	8/17/2009	3890.1	BE-7	1.15E-01	1.58E-02
4	3.1 MILES NNE	11/16/2009	3658.4	TH-234	1.61E-02	1.09E-02
4	3.1 MILES NNE	11/16/2009	3658.4	RA-226	2.02E-02	9.89E-03
4	3.1 MILES NNE	11/16/2009	3658.4	PB-214	4.13E-03	1.36E-03
4	3.1 MILES NNE	11/16/2009	3658.4	BI-214	3.86E-03	1.38E-03
4	3.1 MILES NNE	11/16/2009	3658.4	TL-208	6.29E-04	3.97E-04

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	3.1 MILES NNE	11/16/2009	3658.4	K-40	2.16E-02	8.79E-03
4	3.1 MILES NNE	11/16/2009	3658.4	BE-7	9.01E-02	1.50E-02
4	3.1 MILES NNE	11/16/2009	3658.4	PB-212	9.33E-04	5.85E-04
5	>12 MILES WNW - PITTSBORO - CONTROL	2/16/2009	3672.6	K-40	3.68E-02	1.10E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	2/16/2009	3672.6	TL-208	4.72E-04	4.62E-04
5	>12 MILES WNW - PITTSBORO - CONTROL	2/16/2009	3672.6	PB-212	1.91E-03	1.31E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	2/16/2009	3672.6	PB-214	4.99E-03	1.38E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	2/16/2009	3672.6	BE-7	1.30E-01	1.62E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	2/16/2009	3672.6	TH-234	1.46E-03	1.06E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	2/16/2009	3672.6	BI-214	4.02E-03	1.11E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	2/16/2009	3672.6	RA-226	1.90E-02	9.09E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	5/18/2009	3332.7	TL-208	5.85E-04	5.52E-04
5	>12 MILES WNW - PITTSBORO - CONTROL	5/18/2009	3332.7	BE-7	1.35E-01	2.00E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/18/2009	3332.7	K-40	3.54E-02	1.08E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/18/2009	3332.7	RA-226	2.04E-02	9.15E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	5/18/2009	3332.7	PB-214	4.84E-03	1.39E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	5/18/2009	3332.7	BI-214	5.04E-03	1.49E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	5/18/2009	3332.7	TH-234	1.56E-02	1.08E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/17/2009	3471.4	BE-7	1.23E-01	1.75E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/17/2009	3471.4	BI-214	2.51E-03	1.29E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	8/17/2009	3471.4	K-40	7.21E-02	1.67E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	11/16/2009	3682.3	TL-208	9.12E-04	6.64E-04
5	>12 MILES WNW - PITTSBORO - CONTROL	11/16/2009	3682.3	K-40	5.39E-02	1.21E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	11/16/2009	3682.3	PB-212	9.72E-04	8.95E-04

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	>12 MILES WNW - PITTSBORO - CONTROL	11/16/2009	3682.3	BI-214	1.66E-03	1.21E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	11/16/2009	3682.3	RA-226	1.22E-02	9.43E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	11/16/2009	3682.3	TH-234	1.58E-02	1.11E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	11/16/2009	3682.3	BE-7	8.87E-02	1.56E-02
26	4.7 MILES S	2/16/2009	3334.5	K-40	2.64E-02	9.92E-03
26	4.7 MILES S	2/16/2009	3334.5	RA-226	1.54E-02	8.53E-03
26	4.7 MILES S	2/16/2009	3334.5	PB-214	4.44E-03	1.34E-03
26	4.7 MILES S	2/16/2009	3334.5	PB-212	1.08E-03	7.23E-04
26	4.7 MILES S	2/16/2009	3334.5	BE-7	1.23E-01	1.69E-02
26	4.7 MILES S	2/16/2009	3334.5	BI-214	3.10E-03	1.72E-03
26	4.7 MILES S	5/18/2009	3536	BE-7	1.26E-01	1.87E-02
26	4.7 MILES S	5/18/2009	3536	K-40	5.38E-02	1.12E-02
26	4.7 MILES S	5/18/2009	3536	PB-212	1.42E-03	9.41E-04
26	4.7 MILES S	5/18/2009	3536	BI-214	2.24E-03	1.04E-03
26	4.7 MILES S	5/18/2009	3536	TH-234	2.24E-02	1.05E-02
26	4.7 MILES S	8/17/2009	3588.7	PB-214	1.76E-03	1.23E-03
26	4.7 MILES S	8/17/2009	3588.7	BE-7	1.39E-01	1.95E-02
26	4.7 MILES S	8/17/2009	3588.7	K-40	6.39E-02	1.41E-02
26	4.7 MILES S	11/16/2009	3662.1	BE-7	9.89E-02	1.69E-02
26	4.7 MILES S	11/16/2009	3662.1	BI-214	2.34E-03	1.21E-03
26	4.7 MILES S	11/16/2009	3662.1	PB-212	1.15E-03	8.66E-04
26	4.7 MILES S	11/16/2009	3662.1	K-40	8.02E-02	1.33E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/16/2009	3715.4	K-40	1.99E-02	7.93E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/16/2009	3715.4	BE-7	1.45E-01	1.83E-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*
47	SSW SECTOR 3.4 MI FROM SITE	2/16/2009	3715.4	PB-212	1.15E-03	7.63E-04
47	SSW SECTOR 3.4 MI FROM SITE	2/16/2009	3715.4	BI-214	3.15E-03	1.16E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/16/2009	3715.4	RA-226	7.83E-03	6.74E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/16/2009	3715.4	PB-214	2.77E-03	1.26E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/16/2009	3715.4	TH-234	1.73E-02	9.74E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/18/2009	3628	BE-7	1.52E-01	1.94E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/18/2009	3628	K-40	5.52E-02	1.28E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/18/2009	3628	PB-212	9.35E-04	8.72E-04
47	SSW SECTOR 3.4 MI FROM SITE	5/18/2009	3628	BI-214	3.06E-03	1.15E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/17/2009	3646.5	BE-7	1.31E-01	1.84E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/17/2009	3646.5	K-40	3.17E-02	9.15E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/17/2009	3646.5	PB-212	1.07E-03	5.69E-04
47	SSW SECTOR 3.4 MI FROM SITE	8/17/2009	3646.5	BI-214	1.65E-03	1.05E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/17/2009	3646.5	RA-226	1.64E-02	9.54E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/16/2009	3675	K-40	2.80E-02	9.19E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/16/2009	3675	PB-212	8.09E-04	7.32E-04
47	SSW SECTOR 3.4 MI FROM SITE	11/16/2009	3675	BI-214	4.13E-03	1.32E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/16/2009	3675	PB-214	4.64E-03	1.22E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/16/2009	3675	RA-226	1.56E-02	8.46E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/16/2009	3675	TH-234	1.30E-02	8.36E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/16/2009	3675	BE-7	9.43E-02	1.54E-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	4.7 MILES S	11/23/2009	663.1	K-40	2.86E+00	2.93E-01
26	4.7 MILES S	11/23/2009	663.1	TL-208	1.23E-02	9.19E-03
26	4.7 MILES S	11/23/2009	663.1	PB-212	4.93E-02	1.53E-02
26	4.7 MILES S	11/23/2009	663.1	BI-214	6.98E-02	2.09E-02
26	4.7 MILES S	11/23/2009	663.1	RA-226	2.96E-01	1.70E-01
26	4.7 MILES S	11/23/2009	663.1	TH-234	8.36E-01	3.63E-01
26	4.7 MILES S	11/23/2009	663.1	BE-7	8.80E-01	1.09E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/23/2009	601.1	BI-214	5.72E-02	1.76E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/23/2009	601.1	BE-7	5.16E-01	1.31E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/23/2009	601.1	PB-212	2.52E-02	1.91E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/23/2009	601.1	AC-228	1.02E-01	3.93E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/23/2009	601.1	K-40	3.43E+00	3.54E-01
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/23/2009	628.9	TH-234	3.13E-01	2.62E-01
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/23/2009	628.9	BE-7	3.50E-01	9.21E-02
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/23/2009	628.9	K-40	3.65E+00	3.45E-01
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/23/2009	628.9	TL-208	1.88E-02	1.18E-02
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/23/2009	628.9	PB-212	4.27E-02	1.87E-02
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/23/2009	628.9	BI-214	6.99E-02	2.16E-02
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/23/2009	628.9	PB-214	5.09E-02	2.00E-02
61	2.5 MI E SECTOR HOLLEMANS XRD BR	11/23/2009	628.9	RA-226	3.39E-01	2.37E-01

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	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	472.8	TL-208	7.54E-02	1.82E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	472.8	K-40	3.38E+00	3.79E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	472.8	PB-212	1.42E-01	2.64E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	472.8	BI-214	6.69E-02	3.04E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	472.8	RA-226	5.95E-01	2.89E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	472.8	TH-234	7.37E-01	3.97E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	472.8	BE-7	4.92E-01	1.29E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	476.4	PB-214	4.34E-02	2.59E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	476.4	RA-226	4.80E-01	2.66E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	476.4	BI-214	5.26E-02	2.87E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	476.4	K-40	3.82E+00	3.86E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	476.4	BE-7	1.48E+00	1.78E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	476.4	AC-228	1.28E-01	5.31E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	426.8	PB-214	7.50E-02	4.63E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	426.8	RA-226	3.84E-01	3.13E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	426.8	AC-228	1.60E-01	6.54E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	426.8	PB-212	1.30E-01	3.53E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	426.8	TL-208	3.52E-02	1.66E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	426.8	K-40	5.15E+00	5.19E-01

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	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	426.8	BI-214	8.97E-02	3.79E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	426.8	BE-7	1.75E+00	2.28E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	379.4	BE-7	2.81E+00	3.08E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	379.4	BI-212	1.39E-01	1.03E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	379.4	PB-212	1.53E-01	3.50E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	379.4	BI-214	1.49E-01	3.43E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	379.4	PB-214	8.97E-02	3.88E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	379.4	RA-226	5.99E-01	4.09E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	379.4	AC-228	2.98E-01	7.80E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	379.4	K-40	5.84E+00	5.69E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	379.4	TL-208	6.22E-02	2.05E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	404.3	BE-7	3.95E+00	3.54E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	404.3	AC-228	1.95E-01	6.51E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	404.3	RA-226	5.00E-01	3.81E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	404.3	PB-214	1.84E-01	4.47E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	404.3	BI-214	3.16E-01	5.67E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	404.3	PB-212	4.28E-01	4.58E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	404.3	BI-212	2.79E-01	1.35E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	404.3	TL-208	1.29E-01	2.35E-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	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	404.3	K-40	4.93E+00	5.23E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	399.9	TL-208	6.22E-02	1.85E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	399.9	BE-7	3.38E+00	3.22E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	399.9	K-40	5.71E+00	5.40E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	399.9	BI-212	1.87E-01	1.05E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	399.9	PB-212	1.67E-01	3.40E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	399.9	BI-214	1.43E-01	4.21E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	399.9	PB-214	9.68E-02	4.15E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	399.9	RA-226	5.97E-01	3.84E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	399.9	TH-234	5.59E-01	4.54E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	399.9	AC-228	2.35E-01	8.17E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: HOLLY

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
12	0.9 MILES SSW	5/13/2009	315.8	BI-214	1.20E-01	6.57E-02
12	0.9 MILES SSW	5/13/2009	315.8	PB-212	9.48E-02	5.03E-02
12	0.9 MILES SSW	5/13/2009	315.8	TL-208	4.58E-02	3.71E-02
12	0.9 MILES SSW	5/13/2009	315.8	K-40	7.94E+00	1.09E+00
12	0.9 MILES SSW	5/13/2009	315.8	BE-7	1.19E+00	3.03E-01
12	0.9 MILES SSW	7/21/2009	400.2	TL-208	6.93E-02	2.63E-02
12	0.9 MILES SSW	7/21/2009	400.2	RA-226	5.52E-01	4.78E-01
12	0.9 MILES SSW	7/21/2009	400.2	PB-214	1.42E-01	5.75E-02
12	0.9 MILES SSW	7/21/2009	400.2	BE-7	1.86E+00	2.86E-01
12	0.9 MILES SSW	7/21/2009	400.2	K-40	4.90E+00	6.40E-01
12	0.9 MILES SSW	7/21/2009	400.2	BI-214	1.55E-01	7.01E-02
12	0.9 MILES SSW	7/21/2009	400.2	PB-212	1.57E-01	3.58E-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	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	460.5	AC-228	1.05E-01	6.21E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	460.5	PB-212	1.62E-01	3.52E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	460.5	TL-208	6.65E-02	1.95E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	460.5	K-40	3.73E+00	4.03E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	460.5	BE-7	6.35E-01	1.41E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	460.5	PB-214	4.46E-02	2.71E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	460.5	BI-214	6.96E-02	3.14E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	388.2	BE-7	1.07E+00	1.79E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	388.2	RA-226	6.69E-01	3.29E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	388.2	PB-214	6.24E-02	3.13E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	388.2	BI-214	9.74E-02	3.89E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	388.2	TH-234	6.91E-01	4.87E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	388.2	K-40	3.38E+00	4.02E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	388.2	TL-208	1.80E-02	1.62E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	388.2	AC-228	1.03E-01	5.09E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	415.4	PB-214	1.01E-01	3.44E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	415.4	PB-212	1.36E-01	3.05E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	415.4	BE-7	1.41E+00	1.98E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	415.4	RA-226	7.16E-01	3.83E-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	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	415.4	BI-214	1.13E-01	3.22E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	415.4	AC-228	1.77E-01	5.35E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	415.4	BI-212	1.51E-01	1.07E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	415.4	TL-208	5.16E-02	1.93E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	415.4	K-40	3.58E+00	4.10E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	360.1	PB-212	9.94E-02	4.90E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	360.1	TL-208	7.35E-02	2.41E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	360.1	K-40	3.42E+00	5.43E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	360.1	BI-214	1.65E-01	6.52E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	360.1	RA-226	8.60E-01	6.20E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	360.1	AC-228	1.58E-01	1.08E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	360.1	BE-7	1.77E+00	3.43E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	353.4	AC-228	1.11E-01	7.02E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	353.4	BE-7	1.19E+00	2.14E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	353.4	K-40	3.47E+00	4.19E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	353.4	TL-208	1.04E-01	2.19E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	353.4	RA-226	1.18E+00	5.06E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	353.4	BI-214	1.59E-01	4.65E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	353.4	PB-214	9.69E-02	4.02E-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	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	353.4	PB-212	2.69E-01	4.36E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	364.9	BI-214	1.20E-01	5.64E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	364.9	AC-228	3.28E-01	9.16E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	364.9	PB-214	1.26E-01	4.59E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	364.9	PB-212	1.61E-01	4.09E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	364.9	TL-208	4.18E-02	2.14E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	364.9	K-40	3.35E+00	5.95E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	364.9	BE-7	2.20E+00	3.19E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	364.9	RA-226	1.13E+00	4.19E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: PERSIMMONS

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
12	0.9 MILES SSW	6/23/2009	474.9	RA-226	4.30E-01	3.48E-01
12	0.9 MILES SSW	6/23/2009	474.9	BI-214	6.23E-02	3.65E-02
12	0.9 MILES SSW	6/23/2009	474.9	PB-212	4.66E-02	2.52E-02
12	0.9 MILES SSW	6/23/2009	474.9	TL-208	1.67E-02	1.54E-02
12	0.9 MILES SSW	6/23/2009	474.9	K-40	6.11E+00	6.66E-01
12	0.9 MILES SSW	6/23/2009	474.9	BE-7	5.14E-01	1.40E-01
12	0.9 MILES SSW	8/26/2009	444.9	PB-214	8.97E-02	3.90E-02
12	0.9 MILES SSW	8/26/2009	444.9	RA-226	3.94E-01	3.06E-01
12	0.9 MILES SSW	8/26/2009	444.9	PB-212	5.75E-02	3.26E-02
12	0.9 MILES SSW	8/26/2009	444.9	TL-208	2.46E-02	1.40E-02
12	0.9 MILES SSW	8/26/2009	444.9	BE-7	3.30E+00	3.05E-01
12	0.9 MILES SSW	8/26/2009	444.9	K-40	4.21E+00	4.23E-01
12	0.9 MILES SSW	8/26/2009	444.9	BI-214	1.05E-01	3.21E-02
12	0.9 MILES SSW	9/23/2009	409.3	PB-212	9.66E-02	3.63E-02
12	0.9 MILES SSW	9/23/2009	409.3	TL-208	3.35E-02	1.81E-02
12	0.9 MILES SSW	9/23/2009	409.3	K-40	3.80E+00	5.56E-01
12	0.9 MILES SSW	9/23/2009	409.3	BE-7	3.47E+00	3.96E-01
12	0.9 MILES SSW	9/23/2009	409.3	BI-214	1.23E-01	5.06E-02
12	0.9 MILES SSW	10/20/2009	438.1	BI-214	1.76E-01	4.07E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: PERSIMMONS

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
12	0.9 MILES SSW	10/20/2009	438.1	K-40	3.49E+00	3.74E-01
12	0.9 MILES SSW	10/20/2009	438.1	BE-7	3.96E+00	3.45E-01
12	0.9 MILES SSW	10/20/2009	438.1	PB-212	8.59E-02	2.45E-02
12	0.9 MILES SSW	10/20/2009	438.1	PB-214	1.26E-01	3.67E-02
12	0.9 MILES SSW	10/20/2009	438.1	RA-226	5.94E-01	3.33E-01
12	0.9 MILES SSW	10/20/2009	438.1	TH-234	5.36E-01	4.40E-01
12	0.9 MILES SSW	10/20/2009	438.1	TL-208	2.72E-02	1.59E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: SWEET BAY

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
63	0.6 MILES SW	5/14/2009	496.5	BE-7	8.62E-01	1.53E-01
63	0.6 MILES SW	5/14/2009	496.5	PB-212	9.42E-02	2.48E-02
63	0.6 MILES SW	5/14/2009	496.5	TL-208	2.58E-02	1.23E-02
63	0.6 MILES SW	5/14/2009	496.5	K-40	5.59E+00	5.21E-01
63	0.6 MILES SW	5/14/2009	496.5	BI-214	2.60E-02	1.94E-02
63	0.6 MILES SW	6/23/2009	513.8	PB-214	1.06E-01	3.52E-02
63	0.6 MILES SW	6/23/2009	513.8	BI-214	9.44E-02	4.64E-02
63	0.6 MILES SW	6/23/2009	513.8	RA-226	3.82E-01	3.24E-01
63	0.6 MILES SW	6/23/2009	513.8	PB-212	4.65E-02	2.17E-02
63	0.6 MILES SW	6/23/2009	513.8	K-40	7.51E+00	7.42E-01
63	0.6 MILES SW	6/23/2009	513.8	BE-7	6.62E-01	1.77E-01
63	0.6 MILES SW	7/21/2009	478.7	PB-214	4.72E-02	2.42E-02
63	0.6 MILES SW	7/21/2009	478.7	RA-226	3.37E-01	2.39E-01
63	0.6 MILES SW	7/21/2009	478.7	BI-214	5.49E-02	2.55E-02
63	0.6 MILES SW	7/21/2009	478.7	PB-212	1.25E-01	2.63E-02
63	0.6 MILES SW	7/21/2009	478.7	TL-208	3.57E-02	1.42E-02
63	0.6 MILES SW	7/21/2009	478.7	K-40	5.72E+00	5.10E-01
63	0.6 MILES SW	7/21/2009	478.7	BE-7	9.17E-01	1.50E-01
63	0.6 MILES SW	7/21/2009	478.7	TH-234	4.75E-01	3.55E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: SWEET BAY

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
63	0.6 MILES SW	8/26/2009	392.5	TH-234	1.21E+00	6.37E-01
63	0.6 MILES SW	8/26/2009	392.5	RA-226	6.43E-01	4.19E-01
63	0.6 MILES SW	8/26/2009	392.5	PB-212	9.18E-02	4.04E-02
63	0.6 MILES SW	8/26/2009	392.5	TL-208	3.97E-02	1.58E-02
63	0.6 MILES SW	8/26/2009	392.5	K-40	6.89E+00	6.24E-01
63	0.6 MILES SW	8/26/2009	392.5	BE-7	9.11E-01	1.78E-01
63	0.6 MILES SW	9/23/2009	399.1	TL-208	2.36E-02	1.74E-02
63	0.6 MILES SW	9/23/2009	399.1	BI-214	1.11E-01	3.23E-02
63	0.6 MILES SW	9/23/2009	399.1	K-40	5.38E+00	5.27E-01
63	0.6 MILES SW	9/23/2009	399.1	PB-212	5.94E-02	2.52E-02
63	0.6 MILES SW	9/23/2009	399.1	RA-226	4.30E-01	2.98E-01
63	0.6 MILES SW	9/23/2009	399.1	BE-7	6.88E-01	1.67E-01
63	0.6 MILES SW	9/23/2009	399.1	PB-214	1.05E-01	3.80E-02
63	0.6 MILES SW	10/20/2009	504	TL-208	2.53E-02	1.21E-02
63	0.6 MILES SW	10/20/2009	504	K-40	4.93E+00	4.90E-01
63	0.6 MILES SW	10/20/2009	504	BE-7	1.08E+00	1.55E-01
63	0.6 MILES SW	10/20/2009	504	PB-212	7.10E-02	2.66E-02
63	0.6 MILES SW	10/20/2009	504	BI-214	8.62E-02	2.79E-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	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	520.2	TL-208	1.18E-01	1.91E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	520.2	TH-234	3.84E-01	3.43E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	520.2	AC-228	1.00E-01	4.92E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	520.2	RA-226	5.21E-01	2.57E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	520.2	PB-214	4.72E-02	2.61E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	520.2	BI-214	5.50E-02	2.20E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	520.2	BI-212	2.70E-01	1.28E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	520.2	BE-7	3.56E-01	1.05E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	520.2	PB-212	3.32E-01	3.59E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/13/2009	520.2	K-40	3.54E+00	3.57E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	458.3	K-40	3.56E+00	5.05E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	458.3	BE-7	4.89E-01	1.96E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	458.3	TL-208	4.97E-02	1.90E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	458.3	PB-212	1.07E-01	3.20E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	458.3	AC-228	1.26E-01	6.80E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	427.9	BE-7	1.09E+00	1.89E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	427.9	PB-212	1.59E-01	2.57E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	427.9	TH-234	6.46E-01	3.12E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	427.9	TL-208	4.91E-02	1.78E-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	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	427.9	AC-228	1.34E-01	5.57E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	427.9	RA-226	3.97E-01	2.74E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	427.9	PB-214	1.09E-01	2.96E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	427.9	BI-214	8.82E-02	3.89E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	427.9	K-40	3.60E+00	4.03E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	435.7	K-40	2.81E+00	3.65E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	435.7	TL-208	7.01E-02	1.91E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	435.7	AC-228	1.23E-01	5.35E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	435.7	PB-214	6.33E-02	3.27E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	435.7	BI-214	9.14E-02	3.44E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	435.7	PB-212	1.64E-01	4.05E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	435.7	BI-212	2.27E-01	1.05E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	435.7	BE-7	9.27E-01	1.53E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	477.4	BI-214	2.17E-01	5.34E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	477.4	PB-214	1.23E-01	4.64E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	477.4	RA-226	5.84E-01	3.68E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	477.4	AC-228	1.68E-01	7.22E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	477.4	BE-7	2.28E+00	2.86E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	477.4	K-40	2.58E+00	4.25E-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*
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	477.4	PB-212	4.56E-01	5.51E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	477.4	BI-212	4.02E-01	1.61E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	477.4	TL-208	1.67E-01	3.36E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	419.6	BI-214	1.89E-01	4.34E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	419.6	AC-228	2.39E-01	6.87E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	419.6	RA-226	7.22E-01	3.45E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	419.6	PB-214	1.23E-01	3.72E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	419.6	K-40	3.96E+00	4.41E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	419.6	PB-212	1.90E-01	3.36E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	419.6	TL-208	4.72E-02	2.41E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	419.6	BE-7	7.00E-01	1.65E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	419.6	BI-212	9.01E-02	8.20E-02
12	0.9 MILES SSW	5/13/2009	355.8	BE-7	6.11E-01	1.84E-01
12	0.9 MILES SSW	5/13/2009	355.8	K-40	4.08E+00	4.93E-01
12	0.9 MILES SSW	5/13/2009	355.8	PB-212	7.66E-02	3.27E-02
12	0.9 MILES SSW	5/13/2009	355.8	BI-214	9.56E-02	4.68E-02
12	0.9 MILES SSW	5/13/2009	355.8	PB-214	8.41E-02	3.75E-02
12	0.9 MILES SSW	5/13/2009	355.8	RA-226	4.27E-01	3.74E-01
12	0.9 MILES SSW	6/23/2009	520.6	TL-208	2.82E-02	1.23E-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*
12	0.9 MILES SSW	6/23/2009	520.6	RA-226	4.35E-01	2.34E-01
12	0.9 MILES SSW	6/23/2009	520.6	PB-214	8.84E-02	2.97E-02
12	0.9 MILES SSW	6/23/2009	520.6	BI-214	1.03E-01	3.07E-02
12	0.9 MILES SSW	6/23/2009	520.6	PB-212	4.82E-02	1.76E-02
12	0.9 MILES SSW	6/23/2009	520.6	K-40	2.36E+00	2.95E-01
12	0.9 MILES SSW	6/23/2009	520.6	BE-7	6.60E-01	1.17E-01
12	0.9 MILES SSW	7/21/2009	420.2	RA-226	3.14E-01	3.08E-01
12	0.9 MILES SSW	7/21/2009	420.2	TL-208	3.76E-02	1.73E-02
12	0.9 MILES SSW	7/21/2009	420.2	K-40	2.60E+00	3.50E-01
12	0.9 MILES SSW	7/21/2009	420.2	BE-7	7.19E-01	1.85E-01
12	0.9 MILES SSW	7/21/2009	420.2	PB-212	1.17E-01	3.01E-02
12	0.9 MILES SSW	7/21/2009	420.2	PB-214	6.25E-02	3.24E-02
12	0.9 MILES SSW	7/21/2009	420.2	BI-214	1.40E-01	3.78E-02
12	0.9 MILES SSW	8/26/2009	402.1	RA-226	9.01E-01	5.19E-01
12	0.9 MILES SSW	8/26/2009	402.1	K-40	2.50E+00	4.41E-01
12	0.9 MILES SSW	8/26/2009	402.1	PB-212	8.84E-02	3.51E-02
12	0.9 MILES SSW	8/26/2009	402.1	BI-214	8.49E-02	4.19E-02
12	0.9 MILES SSW	8/26/2009	402.1	PB-214	6.71E-02	4.32E-02
12	0.9 MILES SSW	8/26/2009	402.1	BE-7	1.23E+00	2.77E-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*
12	0.9 MILES SSW	9/23/2009	394.8	PB-214	6.35E-02	3.35E-02
12	0.9 MILES SSW	9/23/2009	394.8	PB-212	7.15E-02	1.95E-02
12	0.9 MILES SSW	9/23/2009	394.8	RA-226	4.13E-01	2.32E-01
12	0.9 MILES SSW	9/23/2009	394.8	TH-234	5.75E-01	5.60E-01
12	0.9 MILES SSW	9/23/2009	394.8	BE-7	1.06E+00	1.97E-01
12	0.9 MILES SSW	9/23/2009	394.8	K-40	1.71E+00	3.00E-01
12	0.9 MILES SSW	9/23/2009	394.8	BI-214	8.13E-02	2.97E-02
12	0.9 MILES SSW	10/20/2009	383.1	BI-214	1.20E-01	3.79E-02
12	0.9 MILES SSW	10/20/2009	383.1	BE-7	2.13E+00	2.49E-01
12	0.9 MILES SSW	10/20/2009	383.1	K-40	2.91E+00	3.57E-01
12	0.9 MILES SSW	10/20/2009	383.1	TL-208	2.21E-02	1.59E-02
12	0.9 MILES SSW	10/20/2009	383.1	PB-212	5.35E-02	2.52E-02
12	0.9 MILES SSW	10/20/2009	383.1	RA-226	7.96E-01	3.76E-01
12	0.9 MILES SSW	10/20/2009	383.1	PB-214	1.03E-01	3.94E-02
63	0.6 MILES SW	5/13/2009	395	PB-212	8.82E-02	3.24E-02
63	0.6 MILES SW	5/13/2009	395	TH-234	6.46E-01	5.08E-01
63	0.6 MILES SW	5/13/2009	395	RA-226	4.94E-01	3.17E-01
63	0.6 MILES SW	5/13/2009	395	BI-214	8.70E-02	3.78E-02
63	0.6 MILES SW	5/13/2009	395	TL-208	5.56E-02	1.89E-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*
63	0.6 MILES SW	5/13/2009	395	K-40	3.43E+00	3.84E-01
63	0.6 MILES SW	5/13/2009	395	BE-7	6.02E-01	1.64E-01
63	0.6 MILES SW	5/13/2009	395	PB-214	9.48E-02	3.39E-02
63	0.6 MILES SW	6/23/2009	380.3	BI-214	3.98E-02	3.56E-02
63	0.6 MILES SW	6/23/2009	380.3	PB-212	3.39E-02	2.26E-02
63	0.6 MILES SW	6/23/2009	380.3	RA-226	7.29E-01	3.86E-01
63	0.6 MILES SW	6/23/2009	380.3	TH-234	8.53E-01	4.76E-01
63	0.6 MILES SW	6/23/2009	380.3	BE-7	6.15E-01	1.75E-01
63	0.6 MILES SW	6/23/2009	380.3	K-40	2.68E+00	3.62E-01
63	0.6 MILES SW	6/23/2009	380.3	TL-208	1.50E-02	1.36E-02
63	0.6 MILES SW	7/21/2009	384.7	PB-212	1.32E-01	3.69E-02
63	0.6 MILES SW	7/21/2009	384.7	BI-214	1.62E-01	4.93E-02
63	0.6 MILES SW	7/21/2009	384.7	PB-214	1.21E-01	4.43E-02
63	0.6 MILES SW	7/21/2009	384.7	RA-226	5.41E-01	4.23E-01
63	0.6 MILES SW	7/21/2009	384.7	BE-7	1.02E+00	2.28E-01
63	0.6 MILES SW	7/21/2009	384.7	K-40	2.87E+00	5.00E-01
63	0.6 MILES SW	7/21/2009	384.7	TL-208	3.70E-02	2.05E-02
63	0.6 MILES SW	8/26/2009	352.8	K-40	2.79E+00	3.76E-01
63	0.6 MILES SW	8/26/2009	352.8	TL-208	3.80E-02	1.73E-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*
63	0.6 MILES SW	8/26/2009	352.8	PB-212	9.79E-02	3.21E-02
63	0.6 MILES SW	8/26/2009	352.8	BI-214	9.38E-02	3.66E-02
63	0.6 MILES SW	8/26/2009	352.8	PB-214	1.19E-01	3.80E-02
63	0.6 MILES SW	8/26/2009	352.8	RA-226	4.64E-01	3.96E-01
63	0.6 MILES SW	8/26/2009	352.8	BE-7	2.27E+00	2.61E-01
63	0.6 MILES SW	9/23/2009	366.5	PB-212	1.51E-01	5.49E-02
63	0.6 MILES SW	9/23/2009	366.5	TL-208	4.50E-02	4.47E-02
63	0.6 MILES SW	9/23/2009	366.5	K-40	4.56E+00	6.86E-01
63	0.6 MILES SW	9/23/2009	366.5	BE-7	2.10E+00	3.87E-01
63	0.6 MILES SW	10/20/2009	381.1	PB-214	1.59E-01	4.36E-02
63	0.6 MILES SW	10/20/2009	381.1	TL-208	1.94E-02	1.89E-02
63	0.6 MILES SW	10/20/2009	381.1	RA-226	4.19E-01	3.26E-01
63	0.6 MILES SW	10/20/2009	381.1	BE-7	1.77E+00	2.28E-01
63	0.6 MILES SW	10/20/2009	381.1	BI-214	2.30E-01	4.85E-02
63	0.6 MILES SW	10/20/2009	381.1	K-40	2.00E+00	3.17E-01
63	0.6 MILES SW	10/20/2009	381.1	PB-212	1.05E-01	2.28E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: WAX MYRTLE

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
12	0.9 MILES SSW	5/13/2009	423.5	PB-212	8.95E-02	3.92E-02
12	0.9 MILES SSW	5/13/2009	423.5	BE-7	1.82E+00	2.83E-01
12	0.9 MILES SSW	5/13/2009	423.5	RA-226	5.11E-01	3.66E-01
12	0.9 MILES SSW	5/13/2009	423.5	BI-214	9.52E-02	4.62E-02
12	0.9 MILES SSW	5/13/2009	423.5	K-40	3.86E+00	5.57E-01
12	0.9 MILES SSW	5/13/2009	423.5	TH-234	7.35E-01	5.37E-01
12	0.9 MILES SSW	5/13/2009	423.5	TL-208	5.08E-02	1.65E-02
12	0.9 MILES SSW	6/23/2009	425.5	BI-214	8.91E-02	3.32E-02
12	0.9 MILES SSW	6/23/2009	425.5	PB-214	6.16E-02	3.53E-02
12	0.9 MILES SSW	6/23/2009	425.5	TH-234	5.71E-01	4.48E-01
12	0.9 MILES SSW	6/23/2009	425.5	BE-7	1.56E+00	2.15E-01
12	0.9 MILES SSW	6/23/2009	425.5	PB-212	4.35E-02	2.68E-02
12	0.9 MILES SSW	6/23/2009	425.5	K-40	3.86E+00	4.20E-01
12	0.9 MILES SSW	7/21/2009	412.7	TL-208	5.90E-02	1.98E-02
12	0.9 MILES SSW	7/21/2009	412.7	K-40	2.87E+00	3.82E-01
12	0.9 MILES SSW	7/21/2009	412.7	PB-212	1.48E-01	2.87E-02
12	0.9 MILES SSW	7/21/2009	412.7	BI-214	1.72E-01	3.40E-02
12	0.9 MILES SSW	7/21/2009	412.7	PB-214	9.76E-02	3.28E-02
12	0.9 MILES SSW	7/21/2009	412.7	RA-226	3.11E-01	2.87E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: WAX MYRTLE

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
12	0.9 MILES SSW	7/21/2009	412.7	BE-7	3.02E+00	2.95E-01
12	0.9 MILES SSW	8/26/2009	353.9	BE-7	1.97E+00	3.08E-01
12	0.9 MILES SSW	8/26/2009	353.9	TH-234	7.41E-01	7.20E-01
12	0.9 MILES SSW	8/26/2009	353.9	RA-226	1.15E+00	5.79E-01
12	0.9 MILES SSW	8/26/2009	353.9	BI-214	1.01E-01	4.04E-02
12	0.9 MILES SSW	8/26/2009	353.9	PB-212	1.07E-01	3.14E-02
12	0.9 MILES SSW	8/26/2009	353.9	TL-208	4.65E-02	2.90E-02
12	0.9 MILES SSW	8/26/2009	353.9	K-40	2.85E+00	5.09E-01
12	0.9 MILES SSW	9/23/2009	367.6	BE-7	3.82E+00	3.87E-01
12	0.9 MILES SSW	9/23/2009	367.6	PB-214	5.18E-02	3.80E-02
12	0.9 MILES SSW	9/23/2009	367.6	BI-214	6.71E-02	3.58E-02
12	0.9 MILES SSW	9/23/2009	367.6	K-40	2.93E+00	3.99E-01
12	0.9 MILES SSW	9/23/2009	367.6	TL-208	3.16E-02	1.81E-02
12	0.9 MILES SSW	9/23/2009	367.6	PB-212	7.05E-02	3.00E-02
12	0.9 MILES SSW	10/20/2009	369.4	BI-214	2.26E-01	5.36E-02
12	0.9 MILES SSW	10/20/2009	369.4	K-40	2.55E+00	5.22E-01
12	0.9 MILES SSW	10/20/2009	369.4	BE-7	1.52E+00	2.88E-01
12	0.9 MILES SSW	10/20/2009	369.4	TL-208	3.98E-02	1.89E-02
12	0.9 MILES SSW	10/20/2009	369.4	PB-214	1.16E-01	5.34E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: WAX MYRTLE

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
12	0.9 MILES SSW	10/20/2009	369.4	PB-212	9.77E-02	2.95E-02
12	0.9 MILES SSW	10/20/2009	369.4	RA-226	5.57E-01	5.18E-01
63	0.6 MILES SW	5/13/2009	445.7	TH-234	4.55E-01	3.84E-01
63	0.6 MILES SW	5/13/2009	445.7	PB-214	1.10E-01	2.81E-02
63	0.6 MILES SW	5/13/2009	445.7	BE-7	1.11E+00	1.70E-01
63	0.6 MILES SW	5/13/2009	445.7	BI-214	1.56E-01	3.44E-02
63	0.6 MILES SW	5/13/2009	445.7	PB-212	1.18E-01	3.33E-02
63	0.6 MILES SW	5/13/2009	445.7	TL-208	5.57E-02	1.75E-02
63	0.6 MILES SW	5/13/2009	445.7	K-40	2.98E+00	3.56E-01
63	0.6 MILES SW	5/13/2009	445.7	RA-226	7.20E-01	3.16E-01
63	0.6 MILES SW	6/23/2009	418.1	BI-214	1.65E-01	5.85E-02
63	0.6 MILES SW	6/23/2009	418.1	PB-214	1.04E-01	5.13E-02
63	0.6 MILES SW	6/23/2009	418.1	K-40	3.47E+00	4.88E-01
63	0.6 MILES SW	6/23/2009	418.1	PB-212	4.64E-02	2.83E-02
63	0.6 MILES SW	6/23/2009	418.1	BE-7	1.21E+00	2.65E-01
63	0.6 MILES SW	6/23/2009	418.1	RA-226	5.14E-01	4.12E-01
63	0.6 MILES SW	7/21/2009	365	PB-212	1.63E-01	3.29E-02
63	0.6 MILES SW	7/21/2009	365	TL-208	7.04E-02	2.13E-02
63	0.6 MILES SW	7/21/2009	365	BI-214	1.62E-01	4.34E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: WAX MYRTLE

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
63	0.6 MILES SW	7/21/2009	365	PB-214	9.82E-02	4.55E-02
63	0.6 MILES SW	7/21/2009	365	K-40	3.74E+00	4.28E-01
63	0.6 MILES SW	7/21/2009	365	BE-7	2.26E+00	2.63E-01
63	0.6 MILES SW	8/26/2009	374.1	TH-234	8.93E-01	5.76E-01
63	0.6 MILES SW	8/26/2009	374.1	PB-214	6.46E-02	3.61E-02
63	0.6 MILES SW	8/26/2009	374.1	K-40	3.64E+00	4.31E-01
63	0.6 MILES SW	8/26/2009	374.1	TL-208	6.11E-02	2.10E-02
63	0.6 MILES SW	8/26/2009	374.1	PB-212	1.02E-01	3.20E-02
63	0.6 MILES SW	8/26/2009	374.1	BI-214	8.54E-02	3.75E-02
63	0.6 MILES SW	8/26/2009	374.1	BE-7	2.63E+00	3.00E-01
63	0.6 MILES SW	9/23/2009	358.4	K-40	3.81E+00	4.69E-01
63	0.6 MILES SW	9/23/2009	358.4	TL-208	4.78E-02	2.04E-02
63	0.6 MILES SW	9/23/2009	358.4	PB-212	1.05E-01	3.08E-02
63	0.6 MILES SW	9/23/2009	358.4	BI-214	7.10E-02	3.63E-02
63	0.6 MILES SW	9/23/2009	358.4	BE-7	2.26E+00	2.69E-01
63	0.6 MILES SW	10/20/2009	392.1	AC-228	8.00E-02	4.37E-02
63	0.6 MILES SW	10/20/2009	392.1	BE-7	2.74E+00	2.88E-01
63	0.6 MILES SW	10/20/2009	392.1	RA-226	3.62E-01	3.06E-01
63	0.6 MILES SW	10/20/2009	392.1	PB-214	5.89E-02	3.38E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: WAX MYRTLE

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
63	0.6 MILES SW	10/20/2009	392.1	BI-214	1.14E-01	4.26E-02
63	0.6 MILES SW	10/20/2009	392.1	PB-212	1.20E-01	3.27E-02
63	0.6 MILES SW	10/20/2009	392.1	BI-212	1.13E-01	1.11E-01
63	0.6 MILES SW	10/20/2009	392.1	K-40	3.06E+00	3.96E-01
63	0.6 MILES SW	10/20/2009	392.1	TL-208	5.87E-02	1.86E-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	1/12/2009	1.0	RA-226	3.68E+01	2.37E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/12/2009	1.0	BI-214	6.98E+00	3.69E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	1/12/2009	1.0	PB-212	5.00E+00	2.65E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	1/12/2009	1.0	TL-208	3.33E+00	1.91E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	1/12/2009	1.0	K-40	4.92E+02	4.94E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	1.0	PB-214	7.29E+00	5.21E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	1.0	K-40	4.90E+02	5.10E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	1.0	TL-208	7.23E+00	3.09E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	1.0	BI-214	1.46E+01	5.01E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	1.0	RA-226	1.06E+02	5.89E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	1.0	TH-234	1.42E+02	8.46E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	1.0	PB-212	6.84E+00	4.39E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2009	1.0	K-40	5.25E+02	5.18E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2009	1.0	PB-214	1.28E+01	6.18E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2009	1.0	RA-226	1.49E+02	5.52E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2009	1.0	BI-214	1.35E+01	4.62E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2009	1.0	PB-212	8.98E+00	3.76E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2009	1.0	TL-208	5.75E+00	2.43E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	1.0	PB-214	1.04E+01	5.14E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	1.0	RA-226	1.36E+02	5.08E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	1.0	TH-234	1.46E+02	6.51E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	1.0	K-40	5.18E+02	5.00E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	1.0	BI-214	1.28E+01	5.00E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	1.0	PB-212	1.13E+01	3.79E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	1.0	TL-208	6.10E+00	2.14E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1.0	AC-228	1.23E+01	6.18E+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*
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1.0	BI-214	2.02E+01	4.41E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1.0	K-40	2.34E+02	3.15E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1.0	TL-208	4.69E+00	2.08E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1.0	PB-212	1.09E+01	2.64E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1.0	RA-226	1.81E+02	4.12E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1.0	PB-214	1.56E+01	4.10E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1.0	TH-234	2.23E+02	7.29E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	1.0	BI-214	1.20E+01	3.49E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	1.0	PB-214	1.17E+01	4.36E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	1.0	PB-212	1.22E+01	3.15E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	1.0	TL-208	4.61E+00	1.63E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	1.0	K-40	3.61E+02	3.68E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	1.0	TH-234	2.25E+02	6.06E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	1.0	RA-226	1.98E+02	4.82E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	1.0	TH-234	2.55E+02	6.56E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	1.0	RA-226	1.83E+02	5.06E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	1.0	K-40	3.71E+02	3.78E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	1.0	TL-208	5.46E+00	1.57E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	1.0	PB-212	1.11E+01	2.97E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	1.0	BI-214	1.07E+01	3.71E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	1.0	PB-214	9.16E+00	3.96E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1.0	BI-214	1.33E+01	3.88E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1.0	TH-234	1.94E+02	6.58E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1.0	AC-228	1.11E+01	6.52E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1.0	PB-214	8.81E+00	3.76E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1.0	PB-212	1.11E+01	3.33E+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*
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1.0	TL-208	5.85E+00	1.93E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1.0	RA-226	1.80E+02	3.96E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1.0	K-40	3.81E+02	3.77E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1.0	AC-228	1.48E+01	6.86E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1.0	TH-234	1.48E+02	7.74E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1.0	RA-226	1.54E+02	4.90E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1.0	PB-214	1.18E+01	4.40E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1.0	BI-214	1.20E+01	3.35E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1.0	PB-212	8.00E+00	3.57E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1.0	TL-208	4.68E+00	2.10E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1.0	K-40	4.95E+02	4.70E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1.0	PB-214	7.53E+00	3.63E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1.0	RA-226	1.16E+02	4.44E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1.0	TH-234	1.77E+02	9.22E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1.0	K-40	5.13E+02	4.71E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1.0	TL-208	4.43E+00	1.97E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1.0	PB-212	9.29E+00	3.58E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1.0	BI-214	1.18E+01	3.42E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1.0	AC-228	1.58E+01	6.88E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	1.0	RA-226	1.42E+02	4.79E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	1.0	PB-214	9.25E+00	5.27E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	1.0	BI-214	9.57E+00	5.27E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	1.0	TL-208	4.41E+00	2.14E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	1.0	K-40	4.98E+02	5.39E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	1.0	TH-234	1.23E+02	7.76E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	1.0	PB-212	7.18E+00	3.92E+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*
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1.0	PB-212	9.41E+00	2.87E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1.0	TH-234	1.50E+02	7.01E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1.0	AC-228	1.59E+01	7.69E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1.0	RA-226	1.37E+02	4.40E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1.0	BI-214	8.36E+00	4.77E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1.0	TL-208	5.94E+00	2.15E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1.0	PB-214	8.41E+00	4.63E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1.0	K-40	5.05E+02	4.80E+01
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	1.0	BI-214	1.52E+01	3.23E+00
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	1.0	PB-214	1.19E+01	2.79E+00
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	1.0	RA-226	7.90E+01	2.36E+01
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	1.0	TH-234	1.15E+02	3.64E+01
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	1.0	TL-208	3.95E+00	1.30E+00
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	1.0	K-40	1.12E+02	2.10E+01
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	1.0	PB-212	6.30E+00	1.94E+00
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	1.0	K-40	2.18E+02	4.13E+01
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	1.0	BI-214	2.07E+01	6.38E+00
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	1.0	RA-226	2.23E+02	5.76E+01
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	1.0	TL-208	5.56E+00	2.47E+00
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	1.0	PB-212	1.23E+01	4.31E+00
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	1.0	PB-214	1.59E+01	4.90E+00
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	1.0	TH-234	2.24E+02	9.71E+01
40	LILLINGTON - CAPE FEAR RIVER	3/12/2009	1.0	PB-214	1.44E+01	5.50E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2009	1.0	K-40	2.31E+02	3.61E+01
40	LILLINGTON - CAPE FEAR RIVER	3/12/2009	1.0	BI-214	1.52E+01	5.61E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2009	1.0	PB-212	1.76E+01	3.49E+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	3/12/2009	1.0	TL-208	5.79E+00	2.39E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2009	1.0	TH-234	2.49E+02	8.94E+01
40	LILLINGTON - CAPE FEAR RIVER	3/12/2009	1.0	RA-226	2.00E+02	4.79E+01
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1.0	K-40	2.18E+02	3.54E+01
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1.0	TL-208	6.83E+00	2.28E+00
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1.0	TH-234	2.22E+02	8.18E+01
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1.0	BI-212	2.58E+01	1.68E+01
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1.0	RA-226	2.21E+02	6.38E+01
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1.0	BI-214	1.38E+01	7.16E+00
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1.0	PB-214	1.34E+01	4.95E+00
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1.0	AC-228	1.97E+01	8.61E+00
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1.0	PB-212	1.43E+01	3.77E+00
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1.0	K-40	2.33E+02	3.75E+01
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1.0	TL-208	9.24E+00	2.87E+00
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1.0	PB-212	1.52E+01	3.21E+00
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1.0	BI-214	1.97E+01	5.05E+00
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1.0	PB-214	1.23E+01	4.62E+00
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1.0	RA-226	2.30E+02	4.71E+01
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1.0	AC-228	1.15E+01	1.09E+01
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1.0	TH-234	2.46E+02	6.95E+01
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	1.0	BI-214	1.52E+01	5.53E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	1.0	K-40	2.27E+02	3.59E+01
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	1.0	PB-212	1.34E+01	4.38E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	1.0	PB-214	1.69E+01	5.67E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	1.0	RA-226	2.01E+02	5.55E+01
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	1.0	TH-234	2.55E+02	1.11E+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*
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	1.0	TL-208	6.67E+00	3.02E+00
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1.0	K-40	2.05E+02	4.02E+01
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1.0	TL-208	5.66E+00	2.60E+00
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1.0	PB-212	1.58E+01	3.96E+00
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1.0	BI-214	1.84E+01	6.17E+00
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1.0	PB-214	1.15E+01	4.59E+00
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1.0	RA-226	2.46E+02	5.74E+01
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1.0	AC-228	2.04E+01	1.06E+01
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1.0	TH-234	2.91E+02	9.96E+01
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	1.0	BI-214	1.15E+01	4.08E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	1.0	TH-234	1.80E+02	7.01E+01
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	1.0	RA-226	8.17E+01	4.43E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	1.0	PB-214	9.75E+00	4.19E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	1.0	K-40	5.17E+02	4.69E+01
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	1.0	PB-212	1.08E+01	3.23E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	1.0	TL-208	4.58E+00	2.08E+00
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	1.0	PB-214	8.47E+00	3.74E+00
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	1.0	PB-212	1.17E+01	3.27E+00
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	1.0	TH-234	2.11E+02	5.45E+01
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	1.0	RA-226	2.11E+02	4.59E+01
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	1.0	K-40	3.99E+02	3.95E+01
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	1.0	BI-214	8.35E+00	4.07E+00
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	1.0	TL-208	5.54E+00	2.25E+00
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	1.0	PB-214	9.98E+00	3.89E+00
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	1.0	RA-226	1.73E+02	4.19E+01
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	1.0	TH-234	1.76E+02	6.93E+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	10/12/2009	1.0	PB-212	8.54E+00	3.58E+00
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	1.0	BI-214	1.20E+01	3.94E+00
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	1.0	TL-208	3.37E+00	2.04E+00
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	1.0	K-40	2.53E+02	3.16E+01
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1.0	K-40	2.60E+02	3.65E+01
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1.0	AC-228	1.53E+01	9.86E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1.0	RA-226	2.20E+02	5.80E+01
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1.0	BI-214	1.31E+01	5.70E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1.0	TL-208	6.83E+00	2.74E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1.0	PB-214	1.32E+01	5.05E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1.0	TH-234	2.08E+02	8.26E+01
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1.0	PB-212	1.51E+01	3.64E+00
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	1.0	K-40	2.18E+02	3.09E+01
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	1.0	TL-208	5.15E+00	2.00E+00
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	1.0	BI-214	1.19E+02	4.97E+00
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	1.0	PB-214	9.03E+00	3.49E+00
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	1.0	RA-226	1.86E+02	4.18E+01
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	1.0	TH-234	2.25E+02	6.42E+01
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	1.0	PB-212	1.26E+01	2.96E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/12/2009	1.0	RA-226	4.56E+01	2.26E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/12/2009	1.0	K-40	5.20E+02	4.72E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/12/2009	1.0	TL-208	3.16E+00	1.33E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/12/2009	1.0	PB-212	7.11E+00	2.23E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/12/2009	1.0	BI-214	6.46E+00	2.75E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/12/2009	1.0	AC-228	8.06E+00	6.45E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/9/2009	1.0	K-40	3.92E+02	4.51E+01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/9/2009	1.0	PB-212	1.63E+01	3.52E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/9/2009	1.0	TH-234	2.61E+02	8.21E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/9/2009	1.0	BI-214	1.30E+01	5.00E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/9/2009	1.0	PB-214	8.42E+00	4.69E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/9/2009	1.0	RA-226	1.96E+02	4.98E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/9/2009	1.0	TL-208	6.23E+00	2.45E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2009	1.0	K-40	2.40E+02	3.45E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2009	1.0	TL-208	5.77E+00	2.12E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2009	1.0	PB-212	9.73E+00	3.03E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2009	1.0	TH-234	1.76E+02	8.71E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2009	1.0	BI-214	1.98E+01	4.84E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2009	1.0	PB-214	1.41E+01	4.87E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2009	1.0	RA-226	2.07E+02	6.64E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/13/2009	1.0	PB-212	1.22E+01	3.09E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/13/2009	1.0	TL-208	4.26E+00	2.04E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/13/2009	1.0	PB-214	1.43E+01	4.37E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/13/2009	1.0	K-40	2.03E+02	3.04E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/13/2009	1.0	TH-234	2.41E+02	8.28E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/13/2009	1.0	RA-226	1.68E+02	3.91E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/13/2009	1.0	BI-214	2.12E+01	5.30E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/11/2009	1.0	RA-226	2.16E+02	4.82E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/11/2009	1.0	TH-234	2.58E+02	6.86E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/11/2009	1.0	K-40	3.59E+02	3.63E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/11/2009	1.0	TL-208	7.68E+00	2.28E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/11/2009	1.0	PB-212	1.21E+01	3.19E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/11/2009	1.0	PB-214	1.12E+01	4.21E+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	5/11/2009	1.0	BI-214	1.30E+01	3.30E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2009	1.0	RA-226	1.31E+02	5.70E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2009	1.0	PB-214	1.20E+01	4.20E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2009	1.0	PB-212	8.81E+00	3.55E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2009	1.0	BI-214	1.69E+01	4.80E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2009	1.0	K-40	4.96E+02	4.88E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2009	1.0	TH-234	1.03E+02	6.37E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2009	1.0	TL-208	3.51E+00	1.87E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/13/2009	1.0	TL-208	6.18E+00	1.67E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/13/2009	1.0	PB-212	1.07E+01	2.81E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/13/2009	1.0	K-40	2.31E+02	3.27E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/13/2009	1.0	RA-226	1.53E+02	3.87E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/13/2009	1.0	AC-228	9.25E+00	6.25E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/13/2009	1.0	TH-234	1.71E+02	7.01E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/13/2009	1.0	BI-214	1.06E+01	4.43E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2009	1.0	PB-212	1.34E+01	2.92E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2009	1.0	RA-226	2.04E+02	4.15E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2009	1.0	AC-228	1.11E+01	6.17E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2009	1.0	TH-234	2.05E+02	5.86E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2009	1.0	K-40	2.48E+02	3.10E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2009	1.0	TL-208	5.62E+00	2.32E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2009	1.0	BI-214	1.50E+01	3.91E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2009	1.0	PB-214	1.53E+01	4.56E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/14/2009	1.0	TL-208	3.10E+00	2.40E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/14/2009	1.0	TH-234	1.70E+02	6.40E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/14/2009	1.0	PB-214	8.68E+00	3.53E+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	9/14/2009	1.0	K-40	2.54E+02	3.37E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/14/2009	1.0	BI-214	1.25E+01	4.87E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/14/2009	1.0	PB-212	1.30E+01	3.24E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/14/2009	1.0	RA-226	1.88E+02	3.92E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/12/2009	1.0	TH-234	2.34E+02	7.67E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/12/2009	1.0	AC-228	1.68E+01	8.44E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/12/2009	1.0	RA-226	1.77E+02	4.21E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/12/2009	1.0	BI-214	1.15E+01	4.26E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/12/2009	1.0	PB-212	1.35E+01	2.76E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/12/2009	1.0	TL-208	4.08E+00	1.98E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/12/2009	1.0	K-40	2.41E+02	3.31E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/12/2009	1.0	PB-214	1.15E+01	4.44E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2009	1.0	BI-214	1.22E+01	5.07E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2009	1.0	K-40	4.13E+02	4.61E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2009	1.0	PB-212	9.71E+00	3.93E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2009	1.0	RA-226	1.87E+02	5.22E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2009	1.0	TH-234	2.12E+02	8.00E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2009	1.0	TL-208	4.57E+00	2.12E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/14/2009	1.0	RA-226	1.11E+02	4.86E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/14/2009	1.0	K-40	5.08E+02	4.78E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/14/2009	1.0	TL-208	6.63E+00	2.43E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/14/2009	1.0	PB-212	1.02E+01	3.65E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/14/2009	1.0	PB-214	1.32E+01	3.80E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/14/2009	1.0	AC-228	1.51E+01	7.35E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/14/2009	1.0	TH-234	1.21E+02	6.27E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/14/2009	1.0	BI-214	1.18E+01	3.77E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: BROCCOLI

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
55	RD 1167 1.7 MI NNW (GOODWIN)	6/23/2009	643.3	PB-214	6.02E-02	2.31E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	6/23/2009	643.3	RA-226	3.94E-01	2.04E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	6/23/2009	643.3	BI-214	8.33E-02	2.35E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	6/23/2009	643.3	PB-212	3.18E-02	1.51E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	6/23/2009	643.3	TL-208	2.08E-02	1.08E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	6/23/2009	643.3	K-40	4.91E+00	4.26E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	6/23/2009	643.3	BE-7	2.96E-01	9.23E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: CABBAGE

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
55	RD 1167 1.7 MI NNW (GOODWIN)	6/23/2009	513.5	BE-7	2.07E-01	1.05E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	6/23/2009	513.5	K-40	5.13E+00	4.94E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	6/23/2009	513.5	PB-214	3.77E-02	2.82E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	6/23/2009	513.5	BI-214	4.89E-02	2.95E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: COLLARDS

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	583.4	PB-214	7.25E-02	2.76E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	583.4	TL-208	6.47E-02	1.45E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	583.4	K-40	3.66E+00	3.70E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	583.4	BE-7	1.28E-01	8.38E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	583.4	BI-214	8.86E-02	3.23E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	583.4	PB-212	1.72E-01	2.41E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/23/2009	583.4	RA-226	4.38E-01	3.18E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	437.3	PB-214	4.13E-02	2.59E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	437.3	BI-214	8.64E-02	2.83E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	437.3	PB-212	2.49E-01	4.03E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	437.3	BI-212	1.41E-01	9.40E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	437.3	TL-208	9.06E-02	2.27E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	437.3	BE-7	2.90E-01	1.31E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/20/2009	437.3	K-40	3.81E+00	4.44E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	11/18/2009	376.3	BI-214	1.27E-01	4.04E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	11/18/2009	376.3	TH-234	6.93E-01	5.02E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	11/18/2009	376.3	RA-226	7.21E-01	4.00E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	11/18/2009	376.3	BE-7	4.58E-01	2.00E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	11/18/2009	376.3	K-40	5.19E+00	5.28E-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	>12 MILES WNW - PITTSBORO - CONTROL	11/18/2009	376.3	TL-208	1.08E-01	2.59E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	11/18/2009	376.3	BI-212	2.85E-01	1.64E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	11/18/2009	376.3	PB-212	2.94E-01	4.35E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	12/16/2009	407.5	PB-214	4.64E-02	3.02E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	12/16/2009	407.5	RA-226	4.06E-01	2.90E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	12/16/2009	407.5	BE-7	5.20E-01	1.48E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	12/16/2009	407.5	BI-214	5.36E-02	3.43E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	12/16/2009	407.5	PB-212	1.13E-01	2.52E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	12/16/2009	407.5	K-40	3.96E+00	4.37E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	12/16/2009	407.5	TH-234	7.92E-01	5.64E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	12/16/2009	407.5	TL-208	5.58E-02	1.53E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	1/26/2009	566.5	K-40	3.82E+00	4.43E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	1/26/2009	566.5	PB-212	3.33E-02	1.64E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	1/26/2009	566.5	BI-214	6.44E-02	3.52E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	1/26/2009	566.5	PB-214	4.75E-02	2.73E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	1/26/2009	566.5	RA-226	4.33E-01	2.59E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	1/26/2009	566.5	TH-234	5.74E-01	4.67E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	2/26/2009	581.8	AC-228	5.03E-02	3.64E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	2/26/2009	581.8	BI-214	7.49E-02	2.34E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: COLLARDS

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
55	RD 1167 1.7 MI NNW (GOODWIN)	2/26/2009	581.8	PB-212	6.41E-02	2.32E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	2/26/2009	581.8	BE-7	2.81E-01	9.57E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	2/26/2009	581.8	TL-208	3.58E-02	1.44E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	2/26/2009	581.8	K-40	3.79E+00	3.88E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	9/23/2009	502.9	RA-226	4.66E-01	2.51E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	9/23/2009	502.9	K-40	2.44E+00	3.06E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	9/23/2009	502.9	TH-234	6.82E-01	3.81E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	9/23/2009	502.9	PB-212	2.94E-02	2.22E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	9/23/2009	502.9	BE-7	2.83E-01	8.60E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	9/23/2009	502.9	BI-214	6.18E-02	2.91E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	10/20/2009	473	TH-234	4.64E-01	3.64E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	10/20/2009	473	RA-226	4.55E-01	2.41E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	10/20/2009	473	PB-214	1.03E-01	3.22E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	10/20/2009	473	BI-214	1.04E-01	2.87E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	10/20/2009	473	PB-212	5.74E-02	2.06E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	10/20/2009	473	TL-208	3.49E-02	1.57E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	10/20/2009	473	K-40	3.23E+00	3.63E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	10/20/2009	473	BE-7	6.54E-01	1.39E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	11/18/2009	400.2	BE-7	8.84E-01	1.60E-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)	11/18/2009	400.2	RA-226	3.59E-01	2.64E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	11/18/2009	400.2	PB-214	9.07E-02	3.69E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	11/18/2009	400.2	BI-214	9.12E-02	4.25E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	11/18/2009	400.2	TH-234	6.04E-01	2.99E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	11/18/2009	400.2	PB-212	4.88E-02	2.86E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	11/18/2009	400.2	K-40	2.24E+00	3.03E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	12/16/2009	523.8	BI-214	1.12E-01	2.61E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	12/16/2009	523.8	K-40	3.29E+00	3.50E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	12/16/2009	523.8	PB-214	8.10E-02	3.07E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	12/16/2009	523.8	TL-208	2.63E-02	1.16E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	12/16/2009	523.8	BE-7	1.84E-01	9.67E-02
55	RD 1167 1.7 MI NNW (GOODWIN)	12/16/2009	523.8	RA-226	3.38E-01	2.13E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	12/16/2009	523.8	TH-234	8.78E-01	3.55E-01
55	RD 1167 1.7 MI NNW (GOODWIN)	12/16/2009	523.8	PB-212	4.94E-02	1.85E-02
64	1.8 MI ENE SECTOR (MICHAEL)	5/13/2009	353	RA-226	8.42E-01	4.62E-01
64	1.8 MI ENE SECTOR (MICHAEL)	5/13/2009	353	K-40	3.43E+00	5.34E-01
64	1.8 MI ENE SECTOR (MICHAEL)	5/13/2009	353	TL-208	1.31E-01	2.98E-02
64	1.8 MI ENE SECTOR (MICHAEL)	5/13/2009	353	PB-212	2.90E-01	5.50E-02
64	1.8 MI ENE SECTOR (MICHAEL)	5/13/2009	353	BI-214	7.65E-02	4.83E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: COLLARDS

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
64	1.8 MI ENE SECTOR (MICHAEL)	6/23/2009	598.1	K-40	4.04E+00	3.93E-01
64	1.8 MI ENE SECTOR (MICHAEL)	6/23/2009	598.1	TL-208	1.28E-02	8.60E-03
64	1.8 MI ENE SECTOR (MICHAEL)	6/23/2009	598.1	PB-212	4.93E-02	2.16E-02
64	1.8 MI ENE SECTOR (MICHAEL)	6/23/2009	598.1	BI-214	3.58E-02	1.83E-02
64	1.8 MI ENE SECTOR (MICHAEL)	6/23/2009	598.1	TH-234	5.29E-01	3.37E-01
64	1.8 MI ENE SECTOR (MICHAEL)	6/23/2009	598.1	BE-7	2.08E-01	9.41E-02
64	1.8 MI ENE SECTOR (MICHAEL)	7/21/2009	539.1	K-40	4.05E+00	3.97E-01
64	1.8 MI ENE SECTOR (MICHAEL)	7/21/2009	539.1	TL-208	3.22E-02	1.62E-02
64	1.8 MI ENE SECTOR (MICHAEL)	7/21/2009	539.1	PB-212	9.35E-02	1.77E-02
64	1.8 MI ENE SECTOR (MICHAEL)	7/21/2009	539.1	RA-226	2.69E-01	1.94E-01
64	1.8 MI ENE SECTOR (MICHAEL)	7/21/2009	539.1	BI-214	6.55E-02	2.46E-02
64	1.8 MI ENE SECTOR (MICHAEL)	7/21/2009	539.1	PB-214	4.70E-02	2.48E-02
64	1.8 MI ENE SECTOR (MICHAEL)	7/21/2009	539.1	BE-7	5.10E-01	1.07E-01
64	1.8 MI ENE SECTOR (MICHAEL)	8/26/2009	427.4	BI-212	1.76E-01	1.13E-01
64	1.8 MI ENE SECTOR (MICHAEL)	8/26/2009	427.4	TL-208	6.34E-02	1.82E-02
64	1.8 MI ENE SECTOR (MICHAEL)	8/26/2009	427.4	PB-212	1.49E-01	2.85E-02
64	1.8 MI ENE SECTOR (MICHAEL)	8/26/2009	427.4	BI-214	8.12E-02	3.52E-02
64	1.8 MI ENE SECTOR (MICHAEL)	8/26/2009	427.4	PB-214	6.56E-02	3.39E-02
64	1.8 MI ENE SECTOR (MICHAEL)	8/26/2009	427.4	K-40	5.03E+00	5.16E-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)	8/26/2009	427.4	BE-7	4.27E-01	1.51E-01
64	1.8 MI ENE SECTOR (MICHAEL)	9/23/2009	466.5	K-40	6.11E+00	7.81E-01
64	1.8 MI ENE SECTOR (MICHAEL)	9/23/2009	466.5	BE-7	5.34E-01	2.11E-01
64	1.8 MI ENE SECTOR (MICHAEL)	9/23/2009	466.5	TL-208	4.12E-02	2.86E-02
64	1.8 MI ENE SECTOR (MICHAEL)	9/23/2009	466.5	PB-212	5.37E-02	4.56E-02
64	1.8 MI ENE SECTOR (MICHAEL)	9/23/2009	466.5	BI-214	6.55E-02	3.67E-02

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	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	500.4	TH-234	7.49E-01	5.21E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	500.4	K-40	2.69E+00	4.02E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	500.4	TL-208	2.38E-02	2.16E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	500.4	BI-214	6.37E-02	3.53E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	500.4	RA-226	6.17E-01	3.20E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	500.4	PB-214	6.29E-02	3.39E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: TOMATOES

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	974.3	K-40	2.01E+00	2.06E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	974.3	PB-212	1.12E-02	9.41E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	974.3	BI-214	1.64E-02	1.09E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/23/2009	974.3	TH-234	2.43E-01	1.73E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	1003.8	BI-214	1.68E-02	1.39E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	1003.8	TL-208	1.34E-02	5.84E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	7/21/2009	1003.8	K-40	2.26E+00	2.24E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	1030.4	RA-226	2.89E-01	2.08E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	1030.4	PB-214	3.22E-02	1.81E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	1030.4	BI-214	5.52E-02	1.97E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	1030.4	PB-212	3.10E-02	1.64E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	1030.4	TH-234	3.57E-01	3.15E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/26/2009	1030.4	K-40	2.56E+00	3.04E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: Catfish

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
44	SITE VARIES WITHIN HARRIS LAKE	5/18/2009	635.2	BI-214	4.65E-02	4.49E-02
44	SITE VARIES WITHIN HARRIS LAKE	5/18/2009	635.2	K-40	3.83E+00	6.06E-01
44	SITE VARIES WITHIN HARRIS LAKE	11/16/2009	714.6	PB-214	6.64E-02	2.94E-02
44	SITE VARIES WITHIN HARRIS LAKE	11/16/2009	714.6	BI-214	7.56E-02	3.49E-02
44	SITE VARIES WITHIN HARRIS LAKE	11/16/2009	714.6	K-40	4.30E+00	6.01E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/18/2009	944.7	PB-214	2.90E-02	2.53E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/18/2009	944.7	BI-214	5.64E-02	2.36E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/18/2009	944.7	PB-212	2.74E-02	2.41E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/18/2009	944.7	K-40	3.40E+00	4.74E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/23/2009	915.4	BI-214	4.17E-02	2.62E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/23/2009	915.4	PB-212	3.40E-02	2.44E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/23/2009	915.4	TL-208	1.92E-02	1.41E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/23/2009	915.4	K-40	3.56E+00	6.27E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: Largemouth Bass

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
44	SITE VARIES WITHIN HARRIS LAKE	5/18/2009	798.5	BI-214	6.53E-02	2.60E-02
44	SITE VARIES WITHIN HARRIS LAKE	5/18/2009	798.5	K-40	3.56E+00	5.22E-01
44	SITE VARIES WITHIN HARRIS LAKE	11/16/2009	793.2	K-40	3.93E+00	5.59E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/18/2009	620.6	K-40	4.42E+00	6.99E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/17/2009	729.3	PB-214	3.07E-02	2.99E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/17/2009	729.3	BI-214	3.19E-02	2.32E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/17/2009	729.3	K-40	3.74E+00	5.58E-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	5/18/2009	626.9	K-40	4.02E+00	6.27E-01
44	SITE VARIES WITHIN HARRIS LAKE	11/16/2009	752.3	PB-214	5.90E-02	3.27E-02
44	SITE VARIES WITHIN HARRIS LAKE	11/16/2009	752.3	K-40	2.80E+00	4.67E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/18/2009	583.5	RA-226	4.27E-01	3.34E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/18/2009	583.5	BI-214	8.05E-02	5.26E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/18/2009	583.5	PB-212	5.18E-02	3.42E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/18/2009	583.5	K-40	3.55E+00	6.05E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/17/2009	632.8	K-40	3.14E+00	5.38E-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	2/24/2009	1	PB-214	4.95E+01	1.52E+01
39	DEEP WELL NEAR DIABASE DIKES	2/24/2009	1	BI-214	6.25E+01	1.38E+01
39	DEEP WELL NEAR DIABASE DIKES	2/24/2009	1	K-40	5.37E+02	8.69E+01
39	DEEP WELL NEAR DIABASE DIKES	2/24/2009	1	TH-234	2.16E+02	1.51E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	2/24/2009	1	K-40	1.98E+02	6.97E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	2/24/2009	1	PB-212	1.50E+01	8.80E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	2/24/2009	1	BI-214	5.05E+01	1.23E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	2/24/2009	1	PB-214	4.87E+01	1.34E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	2/24/2009	1	RA-226	2.32E+02	1.11E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	2/24/2009	1	TH-234	2.41E+02	1.71E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	5/20/2009	1	BI-214	2.54E+01	1.06E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	5/20/2009	1	TH-234	3.00E+02	1.70E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	5/20/2009	1	PB-214	1.81E+01	9.90E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	5/20/2009	1	K-40	2.99E+02	6.84E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	5/20/2009	1	PB-212	1.19E+01	7.35E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	5/20/2009	1	RA-226	2.18E+02	1.08E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	8/25/2009	1	TH-234	2.86E+02	1.33E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	8/25/2009	1	RA-226	2.73E+02	1.16E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	8/25/2009	1	K-40	4.33E+02	8.17E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	8/25/2009	1	PB-212	2.02E+01	7.63E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	8/25/2009	1	BI-214	1.10E+01	7.67E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	8/25/2009	1	PB-214	1.12E+01	7.85E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	11/10/2009	1	K-40	3.57E+02	7.44E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	11/10/2009	1	TL-208	5.01E+00	3.64E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	11/10/2009	1	PB-212	1.72E+01	9.36E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	11/10/2009	1	BI-214	3.78E+01	1.29E+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
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	11/10/2009	1	TH-234	2.18E+02	1.56E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	11/10/2009	1	RA-226	1.78E+02	9.26E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	11/10/2009	1	PB-214	2.91E+01	1.15E+01
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	2/24/2009	1	RA-226	1.82E+02	1.37E+02
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	2/24/2009	1	K-40	2.28E+02	8.94E+01
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	2/24/2009	1	TL-208	1.18E+01	7.89E+00
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	2/24/2009	1	PB-212	3.31E+01	1.72E+01
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	2/24/2009	1	PB-214	3.30E+01	1.66E+01
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	2/24/2009	1	BI-214	2.42E+01	1.44E+01
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	5/20/2009	1	PB-212	1.05E+01	7.21E+00
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	5/20/2009	1	K-40	5.28E+02	8.74E+01
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	5/20/2009	1	PB-214	2.87E+01	1.14E+01
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	5/20/2009	1	BI-214	3.96E+01	1.18E+01
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	8/25/2009	1	BI-214	7.10E+01	1.24E+01
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	8/25/2009	1	PB-214	7.85E+01	1.44E+01
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	8/25/2009	1	RA-226	2.37E+02	9.62E+01
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	8/25/2009	1	TH-234	2.08E+02	1.57E+02
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	8/25/2009	1	K-40	5.02E+02	7.95E+01
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	8/25/2009	1	PB-212	1.37E+01	6.84E+00
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	11/10/2009	1	BI-214	1.07E+02	1.67E+01
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	11/10/2009	1	K-40	4.48E+02	9.49E+01
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	11/10/2009	1	PB-212	1.58E+01	8.41E+00
60	0.5 MI ESE (W BANK THOMAS CRK SE OF CT)	11/10/2009	1	PB-214	8.79E+01	1.53E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	2/24/2009	1	PB-212	1.29E+01	8.49E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	2/24/2009	1	K-40	2.12E+02	7.60E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	2/24/2009	1	RA-226	1.74E+02	9.92E+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*
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	2/24/2009	1	BI-214	2.90E+01	1.04E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	5/20/2009	1	BI-214	1.77E+01	1.33E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	5/20/2009	1	PB-212	1.77E+01	7.14E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	5/20/2009	1	TL-208	5.64E+00	4.12E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	5/20/2009	1	RA-226	2.11E+02	1.20E+02
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	5/20/2009	1	TH-234	2.20E+02	1.43E+02
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	5/20/2009	1	K-40	4.63E+02	7.35E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	8/25/2009	1	PB-212	1.39E+01	1.06E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	8/25/2009	1	PB-214	9.64E+00	9.29E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	8/25/2009	1	K-40	5.40E+02	8.30E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	8/25/2009	1	BI-214	2.19E+01	9.14E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	11/10/2009	1	K-40	2.53E+02	8.04E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	11/10/2009	1	PB-212	1.52E+01	1.10E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	11/10/2009	1	RA-226	1.50E+02	9.32E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	11/10/2009	1	PB-214	6.55E+01	1.16E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	11/10/2009	1	BI-214	8.76E+01	1.35E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	2/24/2009	1	BI-214	3.63E+01	1.31E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	2/24/2009	1	PB-212	1.74E+01	9.82E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	2/24/2009	1	TH-234	2.41E+02	2.19E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	2/24/2009	1	K-40	2.03E+02	6.58E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	2/24/2009	1	TL-208	8.26E+00	5.93E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	2/24/2009	1	RA-226	1.91E+02	1.26E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	5/20/2009	1	RA-226	2.30E+02	1.36E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	5/20/2009	1	K-40	2.27E+02	7.89E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	5/20/2009	1	TL-208	7.33E+00	4.97E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	5/20/2009	1	PB-212	2.20E+01	1.01E+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*
69	0.2 MI NNE (S SIDE OF WRHSE 9)	5/20/2009	1	BI-214	1.40E+01	1.23E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	8/25/2009	1	TH-234	2.75E+02	1.40E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	8/25/2009	1	K-40	2.70E+02	6.84E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	8/25/2009	1	BI-214	6.17E+01	1.30E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	8/25/2009	1	RA-226	1.90E+02	1.30E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	8/25/2009	1	PB-214	5.09E+01	1.11E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	11/10/2009	1	K-40	5.61E+02	9.35E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	11/10/2009	1	BI-214	1.99E+01	1.35E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	11/10/2009	1	TL-208	8.48E+00	4.67E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	11/10/2009	1	PB-212	1.72E+01	9.52E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	2/24/2009	1	PB-212	1.21E+01	8.36E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	2/24/2009	1	BI-214	3.33E+01	1.32E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	2/24/2009	1	TL-208	8.58E+00	5.28E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	2/24/2009	1	K-40	4.43E+02	9.91E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	2/24/2009	1	RA-226	1.58E+02	1.26E+02
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	5/20/2009	1	RA-226	2.18E+02	8.99E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	5/20/2009	1	K-40	2.60E+02	6.55E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	5/20/2009	1	BI-214	2.67E+01	9.95E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	5/20/2009	1	PB-212	1.91E+01	8.38E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	5/20/2009	1	TH-234	2.85E+02	1.76E+02
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	5/20/2009	1	PB-214	1.28E+01	8.84E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	8/25/2009	1	PB-214	2.29E+01	1.11E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	8/25/2009	1	K-40	5.58E+02	8.75E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	8/25/2009	1	BI-214	3.06E+01	1.01E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	11/10/2009	1	K-40	2.50E+02	7.40E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	11/10/2009	1	TL-208	9.46E+00	4.50E+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
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	11/10/2009	1	PB-212	1.47E+01	9.16E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	11/10/2009	1	TH-234	2.95E+02	1.68E+02
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	11/10/2009	1	BI-214	2.98E+01	1.03E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	11/10/2009	1	PB-214	1.65E+01	1.25E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	11/10/2009	1	RA-226	2.25E+02	9.63E+01
71	0.3 MI SE (S OF SWITCH YARD)	2/24/2009	1	PB-214	3.28E+01	1.22E+01
71	0.3 MI SE (S OF SWITCH YARD)	2/24/2009	1	BI-214	2.98E+01	1.35E+01
71	0.3 MI SE (S OF SWITCH YARD)	2/24/2009	1	PB-212	1.76E+01	1.07E+01
71	0.3 MI SE (S OF SWITCH YARD)	2/24/2009	1	K-40	5.07E+02	8.42E+01
71	0.3 MI SE (S OF SWITCH YARD)	2/24/2009	1	TL-208	1.00E+01	6.44E+00
71	0.3 MI SE (S OF SWITCH YARD)	5/20/2009	1	PB-214	1.62E+01	9.85E+00
71	0.3 MI SE (S OF SWITCH YARD)	5/20/2009	1	BI-214	2.06E+01	9.57E+00
71	0.3 MI SE (S OF SWITCH YARD)	5/20/2009	1	PB-212	1.06E+01	8.47E+00
71	0.3 MI SE (S OF SWITCH YARD)	5/20/2009	1	K-40	5.29E+02	1.01E+02
71	0.3 MI SE (S OF SWITCH YARD)	8/25/2009	1	TH-234	2.39E+02	1.93E+02
71	0.3 MI SE (S OF SWITCH YARD)	8/25/2009	1	K-40	5.70E+02	9.43E+01
71	0.3 MI SE (S OF SWITCH YARD)	8/25/2009	1	TL-208	5.83E+00	4.03E+00
71	0.3 MI SE (S OF SWITCH YARD)	8/25/2009	1	BI-214	1.89E+01	1.04E+01
71	0.3 MI SE (S OF SWITCH YARD)	11/10/2009	1	PB-212	1.72E+01	8.06E+00
71	0.3 MI SE (S OF SWITCH YARD)	11/10/2009	1	BI-214	2.00E+01	9.00E+00
71	0.3 MI SE (S OF SWITCH YARD)	11/10/2009	1	PB-214	1.72E+01	1.03E+01
71	0.3 MI SE (S OF SWITCH YARD)	11/10/2009	1	RA-226	1.65E+02	1.07E+02
71	0.3 MI SE (S OF SWITCH YARD)	11/10/2009	1	TH-234	3.16E+02	1.81E+02
71	0.3 MI SE (S OF SWITCH YARD)	11/10/2009	1	K-40	3.91E+02	6.80E+01
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	2/24/2009	1	BI-214	3.92E+02	3.59E+01
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	2/24/2009	1	TH-234	3.04E+02	1.98E+02

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	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	2/24/2009	1	PB-214	4.20E+02	3.38E+01
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	2/24/2009	1	RA-226	2.16E+02	1.43E+02
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	2/24/2009	1	K-40	2.11E+02	8.64E+01
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	5/20/2009	1	PB-214	1.11E+03	7.16E+01
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	5/20/2009	1	K-40	4.28E+02	9.85E+01
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	5/20/2009	1	PB-212	1.63E+01	1.12E+01
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	5/20/2009	1	BI-214	1.09E+03	8.62E+01
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	8/25/2009	1	RA-226	1.94E+02	1.41E+02
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	8/25/2009	1	PB-214	6.91E+02	4.77E+01
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	8/25/2009	1	BI-214	6.31E+02	5.08E+01
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	8/25/2009	1	K-40	2.91E+02	1.00E+02
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	8/25/2009	1	TL-208	7.54E+00	6.29E+00
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	11/10/2009	1	PB-214	6.24E+02	4.57E+01
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	11/10/2009	1	BI-214	6.02E+02	4.82E+01
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	11/10/2009	1	PB-212	1.77E+01	8.76E+00
72	0.2 MI SE (N EMERG SW & CTMW INTAKE STRUCTURE)	11/10/2009	1	K-40	5.52E+02	1.07E+02

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	>12 MILES WNW - PITTSBORO - CONTROL	1/5/2009	1	TL-208	6.95E+00	7.31E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	1/5/2009	1	K-40	2.62E+03	2.88E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	2/2/2009	1	K-40	2.23E+03	2.51E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	2/2/2009	1	RA-226	1.57E+02	1.27E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	2/2/2009	1	TL-208	1.37E+01	1.03E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	3/2/2009	1	RA-226	1.66E+02	9.63E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	3/2/2009	1	TH-234	2.82E+02	1.56E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	3/2/2009	1	PB-214	3.08E+01	1.20E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	3/2/2009	1	PB-212	2.55E+01	9.59E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	3/2/2009	1	BI-214	4.32E+01	1.31E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	3/2/2009	1	K-40	1.63E+03	1.46E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	4/6/2009	1	PB-214	2.31E+01	1.15E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	4/6/2009	1	BI-214	1.94E+01	1.34E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	4/6/2009	1	PB-212	1.19E+01	8.56E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	4/6/2009	1	K-40	1.77E+03	1.69E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/4/2009	1	PB-212	1.28E+01	6.55E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	5/4/2009	1	RA-226	2.03E+02	1.26E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/4/2009	1	TL-208	5.05E+00	4.21E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	5/4/2009	1	BI-214	2.38E+01	8.95E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	5/4/2009	1	K-40	1.84E+03	1.67E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/4/2009	1	PB-214	2.40E+01	8.66E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	6/1/2009	1	TH-234	2.41E+02	1.45E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/1/2009	1	K-40	1.76E+03	1.58E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/1/2009	1	TL-208	6.52E+00	3.82E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	6/1/2009	1	PB-212	1.05E+01	6.08E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	6/1/2009	1	BI-214	2.70E+01	1.03E+01

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	>12 MILES WNW - PITTSBORO - CONTROL	6/1/2009	1	PB-214	1.79E+01	9.60E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	6/1/2009	1	RA-226	2.17E+02	1.21E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/6/2009	1	PB-212	1.36E+01	6.30E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	7/6/2009	1	RA-226	2.26E+02	9.57E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/6/2009	1	TH-234	3.29E+02	1.60E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/6/2009	1	K-40	1.62E+03	1.55E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/6/2009	1	BI-214	3.88E+01	1.08E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/3/2009	1	RA-226	1.92E+02	9.24E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/3/2009	1	K-40	1.68E+03	1.52E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/3/2009	1	TL-208	1.10E+01	4.49E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	8/3/2009	1	PB-212	1.76E+01	8.51E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	8/3/2009	1	BI-214	1.64E+01	1.18E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/3/2009	1	PB-214	1.11E+01	1.05E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/3/2009	1	TH-234	2.09E+02	1.18E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/8/2009	1	RA-226	1.47E+02	1.06E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/8/2009	1	BI-214	2.88E+01	1.06E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/8/2009	1	PB-212	7.23E+00	6.34E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	9/8/2009	1	K-40	1.79E+03	1.68E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/8/2009	1	TL-208	5.66E+00	4.95E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	10/5/2009	1	K-40	1.49E+03	1.47E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/5/2009	1	TH-234	2.88E+02	1.60E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/5/2009	1	PB-212	1.24E+01	9.33E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	10/5/2009	1	BI-214	2.24E+01	9.10E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	10/5/2009	1	RA-226	2.29E+02	9.98E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/5/2009	1	PB-214	1.60E+01	8.78E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	11/2/2009	1	BI-214	1.51E+01	7.66E+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	>12 MILES WNW - PITTSBORO - CONTROL	11/2/2009	1	PB-212	1.93E+01	9.00E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	11/2/2009	1	K-40	1.86E+03	1.74E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	12/7/2009	1	PB-214	1.47E+01	1.20E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	12/7/2009	1	BI-214	1.51E+01	9.59E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	12/7/2009	1	PB-212	1.15E+01	6.71E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	12/7/2009	1	TL-208	8.09E+00	4.58E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	12/7/2009	1	K-40	1.94E+03	1.77E+02

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	2/12/2009	1115.1	K-40	5.61E+00	5.18E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	2/12/2009	1115.1	BE-7	3.10E-01	1.66E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	2/12/2009	1115.1	TH-234	1.01E+00	7.60E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	2/12/2009	1115.1	CO-58	2.67E-02	1.48E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	2/12/2009	1115.1	CO-60	5.00E-01	4.95E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	2/12/2009	1115.1	CS-137	1.10E-01	2.92E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	2/12/2009	1115.1	TL-208	1.65E-01	2.92E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	2/12/2009	1115.1	PB-212	5.01E-01	4.69E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	2/12/2009	1115.1	BI-214	4.24E-01	5.71E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	2/12/2009	1115.1	PB-214	3.56E-01	5.74E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	2/12/2009	1115.1	RA-226	1.15E+00	3.99E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	2/12/2009	1115.1	AC-228	5.96E-01	9.89E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	2/12/2009	1115.1	BI-212	3.20E-01	1.75E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/21/2009	1032.3	RA-226	1.33E+00	6.72E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/21/2009	1032.3	CO-60	1.00E+00	9.30E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/21/2009	1032.3	SB-125	1.21E-01	6.55E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/21/2009	1032.3	CS-137	1.91E-01	4.77E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/21/2009	1032.3	TL-208	2.59E-01	4.78E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/21/2009	1032.3	BI-212	5.50E-01	2.55E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/21/2009	1032.3	PB-212	8.08E-01	7.70E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/21/2009	1032.3	TH-234	1.15E+00	1.08E+00
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/21/2009	1032.3	PB-214	5.34E-01	8.15E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/21/2009	1032.3	AC-228	7.68E-01	1.43E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/21/2009	1032.3	K-40	8.77E+00	8.04E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/21/2009	1032.3	BI-214	4.53E-01	7.76E-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	4.7 MILES S	2/12/2009	1591.9	AC-228	3.25E-01	8.28E-02
26	4.7 MILES S	2/12/2009	1591.9	TL-208	9.77E-02	2.65E-02
26	4.7 MILES S	2/12/2009	1591.9	BI-212	2.42E-01	1.29E-01
26	4.7 MILES S	2/12/2009	1591.9	PB-212	2.95E-01	4.36E-02
26	4.7 MILES S	2/12/2009	1591.9	BI-214	2.08E-01	4.81E-02
26	4.7 MILES S	2/12/2009	1591.9	PB-214	1.85E-01	4.39E-02
26	4.7 MILES S	2/12/2009	1591.9	RA-226	1.03E+00	3.79E-01
26	4.7 MILES S	2/12/2009	1591.9	K-40	8.37E+00	7.45E-01
26	4.7 MILES S	7/21/2009	1589.7	BI-214	2.35E-01	5.57E-02
26	4.7 MILES S	7/21/2009	1589.7	AC-228	2.88E-01	7.98E-02
26	4.7 MILES S	7/21/2009	1589.7	PB-212	2.66E-01	4.26E-02
26	4.7 MILES S	7/21/2009	1589.7	BI-212	2.27E-01	1.27E-01
26	4.7 MILES S	7/21/2009	1589.7	TL-208	9.69E-02	2.41E-02
26	4.7 MILES S	7/21/2009	1589.7	K-40	1.23E+01	9.82E-01
26	4.7 MILES S	7/21/2009	1589.7	BE-7	4.79E-01	1.87E-01
26	4.7 MILES S	7/21/2009	1589.7	PB-214	2.72E-01	4.80E-02
26	4.7 MILES S	7/21/2009	1589.7	RA-226	1.34E+00	5.67E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	2/12/2009	2008.4	PB-214	1.62E-01	4.13E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	2/12/2009	2008.4	RA-226	4.78E-01	3.10E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	2/12/2009	2008.4	AC-228	1.96E-01	6.02E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	2/12/2009	2008.4	BI-214	1.76E-01	3.79E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	2/12/2009	2008.4	PB-212	2.02E-01	2.99E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	2/12/2009	2008.4	BI-212	1.91E-01	9.60E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	2/12/2009	2008.4	TL-208	8.18E-02	1.79E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	2/12/2009	2008.4	K-40	1.01E+01	8.41E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/21/2009	1890	BE-7	1.94E-01	1.37E-01

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	7/21/2009	1890	RA-226	5.04E-01	4.06E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/21/2009	1890	PB-214	2.11E-01	4.30E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/21/2009	1890	BI-214	1.91E-01	4.39E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/21/2009	1890	PB-212	2.48E-01	3.32E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/21/2009	1890	TL-208	7.63E-02	2.28E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/21/2009	1890	K-40	1.13E+01	9.33E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/21/2009	1890	AC-228	2.07E-01	6.69E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
26	4.7 MILES S	1/12/2009	1	BI-214	8.17E+00	2.31E+00
26	4.7 MILES S	1/12/2009	1	RA-226	7.35E+01	1.99E+01
26	4.7 MILES S	1/12/2009	1	AC-228	8.59E+00	3.72E+00
26	4.7 MILES S	1/12/2009	1	TH-234	6.86E+01	2.03E+01
26	4.7 MILES S	1/12/2009	1	PB-214	8.92E+00	2.34E+00
26	4.7 MILES S	1/12/2009	1	TL-208	3.49E+00	1.19E+00
26	4.7 MILES S	1/12/2009	1	K-40	1.08E+02	1.70E+01
26	4.7 MILES S	1/12/2009	1	PB-212	7.65E+00	1.57E+00
26	4.7 MILES S	2/9/2009	1	PB-212	8.24E+00	5.10E+00
26	4.7 MILES S	2/9/2009	1	TL-208	3.02E+00	2.35E+00
26	4.7 MILES S	2/9/2009	1	BI-214	2.11E+01	4.82E+00
26	4.7 MILES S	2/9/2009	1	PB-214	2.22E+01	5.61E+00
26	4.7 MILES S	2/9/2009	1	RA-226	1.92E+02	5.14E+01
26	4.7 MILES S	2/9/2009	1	AC-228	8.74E+00	7.03E+00
26	4.7 MILES S	2/9/2009	1	TH-234	2.81E+02	9.20E+01
26	4.7 MILES S	2/9/2009	1	K-40	2.43E+02	3.83E+01
26	4.7 MILES S	3/12/2009	1	RA-226	1.95E+02	5.45E+01
26	4.7 MILES S	3/12/2009	1	AC-228	1.57E+01	7.61E+00
26	4.7 MILES S	3/12/2009	1	TH-234	1.90E+02	8.11E+01
26	4.7 MILES S	3/12/2009	1	BI-214	1.19E+01	4.76E+00
26	4.7 MILES S	3/12/2009	1	PB-212	1.55E+01	3.62E+00
26	4.7 MILES S	3/12/2009	1	K-40	3.85E+02	4.36E+01
26	4.7 MILES S	3/12/2009	1	PB-214	1.03E+01	4.88E+00
26	4.7 MILES S	3/12/2009	1	TL-208	6.64E+00	3.02E+00
26	4.7 MILES S	4/13/2009	1	K-40	4.23E+02	4.42E+01
26	4.7 MILES S	4/13/2009	1	BI-214	1.23E+01	4.15E+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*
26	4.7 MILES S	4/13/2009	1	PB-214	1.19E+01	4.71E+00
26	4.7 MILES S	4/13/2009	1	RA-226	1.91E+02	4.69E+01
26	4.7 MILES S	4/13/2009	1	TL-208	5.48E+00	2.14E+00
26	4.7 MILES S	4/13/2009	1	PB-212	1.58E+01	3.64E+00
26	4.7 MILES S	4/13/2009	1	TH-234	2.31E+02	7.13E+01
26	4.7 MILES S	5/11/2009	1	TH-234	1.11E+02	6.11E+01
26	4.7 MILES S	5/11/2009	1	TL-208	4.16E+00	1.84E+00
26	4.7 MILES S	5/11/2009	1	PB-212	1.45E+01	4.89E+00
26	4.7 MILES S	5/11/2009	1	BI-214	7.29E+00	4.70E+00
26	4.7 MILES S	5/11/2009	1	PB-214	1.13E+01	4.68E+00
26	4.7 MILES S	5/11/2009	1	RA-226	1.39E+02	5.03E+01
26	4.7 MILES S	5/11/2009	1	AC-228	1.32E+01	6.95E+00
26	4.7 MILES S	5/11/2009	1	K-40	4.93E+02	4.47E+01
26	4.7 MILES S	6/11/2009	1	RA-226	1.70E+02	3.92E+01
26	4.7 MILES S	6/11/2009	1	PB-214	1.36E+01	3.67E+00
26	4.7 MILES S	6/11/2009	1	BI-214	2.19E+01	4.69E+00
26	4.7 MILES S	6/11/2009	1	PB-212	8.96E+00	3.28E+00
26	4.7 MILES S	6/11/2009	1	TL-208	3.09E+00	1.94E+00
26	4.7 MILES S	6/11/2009	1	AC-228	8.56E+00	4.70E+00
26	4.7 MILES S	6/11/2009	1	TH-234	1.72E+02	7.17E+01
26	4.7 MILES S	6/11/2009	1	K-40	2.23E+02	2.79E+01
26	4.7 MILES S	7/13/2009	1	K-40	4.83E+02	4.70E+01
26	4.7 MILES S	7/13/2009	1	TL-208	3.87E+00	2.12E+00
26	4.7 MILES S	7/13/2009	1	PB-212	8.78E+00	3.55E+00
26	4.7 MILES S	7/13/2009	1	BI-214	1.15E+01	5.53E+00
26	4.7 MILES S	7/13/2009	1	TH-234	1.94E+02	6.85E+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	4.7 MILES S	7/13/2009	1	RA-226	1.81E+02	6.85E+01
26	4.7 MILES S	8/13/2009	1	PB-214	2.82E+01	5.15E+00
26	4.7 MILES S	8/13/2009	1	RA-226	1.66E+02	4.60E+01
26	4.7 MILES S	8/13/2009	1	BI-214	2.93E+01	5.42E+00
26	4.7 MILES S	8/13/2009	1	PB-212	1.24E+01	2.69E+00
26	4.7 MILES S	8/13/2009	1	TL-208	5.08E+00	2.22E+00
26	4.7 MILES S	8/13/2009	1	TH-234	2.14E+02	6.39E+01
26	4.7 MILES S	8/13/2009	1	K-40	2.43E+02	3.79E+01
26	4.7 MILES S	9/14/2009	1	TH-234	1.06E+02	6.90E+01
26	4.7 MILES S	9/14/2009	1	K-40	5.19E+02	4.97E+01
26	4.7 MILES S	9/14/2009	1	TL-208	5.50E+00	2.19E+00
26	4.7 MILES S	9/14/2009	1	PB-212	7.95E+00	3.20E+00
26	4.7 MILES S	9/14/2009	1	BI-214	1.06E+01	4.11E+00
26	4.7 MILES S	9/14/2009	1	PB-214	4.93E+00	4.01E+00
26	4.7 MILES S	9/14/2009	1	RA-226	1.27E+02	4.45E+01
26	4.7 MILES S	10/12/2009	1	RA-226	1.88E+02	4.23E+01
26	4.7 MILES S	10/12/2009	1	TH-234	1.98E+02	6.63E+01
26	4.7 MILES S	10/12/2009	1	PB-212	1.10E+01	3.21E+00
26	4.7 MILES S	10/12/2009	1	PB-214	6.52E+00	3.59E+00
26	4.7 MILES S	10/12/2009	1	BI-214	8.99E+00	4.05E+00
26	4.7 MILES S	10/12/2009	1	TL-208	4.80E+00	1.86E+00
26	4.7 MILES S	10/12/2009	1	K-40	3.69E+02	3.95E+01
26	4.7 MILES S	11/12/2009	1	PB-212	7.68E+00	3.60E+00
26	4.7 MILES S	11/12/2009	1	RA-226	1.77E+02	5.09E+01
26	4.7 MILES S	11/12/2009	1	TH-234	2.52E+02	7.85E+01
26	4.7 MILES S	11/12/2009	1	BI-214	1.39E+01	4.81E+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*
26	4.7 MILES S	11/12/2009	1	TL-208	4.79E+00	2.39E+00
26	4.7 MILES S	11/12/2009	1	K-40	2.47E+02	4.08E+01
26	4.7 MILES S	11/12/2009	1	PB-214	1.59E+01	4.54E+00
26	4.7 MILES S	12/14/2009	1	RA-226	1.50E+02	3.97E+01
26	4.7 MILES S	12/14/2009	1	PB-214	1.41E+01	4.18E+00
26	4.7 MILES S	12/14/2009	1	TH-234	1.60E+02	7.50E+01
26	4.7 MILES S	12/14/2009	1	TL-208	4.14E+00	2.21E+00
26	4.7 MILES S	12/14/2009	1	BI-214	1.59E+01	4.36E+00
26	4.7 MILES S	12/14/2009	1	PB-212	8.56E+00	2.63E+00
26	4.7 MILES S	12/14/2009	1	K-40	2.48E+02	3.31E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/12/2009	1	BI-214	6.98E+00	3.69E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	1/12/2009	1	K-40	4.92E+02	4.94E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/12/2009	1	RA-226	3.68E+01	2.37E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/12/2009	1	TL-208	3.33E+00	1.91E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	1/12/2009	1	PB-212	5.00E+00	2.65E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	1	PB-214	7.29E+00	5.21E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	1	RA-226	1.06E+02	5.89E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	1	K-40	4.90E+02	5.10E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	1	TL-208	7.23E+00	3.09E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	1	PB-212	6.84E+00	4.39E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	1	BI-214	1.46E+01	5.01E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/9/2009	1	TH-234	1.42E+02	8.46E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2009	1	RA-226	1.49E+02	5.52E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2009	1	K-40	5.25E+02	5.18E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2009	1	BI-214	1.35E+01	4.62E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2009	1	PB-212	8.98E+00	3.76E+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*
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2009	1	PB-214	1.28E+01	6.18E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2009	1	TL-208	5.75E+00	2.43E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	1	TL-208	6.10E+00	2.14E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	1	BI-214	1.28E+01	5.00E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	1	RA-226	1.36E+02	5.08E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	1	TH-234	1.46E+02	6.51E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	1	K-40	5.18E+02	5.00E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	1	PB-212	1.13E+01	3.79E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/13/2009	1	PB-214	1.04E+01	5.14E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1	TL-208	4.69E+00	2.08E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1	TH-234	2.23E+02	7.29E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1	AC-228	1.23E+01	6.18E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1	RA-226	1.81E+02	4.12E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1	PB-214	1.56E+01	4.10E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1	BI-214	2.02E+01	4.41E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1	PB-212	1.09E+01	2.64E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/11/2009	1	K-40	2.34E+02	3.15E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	1	TL-208	4.61E+00	1.63E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	1	PB-212	1.22E+01	3.15E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	1	BI-214	1.20E+01	3.49E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	1	PB-214	1.17E+01	4.36E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	1	RA-226	1.98E+02	4.82E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	1	TH-234	2.25E+02	6.06E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2009	1	K-40	3.61E+02	3.68E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	1	K-40	3.71E+02	3.78E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	1	PB-214	9.16E+00	3.96E+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*
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	1	PB-212	1.11E+01	2.97E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	1	BI-214	1.07E+01	3.71E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	1	TH-234	2.55E+02	6.56E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	1	TL-208	5.46E+00	1.57E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/13/2009	1	RA-226	1.83E+02	5.06E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1	TH-234	1.94E+02	6.58E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1	AC-228	1.11E+01	6.52E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1	K-40	3.81E+02	3.77E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1	TL-208	5.85E+00	1.93E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1	PB-212	1.11E+01	3.33E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1	BI-214	1.33E+01	3.88E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1	PB-214	8.81E+00	3.76E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2009	1	RA-226	1.80E+02	3.96E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1	BI-214	1.20E+01	3.35E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1	TH-234	1.48E+02	7.74E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1	AC-228	1.48E+01	6.86E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1	PB-214	1.18E+01	4.40E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1	PB-212	8.00E+00	3.57E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1	TL-208	4.68E+00	2.10E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1	K-40	4.95E+02	4.70E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/14/2009	1	RA-226	1.54E+02	4.90E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1	TH-234	1.77E+02	9.22E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1	AC-228	1.58E+01	6.88E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1	RA-226	1.16E+02	4.44E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1	PB-214	7.53E+00	3.63E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1	BI-214	1.18E+01	3.42E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1	PB-212	9.29E+00	3.58E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1	TL-208	4.43E+00	1.97E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/12/2009	1	K-40	5.13E+02	4.71E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	1	PB-214	9.25E+00	5.27E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	1	K-40	4.98E+02	5.39E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	1	TL-208	4.41E+00	2.14E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	1	PB-212	7.18E+00	3.92E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	1	RA-226	1.42E+02	4.79E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	1	BI-214	9.57E+00	5.27E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2009	1	TH-234	1.23E+02	7.76E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1	TL-208	5.94E+00	2.15E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1	TH-234	1.50E+02	7.01E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1	AC-228	1.59E+01	7.69E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1	RA-226	1.37E+02	4.40E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1	PB-214	8.41E+00	4.63E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1	PB-212	9.41E+00	2.87E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1	K-40	5.05E+02	4.80E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/14/2009	1	BI-214	8.36E+00	4.77E+00
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	1	TL-208	3.95E+00	1.30E+00
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	1	K-40	1.12E+02	2.10E+01
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	1	PB-212	6.30E+00	1.94E+00
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	1	TH-234	1.15E+02	3.64E+01
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	1	RA-226	7.90E+01	2.36E+01
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	1	PB-214	1.19E+01	2.79E+00
40	LILLINGTON - CAPE FEAR RIVER	1/12/2009	1	BI-214	1.52E+01	3.23E+00
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	1	K-40	2.18E+02	4.13E+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	2/9/2009	1	TH-234	2.24E+02	9.71E+01
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	1	PB-214	1.59E+01	4.90E+00
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	1	BI-214	2.07E+01	6.38E+00
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	1	PB-212	1.23E+01	4.31E+00
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	1	RA-226	2.23E+02	5.76E+01
40	LILLINGTON - CAPE FEAR RIVER	2/9/2009	1	TL-208	5.56E+00	2.47E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2009	1	K-40	2.31E+02	3.61E+01
40	LILLINGTON - CAPE FEAR RIVER	3/12/2009	1	TL-208	5.79E+00	2.39E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2009	1	PB-212	1.76E+01	3.49E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2009	1	BI-214	1.52E+01	5.61E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2009	1	TH-234	2.49E+02	8.94E+01
40	LILLINGTON - CAPE FEAR RIVER	3/12/2009	1	RA-226	2.00E+02	4.79E+01
40	LILLINGTON - CAPE FEAR RIVER	3/12/2009	1	PB-214	1.44E+01	5.50E+00
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1	RA-226	2.21E+02	6.38E+01
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1	TH-234	2.22E+02	8.18E+01
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1	BI-212	2.58E+01	1.68E+01
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1	PB-212	1.43E+01	3.77E+00
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1	BI-214	1.38E+01	7.16E+00
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1	K-40	2.18E+02	3.54E+01
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1	TL-208	6.83E+00	2.28E+00
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1	AC-228	1.97E+01	8.61E+00
40	LILLINGTON - CAPE FEAR RIVER	4/13/2009	1	PB-214	1.34E+01	4.95E+00
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1	TL-208	9.24E+00	2.87E+00
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1	PB-212	1.52E+01	3.21E+00
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1	BI-214	1.97E+01	5.05E+00
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1	PB-214	1.23E+01	4.62E+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	5/11/2009	1	RA-226	2.30E+02	4.71E+01
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1	AC-228	1.15E+01	1.09E+01
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1	TH-234	2.46E+02	6.95E+01
40	LILLINGTON - CAPE FEAR RIVER	5/11/2009	1	K-40	2.33E+02	3.75E+01
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	1	BI-214	1.52E+01	5.53E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	1	K-40	2.27E+02	3.59E+01
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	1	TH-234	2.55E+02	1.11E+02
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	1	PB-214	1.69E+01	5.67E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	1	PB-212	1.34E+01	4.38E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	1	TL-208	6.67E+00	3.02E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2009	1	RA-226	2.01E+02	5.55E+01
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1	K-40	2.05E+02	4.02E+01
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1	TH-234	2.91E+02	9.96E+01
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1	AC-228	2.04E+01	1.06E+01
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1	RA-226	2.46E+02	5.74E+01
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1	PB-214	1.15E+01	4.59E+00
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1	BI-214	1.87E+01	6.17E+00
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1	PB-212	1.58E+01	3.96E+00
40	LILLINGTON - CAPE FEAR RIVER	7/13/2009	1	TL-208	5.66E+00	2.60E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	1	TH-234	1.80E+02	7.01E+01
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	1	RA-226	8.17E+00	4.43E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	1	PB-214	9.75E+00	4.19E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	1	BI-214	1.15E+01	4.08E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	1	K-40	5.17E+02	4.69E+01
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	1	TL-208	4.58E+00	2.08E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2009	1	PB-212	1.08E+01	3.23E+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	9/14/2009	1	PB-212	1.17E+01	3.27E+00
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	1	K-40	3.99E+02	3.95E+01
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	1	TL-208	5.54E+00	2.25E+00
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	1	BI-214	8.35E+00	4.07E+00
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	1	PB-214	8.47E+00	3.74E+00
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	1	RA-226	2.11E+02	4.59E+01
40	LILLINGTON - CAPE FEAR RIVER	9/14/2009	1	TH-234	2.11E+02	5.45E+01
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	1	TH-234	1.76E+02	6.93E+01
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	1	PB-212	8.54E+00	3.58E+00
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	1	BI-214	1.20E+01	3.94E+00
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	1	K-40	2.53E+02	3.16E+01
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	1	PB-214	9.98E+00	3.89E+00
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	1	RA-226	1.73E+02	4.19E+01
40	LILLINGTON - CAPE FEAR RIVER	10/12/2009	1	TL-208	3.37E+00	2.04E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1	TL-208	6.83E+00	2.74E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1	PB-212	1.51E+01	3.64E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1	BI-214	1.31E+01	5.70E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1	PB-214	1.32E+01	5.05E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1	RA-226	2.20E+02	5.80E+01
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1	AC-228	1.53E+01	9.86E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1	TH-234	2.08E+02	8.26E+01
40	LILLINGTON - CAPE FEAR RIVER	11/12/2009	1	K-40	2.60E+02	3.65E+01
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	1	RA-226	1.86E+02	4.18E+01
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	1	K-40	2.18E+02	3.09E+01
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	1	TL-208	5.15E+00	2.00E+00
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	1	PB-212	1.26E+01	2.96E+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	12/14/2009	1	PB-214	9.03E+00	3.49E+00
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	1	TH-234	2.25E+02	6.42E+01
40	LILLINGTON - CAPE FEAR RIVER	12/14/2009	1	BI-214	1.19E+01	4.97E+00