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

Shearon Harris Nuclear Power Plant
Docket No. 50-400

Subject: Annual Radiological Environmental Operating Report

Ladies and Gentlemen:

In accordance with Harris Nuclear Plant (HNP) Technical Specification 6.9.1.3, Carolina Power & Light Company is providing the enclosed Annual Radiological Environmental Operating Report for 2012.

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

Sincerely,

DHC/mgw

Enclosure

c: Mr. J. D. Austin (NRC Senior Resident Inspector, HNP)
Mr. V. M. McCree (NRC Regional Administrator, Region II)
Ms. A. T. Billoch Colón (NRC Project Manager, HNP)

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NRR

HARRIS ENERGY &

ENVIRONMENTAL CENTER

CAROLINA POWER & LIGHT COMPANY

NEW HILL, NORTH CAROLINA

RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

FOR THE

SHEARON HARRIS NUCLEAR POWER PLANT

JANUARY 1 THROUGH DECEMBER 31, 2012

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EXECUTIVE SUMMARY

The Harris Nuclear Plant (HNP) is operated by Carolina Power & Light Company under a license granted by the Nuclear Regulatory Commission. Provisions of the Nuclear Regulatory Commission's Regulatory Guide 4.8, Harris Nuclear Plant Technical Specifications, and the Harris Nuclear Plant Offsite Dose Calculation Manual (ODCM) establish the requirements of the Radiological Environmental Monitoring Program (REMP). This report provides the results of the Radiological Environmental Monitoring program from January 1, 2012, through December 31, 2012.

The Radiological Environmental Monitoring Program (REMP) was established in 1982. Radiation and radioactivity in various environmental media have been monitored for 30 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 slightly higher than the concentrations of radioactivity from pre-operation monitoring. These observations are also consistent with past operational data and control data other than during the timeframe of the 1986 Chernobyl incident and the 2011 Japan earthquake and tsunami which triggered the Fukushima Dai-ichi nuclear power plant incident.

- Milk and broadleaf vegetation monitoring results are similar to all the past years where no I-131 concentrations were detected other than during the timeframe of the 1986 Chernobyl incident and the 2011 Japan earthquake and tsunami which triggered the Fukushima Dai-ichi nuclear power plant incident. An indicator milk-producing animal within five miles of the plant was introduced into the monitoring program mid-September 2010 (broadleaf vegetation is sampled in lieu of indicator milk samples). The broadleaf vegetation sampling continues since the indicator milk is only available about half of the year.

- Terrestrial vegetation includes various crops collected during a growing season and results indicate no by-product/plant-related activity.

- Aquatic organism monitoring includes fish and aquatic vegetation. The fish and aquatic vegetation results indicate no by-product/plant-related activity, except for the I-131 noted in Interpretations and Conclusions Section/Aquatic Vegetation.

- Surface (and drinking) water results indicate no by-product/plant-related gamma activity, except for the I-131 noted in Interpretations and Conclusions section/ Drinking and Surface Water. This analysis 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.

- Ground water results show the presence of tritium; however, the results are 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/ Ground 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 and the Ground 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 30 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 930 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 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 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, 3b, and 3c. A description of each sample location may be found in Tables 2 and 3.

Radiological Environmental Sampling Locations

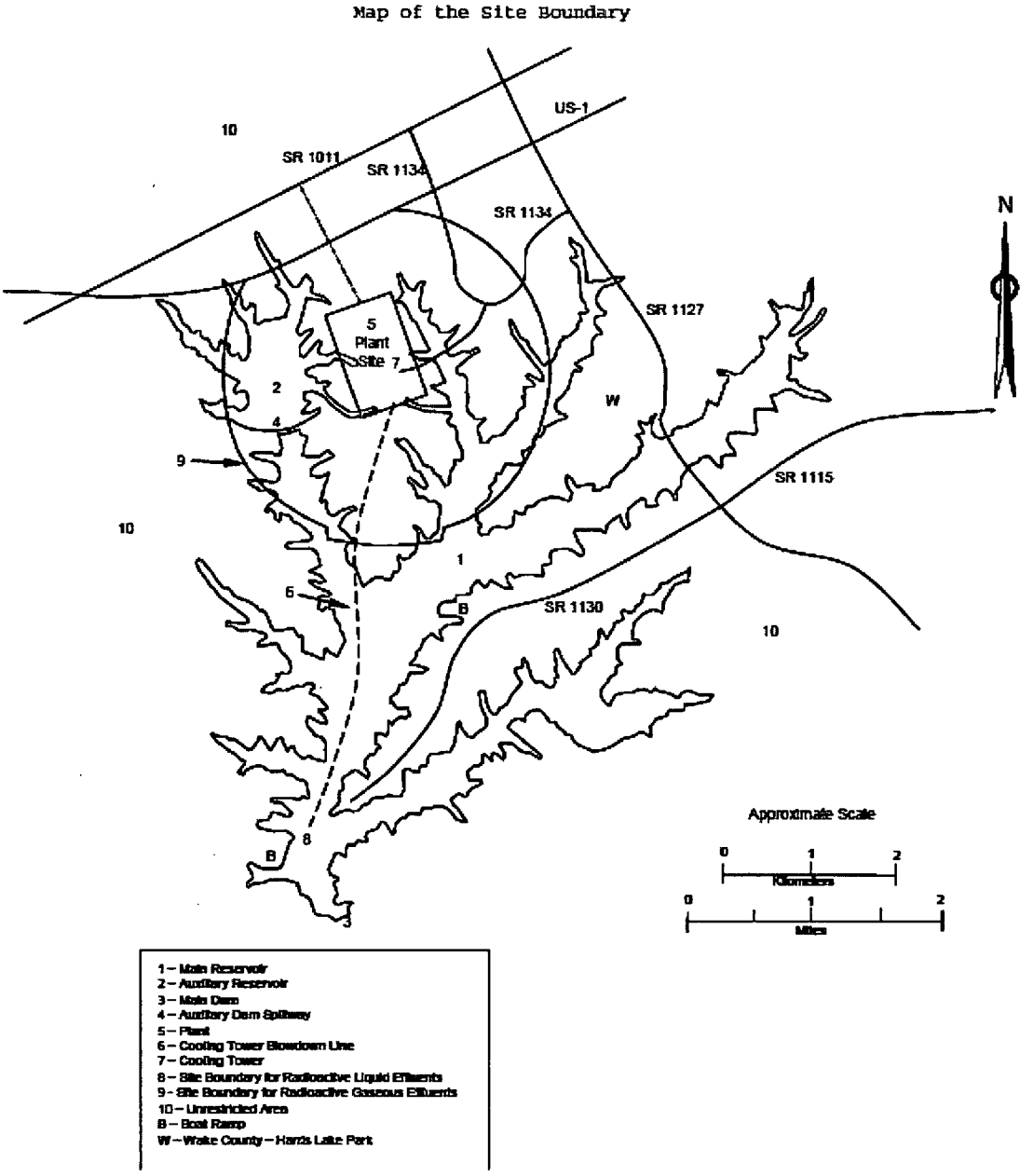


Figure 2a: Radiological Environmental Sampling Locations (Distant from Plant)

Radiological Environmental Sampling Locations

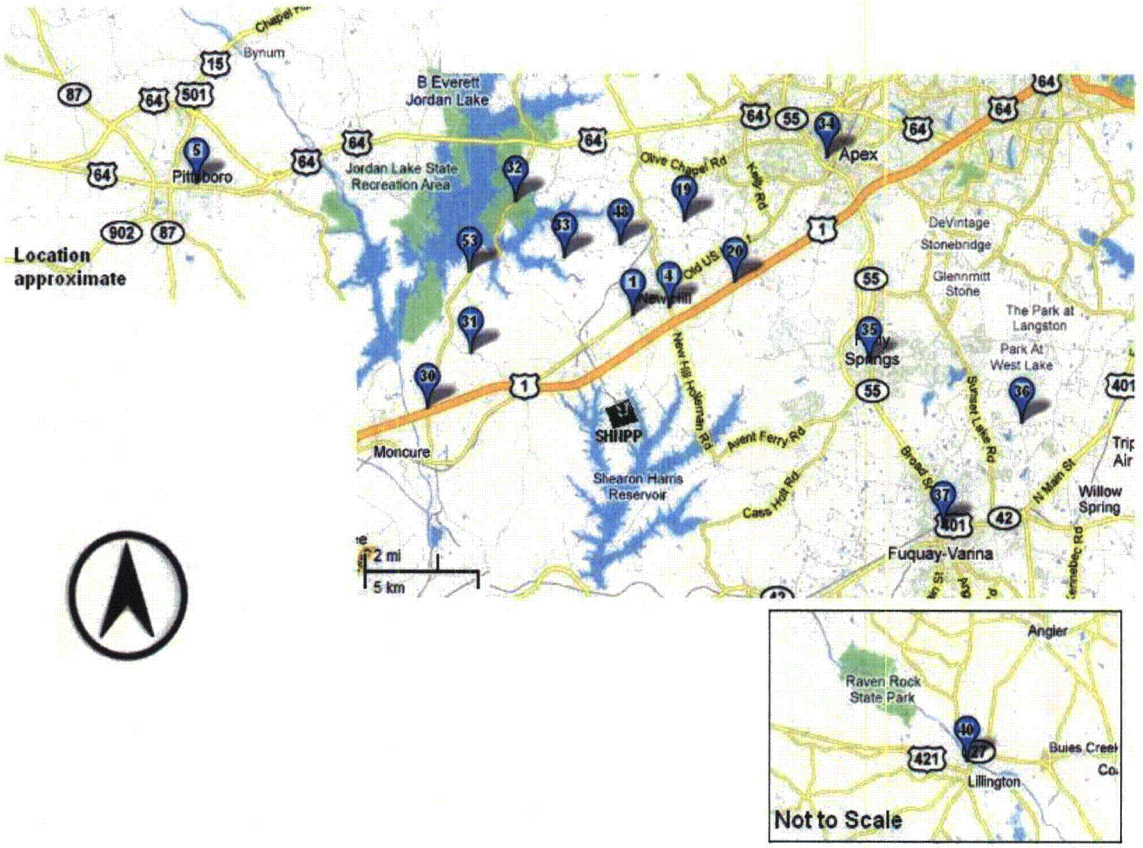


Figure 2b: Radiological Environmental Sampling Locations (Distant from Plant)

Radiological Environmental Sampling Locations

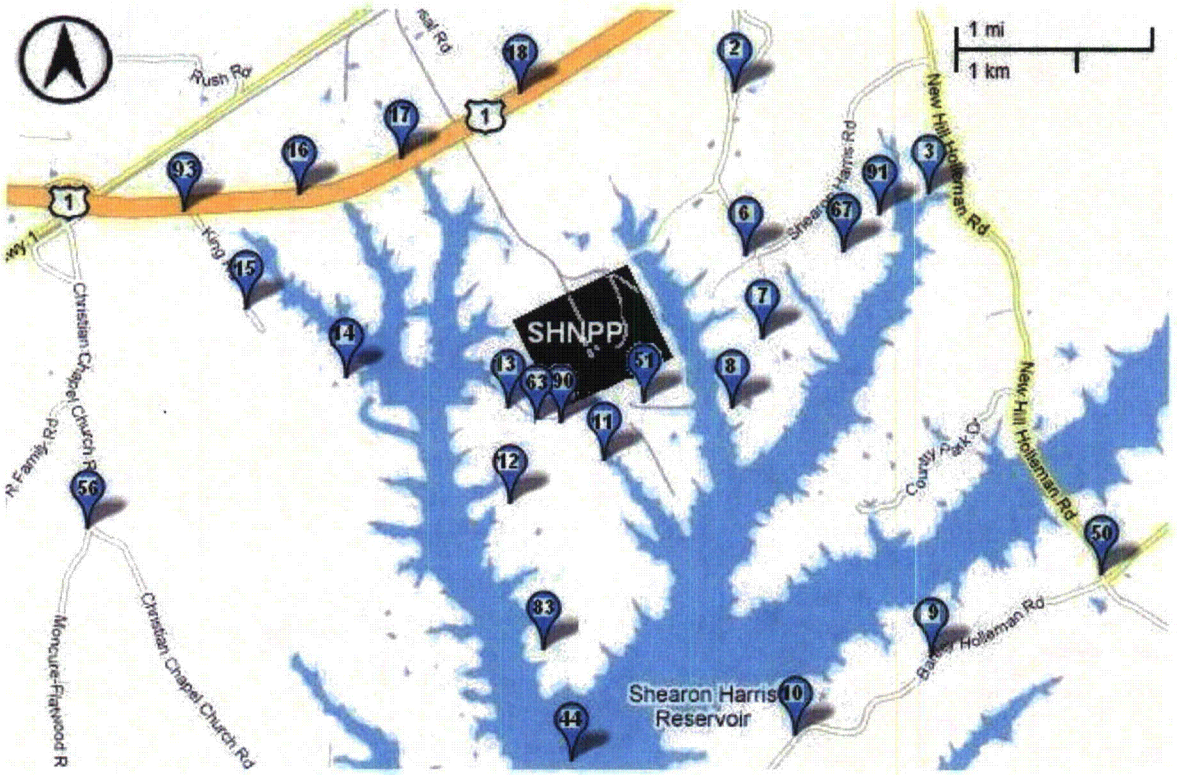


Figure 3a: Radiological Environmental Sampling Locations (Nearest Plant)

Radiological Environmental Sampling Locations

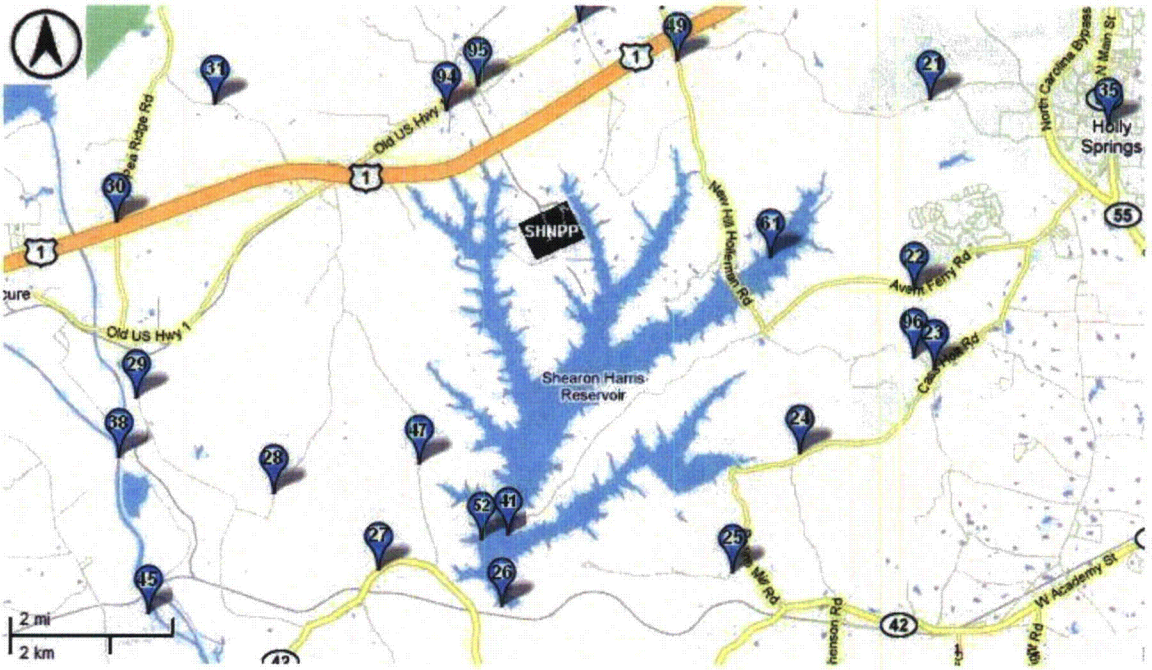


Figure 3b: Radiological Environmental Sampling Locations (Nearest Plant)

Radiological Environmental Sampling Locations

Figure 3c: 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	2b	34	TL	2b
2	AP, AC, TL	3a	35	TL	2b, 3b
3	TL	3a	36	TL	2b
4	AP, AC, TL	2b	37	TL	2b
5	AP, AC, MK, FC, TL, BL	2b*	38	SW, DW	3b
6	TL	3a	39	GW/Deleted	n/a
7	TL	3a	40	SW, DW	2b*
8	TL	3a	41	SS, AV	3b*
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	3b
13	TL	3a	47	AP, AC	3b
14	TL	3a	48	TL	2b
15	TL	3a	49	TL	3b
16	TL/Deleted	3a	50	TL	3a
17	TL/Deleted	3a	51	DW	3a
18	TL/Deleted	3a	52	SD	3b
19	TL	2b	53	TL	2b
20	TL	2b	54	FC/Deleted	n/a
21	TL	3b	55	FC/Deleted	n/a
22	TL	3b	56	TL	3a
23	TL	3b	57	GW	3c
24	TL	3b	58	GW/Deleted	n/a
25	TL	3b	59	GW	3c
26	AP, AC, AV, SS, SW, TL	3b	60	GW	3c
27	TL	3b	61	AV	3b*
28	TL	3b	62	FC/Deleted	n/a
29	TL	3b	63	AP, AC, TL, BL	3a
30	TL	2b, 3b	64	FC/Deleted	n/a
31	TL	2b, 3b	65	BL/Deleted	n/a
32	TL	2b	66	BL/Deleted	n/a
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	Broadleaf 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	3c			
69	GW	3c			
70	GW	3c			
71	GW	3c			
72	GW	3c			
73	GW	3c			
74	GW	3c			
75	GW	3c			
76	GW	3c			
77	GW	3c			
78	GW	3c			
79	GW	3c			
80	GW	3c			
81	GW	3c			
82	GW	3c			
83	GW	3a			
90	AP, AC	3a			
91	AP, AC	3a			
93	TL	3a			
94	TL	3b			
95	TL	3b			
96	MK	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	Broadleaf 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 63--0.6 miles SW 90--0.5 miles SSW 91--1.6 miles ENE	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 63--0.6 miles SW 90--0.5 miles SSW 91--1.6 miles ENE	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)	57--0.4 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 73--0.2 miles S 74--0.2 miles SSE 75--0.1 miles ESE 76--0.1 miles S 77--0.4 miles S 78--0.5 miles S 79--0.5 miles S 80--0.6 miles S 81--0.6 miles S 82--0.6 miles S 83--1.6 miles SSW	Quarterly	4 liters	Gamma Tritium
Milk (MK)	5-- > 12 miles WNW Manco Dairy* 96--4.6 miles ESE Humbug Farm	Semi-monthly / 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

* Control Stations

Table 3 (Continued)

Harris Nuclear Plant

Radiological Environmental Monitoring Sampling Locations

Sample Type	Location & Description	Frequency	Sample Size	Analysis
Bottom Sediment (SD)	52--3.8 miles S	Semiannual	575 grams	Gamma
Broadleaf Vegetation (BL)	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 64--1.8 miles ENE -- Michael	3 different kinds of broadleaf vegetation monthly during growing season	350 grams	Gamma

* Control Stations

Table 3 (Continued)

Harris Nuclear Plant

Radiological Environmental Monitoring Sampling Locations

Sample Type	Location & Description	Frequency	Sample Size	Analysis
Thermoluminescent Dosimetry (TL or TLD)	1 -- 2.6 miles N 2 -- 1.4 miles NNE 3 -- 1.9 miles ENE 4 -- 3.1 miles NNE 5 – >12 miles WNW -- Pittsboro* 6 -- 0.8 mile ENE 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 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 NE 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 93 -- 2.2 miles WNW 94 – 2.0 miles NW 95 – 2.0 miles NNW	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 2012 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 1481 total samples of 14 different media types from approximately 1279 indicator samples were compared to approximately 202 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 2012 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	8,080 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.	0.018 Total Body

The radiological environmental data indicates that HNP operations in 2012 had no significant impact on the environment or public health and safety.

A statistical summary of all the data for 2012 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 2012. 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: 2012

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-131 477	6.38E-2	All less than LLD	N/A	N/A	All less than LLD
Air Particulate (pCi/m^3)	Gross Beta 477	5.74E-3	2.20E-2 (424/424) 7.92E-3 – 4.08E-2	HEEC Sewage Treatment Facility 1.6 miles ENE	2.29E-2 (53/53) 1.37E-2 – 3.57E-2	2.10E-2 (53/53) 1.19E-2 - 3.66E-2
	Gamma[8] 36	Refer to Table 5	All less than LLD	N/A	N/A	All less than LLD
Drinking Water[4] (pCi/l)	I-131[8] 78	8.6E-1	7.62E-1 (1/52) Single Value	Lillington Cape Fear River 17.2 miles SSE	7.62E-1 (1/26) Single Value	7.91E-1 (3/26) 4.92E-1 – 1.21E+0
	Gross Beta 36	1.2E+0	4.67E+0 (24/24) 1.73E+0 – 7.05E+0	Lillington Cape Fear River 17.2 miles SSE	5.47E+0 (12/12) 3.59E+0 – 7.05E+0	5.69E+0 (12/12) 3.16E+0 – 7.63E+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]	6.51E+3 (12/24) 4.62E+3 – 7.66E+3	Water Treatment Building on Site	6.51E+3 (12/12) 4.62E+3 – 7.66E+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: 2012

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 6[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 4 I-131	3.28E-2	All less than LLD	Harris Lake East of New Hill – Holleman Rd. (Control) 2.5 miles E	1.97E-2 (2/2) 1.27E-2 – 2.67E-2	1.97E-2 (2/2) 1.27E-2 – 2.67E-2
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: 2012

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Typical Lower Limit of Detection (LLD) [1]	All Indicator Locations Mean[2] Range	Location w/Highest Annual Mean		Control Locations Mean[2] Range
				Name, Distance, and Direction	Mean[2] Range	
Ground Water (pCi/l)	Gamma 76	Refer to Table 5	All less than LLD	N/A	N/A	No control
	Tritium 78	2.50E+2[6]	1.36E+3 (30/78) 2.71E+2 – 1.29E+4	GW 83 On Site (BD-MW16) along Cooling Tower Blowdown line 1.6 miles SSW	6.36E+3 (4/4) 3.04E+3 – 1.29E+4	No control
Milk (pCi/l)	I-131 30	Refer to Table 5	All less than LLD	N/A	N/A	All less than LLD
	Gamma 30	Refer to Table 5	All less than LLD	N/A	N/A	All less than LLD
Bottom Sediment (pCi/g, dry)	Gamma 2 Co-60	7.08E-2	1.79E+0 (2/2) 6.63E-1 – 2.91E+0	Harris Lake Cooling Tower Mixing Zone 3.8 miles S	1.79E+0 (2/2) 6.63E-1 – 2.91E+0	No Control
	Cs-137	1.12E-1	2.19E-1 (2/2) 1.86E-1 – 2.52E-1	Harris Lake Cooling Tower Mixing Zone 3.8 miles S	2.19E-1 (2/2) 1.86E-1 – 2.52E-1	No Control
	Sb-125	5.77E-2	1.64E-1 (1/2) Single Value	Harris Lake Cooling Tower Mixing Zone 3.8 miles S	1.64E-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: 2012

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Typical Lower Limit of Detection (LLD) [1]	All Indicator Locations Mean[2] Range	Location w/Highest Annual Mean		Control Locations Mean[2] Range
				Name, Distance, and Direction	Mean[2] Range	
Surface Water[4] (pCi/l)	I-131 53	8.6E-1	7.62E-1 (1/27) Single Value	Lillington Cape Fear River 17.2 miles SSE	7.62E-1 (1/27) Single Value	7.91E-1 (3/26) 4.92E-1 – 1.21E+0
	Gross Beta 36	1.2 E+0	6.06E+0 (24/24) 3.59E+0 - 8.18E+0	Harris Lake Spillway 4.7 miles S	6.66E+0 (12/12) 5.17E+0 - 8.18E+0	5.69E+0 (12/12) 3.16E+0 – 7.63E+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]	8.08E+3 (12/24) 6.55E+3 – 9.07E+3	Harris Lake Spillway 4.7 miles S	8.08E+3 (12/24) 6.55E+3 – 9.07E+3	All less than LLD
Direct Radiation (mR/qtr) [5]	TLD 174		1.16E+1 (170/172) 8.90E+0 – 1.58E+1	Apex at Population Center 8.7 miles NE	1.51E+1 (4/4) 1.41E+1 – 1.58E+1	1.46E+1 (4/4) 1.37E+1 – 1.52E+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. Refer to Analytical Procedures Section/Gamma Spectrometry for an explanation of how LLD values were derived.

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 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) has been included, as of 2009, in the Data Summary even though it does not meet the EPA (Environmental Protection Agency) definition of a public drinking water supply.

INTERPRETATIONS AND CONCLUSIONS

Air Monitoring

All 477 air cartridge (AC) samples from indicator and control stations had I-131 concentrations less than the typical LLD of 6.38E-2 pCi/m^3. The air samplers operated for a total of 99.9% availability for the 2012 year. I-131 was detected in air samples for a three week period following the Fukushima Dai-ichi nuclear power plant incident after the March 11, 2011, earthquake and tsunami (CR # 456564) and for a six-week period following the Chernobyl incident in April 1986. With these exceptions, no I-131 has been detected in air samples collected from 1987 through 2012, which is the entire operating history of the plant.

For the period of January 1, 2012, to December 31, 2012, the gross beta activity was detectable in all airborne particulate (AP) samples, with acceptable runtime, from the eight indicator locations. The 424 indicator samples had an average concentration of 2.20E-2 pCi/m^3, a value slightly higher than the preoperational data of 2.00E-2 pCi/m^3. Similar gross beta activities were observed at the control location in Pittsboro, which had an average concentration of 2.10E-2 pCi/m^3 in 53 control samples. Figures 4 through 11 provide a graphic representation of the gross beta activity at the indicator locations compared to the control location for the year 2012. AP samples that exhibit an elevated gross beta activity typically have a gamma isotopic analysis done and the results typically indicate all natural gamma activity. No plant-related gamma activity was observed for any air particulates during 2012. Natural gamma concentrations identified are typical of the natural environment and are not attributed to plant operations. Refer to the Missed Surveillance Section on the AC and AP Missed Surveillances in the 2012 collection year (CR # 551494, 552121, 568492, 573920, and 580220).

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

Twenty-five drinking water samples collected at the Lillington Municipal water supply, the 26 water treatment building samples at the Harris Plant, and the 23 control samples collected from the Cape Fear River above the Buckhorn Dam contained less than detectable I-131 activity (<

8.6E-1 pCi/L) during 2012. Three control (DW/SW-38) samples and one indicator (DW/SW-40) showed presence of I-131 (see chart). As indicated in the chart, the control composite water sample taken from the Cape Fear River, at the Cape Fear Plant, indicated small concentrations of I-131 ranging from 4.92E-1 pCi/Liter to 1.21E+0 pCi/Liter for the stated sample dates. This control location is upstream of the discharge of Harris Lake. For the sample period (4/16/12 – 4/30/12) of the one DW/SW-40 sample that indicated I-131 activity, a similar sample was taken from downstream at the Harris Lake Spillway discharge (SW-26) with no detectable I-131 (see chart) and water was not going over the spillway at the Harris Lake Dam. This indicates that the I-131 detected at the control location is from a source other than the plant's effluents as discussed in a previous investigation (CR # 189683) and not attributed to plant operations. It has typically been the experience for all of the I-131 drinking water samples to contain less than the lower limit of detection for the preoperational and operational period with the exception of 1986 when the fallout from Chernobyl was detected; however, due to the March 11, 2011, earthquake and tsunami in Japan and the Fukushima Dai-ichi nuclear power plant situation, detectable levels of I-131 activity were detected (CR # 458495 and 461822). The water samplers operated for a total of 99.6% availability for the 2012 year. Refer to the Missed Surveillance Section on the missed drinking/surface water samples (CR # 515356, 531034, and 562911) in 2012 collection year.

Composite Period (Sample Date)	DW/SW-38 (Control) I-131 Activity Detected (pCi/Liter)	CR #	DW/SW-40 (Downstream of HNP) I-131 Activity Detected (pCi/Liter)	SW-26 (Harris Lake) (pCi/Liter)
1/23/12 – 2/6/12 (1/30/12)	6.65E-1	515575	< LLD	N/A
2/6/12 – 2/20/12 (2/13/12)	4.92E-1	518992	< LLD	N/A
4/16/12 – 4/30/12 (4/23/12)	1.21E+0	535398	7.62E-1	< LLD

The average annual gross beta concentrations at the indicator and control locations were 4.67E+0 pCi/L and 5.69E+0 pCi/L, respectively. The preoperational average was 4.00E+0 pCi/L. These concentrations are attributed to the natural environment and are not attributed to plant operations. Figure 12 provides graphic representation of the drinking water gross beta activity during 2012 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 (DW/SW-40) were less than the lower limit of detection (approximately 2.50E+2 pCi/L) (see Footnotes to Table 4, Footnote 6). The annual average tritium concentration for the Water Treatment Building sample on site (DW-51) was 6.51E+3 pCi/L, with a minimum and maximum value of 4.62E+3 pCi/L and 7.66E+3 pCi/L, respectively.

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 2012, other than naturally occurring nuclides. This is consistent with the data for 1989-2011. 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 0.018 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	0.011	0.014	0.018

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 0.011, 0.014, and 0.018 mrem/year respectively.

Milk/Broadleaf Vegetation

During 2012, as in all the past years with the exception of the 1986 Chernobyl incident and the 2011 Japan earthquake and tsunami which triggered the Fukushima Dai-ichi nuclear power plant incident (CR #458543), no I-131 concentrations were detected in the control milk sample. This control milk location is located greater than 12 miles WNW from the plant, thus in an area to be out of the influence of the plant. Gamma analyses revealed no detectable radioactivity from plant operations. Natural gamma activity is consistently identified in each control milk sample. Potassium-40, is a natural occurring nuclide in any organic material. The K-40 concentrations in the milk control samples range from 1.53E+3 pCi/L to 2.01E+3 pCi/L. Other natural occurring nuclides are identified in some of the control milk samples. In mid-September of 2010, the Humbug Farm (Goat milk indicator MK-96 – located in the ESE sector) was added to the HNP Environmental Monitoring Program. This is a small local goat farm which provides samples of goat milk during the spring and summer months. The dairy's Nubian and Saanen goats only produce milk about six months per year – from around March to September/October. Goat milk samples (MK-96) were collected May through October of 2012 (CR # 560727). The K-40 concentrations in the goat milk indicator samples range from 1.76E+3 pCi/Liter to 2.49E+3 pCi/Liter. Other natural occurring nuclides are identified in the goat milk.

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 only one milk animal location is 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 gamma analyses on the broadleaf vegetation did not detect any plant-related radioactivity in any of the broadleaf vegetation (Fig Leaf, Maple, Sweetgum, and Wax Myrtle) in 2012. Refer to the Missed Surveillance Section for the seasonally unavailable surveillances (NCR # 511134, 518592, 525122, 532302, 573243, and 579031).

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 during 2012, except for three control samples (DW/SW-38) and one indicator sample (DW/SW-40) (see chart in Drinking Water Section). As indicated in the chart, the control composite water sample taken from the Cape Fear River, at the Cape Fear Plant, indicated small concentrations of I-131 ranging from 4.92E-1 pCi/Liter to 1.21E+0 pCi/Liter for the stated sample dates. This control location is upstream of the discharge of Harris Lake. For the sample period (4/16/12 – 4/30/12) of the one DW/SW-40 sample that indicated I-131 activity, a similar sample was taken from downstream at the Harris Lake Spillway discharge (SW-26) with no detectable I-131 (see chart), and water was not going over the spillway at the Harris Lake Dam. This indicates that the I-131 detected at the control location is from a source other than the plant's effluents as discussed in a previous investigation (CR # 189683) and not attributed to plant operations. It has typically been the experience for all the I-131 surface 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; however, due to the March 11, 2011, earthquake and tsunami in Japan and the Fukushima Dai-ichi nuclear power plant situation, detectable levels of I-131 activity were detected (CR # 458495 and 461822). The water samplers operated for a total of 99.6% availability for the 2012 year. Refer to the Missed Surveillance Section on the missed drinking/surface water samples (CR # 515356, 531034, and 562911) in 2012 collection year.

Average gross beta concentrations at the indicator and control locations were 6.06E+0 pCi/L and 5.69E+0 pCi/L, respectively, in 2012, indicating no contribution from plant operations (See Figure 13).

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 8.08E+3 pCi/L with minimum and maximum values of 6.55E+3 pCi/L and 9.07E+3 pCi/L, respectively (see Figure 14). The average Harris Lake Spillway tritium concentration showed an increase in tritium compared to the annual average of 4.36E+3 pCi/L in 2011. This concentration remains well below regulatory limits. The tritium liquid release program is optimized by releasing liquid effluents during periods of high rainfall to minimize the impact of the tritium concentration in the lake. The increase in average tritium concentration from 2011 to 2012 is due to the tritium release program and the low rainfall in 2012.

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 2012.

The measured ground water tritium concentrations were below the required HNP ODCM Table 4.12-1 LLD for environmental samples, except for GW-83. The tritium 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 shows the presence of tritium, ranging from 271 pCi/Liter to 1.29E+4 pCi/Liter in 2012; however, the results are well below the EPA reportable drinking water limit (20,000 pCi/Liter) and non-drinking water limit (30,000 pCi/Liter). The ground

water wells, located on site at HNP, are all abandoned wells and are not a water supply for drinking or irrigation. Therefore, there is no radiological dose via this pathway.

Shoreline Sediment

Shoreline sediment samples were collected semiannually in 2012 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 2012. No long-term trends are readily observed in these samples.

Bottom Sediment

The 2012 data shows Co-60 (6.63E-1 pCi/gm dry to 2.91E+0 pCi/gm dry), Cs-137 (1.86E-1 pCi/gm dry to 2.52E-1 pCi/gm dry), and Sb-125 (1.64E-1 pCi/gm dry) activity in the indicator sample, which is sampled semiannually. The bottom sediment sample from Harris Lake poses no radiological dose to the general public via this pathway due to the fact that it is not easily accessible (i.e. bottom sediment is approximately forty to sixty feet under water). These samples are for long-term trends for liquid effluents.

Food Crops

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 (CR # 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.

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 2012 included

collards, eggplants, and tomatoes. Gamma analyses of the food crops detected no plant-related activity in one (1) sample from an indicator location and five (5) samples from control locations collected in 2012.

Aquatic Vegetation

The 2012 data shows that there were two aquatic vegetation indicator samples and two control sample 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 two indicator samples or the two control samples collected during 2012; however, I-131 was detected in both control aquatic vegetation samples in November 2012 (CR # 574087). 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 11.6 mR/std. qtr. and 14.6 mR/std. qtr. respectively. The highest indicator location was 8.7 miles NE of the plant (Apex at Population Center) and its average was 15.1 mR/std. qtr. The differences among these locations are attributed to variations in soils, local geology, and are not the result of plant operations. There were two missing TLDs during the HNP 2012 collection period (CR # 530776 and CR # 582318).

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 15. These data illustrate that the quarterly inner ring TLD exposures for third and fourth quarters of 2012 are slightly less than the quarterly outer ring TLD exposures (differences range from 0.045 mR/std. qtr. to 0.254 mR/std. qtr.). The data illustrated in Figure 15 shows that the quarterly inner ring TLD exposures for first and second quarters of 2012 are slightly more than the quarterly outer ring TLD exposures (differences range from 0.033 mR/std. qtr. to 0.082 mR/std. qtr.).

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 2012 from the established air samplers. The air samplers operated for a total of 99.9% availability in 2012.

Missed Samples:

- None in 2012 from established air samplers

Missed Surveillances:

- APAC-5; December 30, 2012 – Down time of approximately 42 hours, of which 31.5 hours was in 2012. The down time was due to a failed time delay relay. The relay was replaced and the sampler was back in operation (CR # 580220).

Other down times were identified that did not meet the definition of "missed surveillances." Additional information of these events can be found in the corrective action program (CR # 551494, 552121, 568492, and 573920).

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 (CR # 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 2012 did not plant or produce three (3) different kinds of food crops in 2012. 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-40 (January 28 – February 6, 2012) had nine (9) hours of missed surveillances due to the sampler malfunction (CR # 515356). The malfunction caused the sampler to sample continuously instead of timed aliquots; therefore, the sample aliquots were not representative for the sampling period. Sampler was replaced with spare sampler after several failed attempts to reprogram.

DW/SW-40 (April 9 – April 16, 2012) had approximately 40 hours of missed surveillances due to a drop in the Cape Fear River water level. The water sampler failed to collect the normal aliquots of sample which was caused by a dramatic drop in the water level at the intake structure which resulted in the missed surveillances. The sampler hose was replaced and extended to accommodate the lower water level. The sampler was then verified to be working properly (CR # 531034).

DW/SW-40 (September 17 – September 24, 2012) had approximately 50 hours of missed surveillances due to the sampler malfunction and premature sampler shutdown due to high sample level. This was caused by a rise in the Cape Fear River water level from heavy rains. Sampler was reprogrammed and verified to be working properly (CR # 562911).

Milk / Broadleaf Vegetation

If milk sampling cannot be performed, then three (3) different kinds of broadleaf vegetation nearest each of two different offsite locations of highest predicted annual average ground level D/Q shall be sampled. The new indicator milk sample that was introduced to the HNP Environmental Monitoring Program in mid-September of 2010 (Humbug Farm – goat milk) was not available from January through mid-May of 2012, November through December of 2012, and September 10, 2012 – no milk sample available (CR # 560727). Broadleaf vegetation samples were not available for sampling due to seasonal unavailability during January, February, March, April, November, and December of 2012 (CR # 511134, 518592, 525122, 532302, 573243, and 579031).

TLDs

Two TLD samples, out of a possible 176 TLD samples (indicator and control locations), were missing during 2012.

TLD # 15 First Quarter 2012

TLD # 15 was missing in the field. The area was searched, but the TLD could not be located (CR # 530776).

TLD # 19 Fourth Quarter 2012

TLD # 19 was missing in the field. The area was searched, but the TLD could not be located (CR # 582318).

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 5.74E-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 a worst case LLD of 6.38E-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 less than 1.0E+0 pCi/L using 25,000-second, 31,500-second (DETAL – Milk), and 40,000-second count times respectively. Refer to Table 4 or Table 5 for Typical/Worst Case LLDs.

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 1,500 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 16,000 seconds and the SW/DW samples for 73,000 seconds (130,000 seconds on DETAL). One-liter milk samples are analyzed in a 1-liter Marinelli beaker for 12,600 seconds.

Shoreline and bottom sediments are dried, weighed, and then analyzed in a 1-liter Marinelli beaker for 840 seconds (> 1000 grams, dry) or 1,380 seconds (≤ 1000 grams, dry).

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 1,500 seconds.

Thermoluminescent Dosimetry

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

Dosimeters are machine annealed before field placement. Following exposure in the field, each dosimeter is read utilizing a Panasonic TLD reader. This instrument integrates the light photons emitted from traps as the dosimeter is heated. Calibration is calculated using dosimeters

irradiated to known doses for each set of dosimeters measured. Prior to the measurement of each dosimeter, the instrument is checked through use of an internal constant light source as a secondary standard.

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

Interlaboratory Comparison Program

The Radiochemistry Laboratory at the Harris Energy & Environmental Center in New Hill, North Carolina, provides radioanalytical services for Carolina Power & Light Company's 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 2012, 64 results were reported for the year on 14 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 64 results 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 64 results were within the acceptance criteria for 2012, except for one (second quarter gamma filter sample E10146). During 2012, there were 300 individual measurements of which 295 (98.3%) were passing. 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 (CR # 566790). Complete documentation of any evaluation will be available and provided to the NRC upon request.

Environmental Cross Check Performance Summary for 2012

Sample	Nuclide	Quarter	Units	HEEC Value	EZA Value	HEEC/EZA Ratio	Evaluation
Gross beta water 1st Qtr E10030 3rd Qtr E10170	Gross beta	1st	pCi/L	312	285	1.09	Agreement
		3rd	pCi/L	274	251	1.09	Agreement
Gross beta filter 2nd Qtr E10147 4th Qtr E10173	Gross beta	2nd	pCi	67.4	62.9	1.07	Agreement
		4th	pCi	44.0	42.3	1.04	Agreement
Tritium in water 1st Qtr E10033 4th Qtr E10174	H-3	1st	pCi/L	4360	4470	0.97	Agreement
		4th	pCi/L	11672	12100	0.96	Agreement
Iodine Cartridge 2nd Qtr E10145 4th Qtr E10172	I-131	2nd	pCi	94.0	96.9	0.97	Agreement
		4th	pCi	71.5	72.4	0.99	Agreement
Gamma Milk 1st Qtr E10031	Cr-51	1st	pCi/L	436	436	1.00	Agreement
	Mn-54	1st	pCi/L	213	195	1.09	Agreement
	Co-58	1st	pCi/L	136	132	1.03	Agreement
	Fe-59	1st	pCi/L	185	168	1.10	Agreement
	Co-60	1st	pCi/L	293	279	1.05	Agreement
	Zn-65	1st	pCi/L	357	333	1.07	Agreement
	I-131	1st	pCi/L	91	92.5	0.99	Agreement
	Cs-134	1st	pCi/L	142	149	0.95	Agreement
	Cs-137	1st	pCi/L	166	159	1.04	Agreement
	Ce-141	1st	pCi/L	260	260	1.00	Agreement
Gamma Soil 1st Qtr E10032	Cr-51	1st	pCi/g	0.620	0.618	1.00	Agreement
	Mn-54	1st	pCi/g	0.300	0.277	1.08	Agreement
	Co-58	1st	pCi/g	0.190	0.187	1.02	Agreement
	Fe-59	1st	pCi/g	0.271	0.238	1.14	Agreement
	Co-60	1st	pCi/g	0.422	0.395	1.07	Agreement
	Zn-65	1st	pCi/g	0.505	0.471	1.07	Agreement
	I-131	1st	pCi/g	0.218	0.212	1.03	Agreement
	Cs-134	1st	pCi/g	0.337	0.313	1.08	Agreement
	Cs-137	1st	pCi/g	0.389	0.369	1.06	Agreement
Gamma Vegetation 3rd Qtr E10171	Cr-51	3rd	pCi/g	0.561	0.583	0.96	Agreement
	Mn-54	3rd	pCi/g	0.460	0.460	1.00	Agreement
	Co-58	3rd	pCi/g	0.234	0.236	0.99	Agreement
	Fe-59	3rd	pCi/g	0.373	0.357	1.04	Agreement
	Co-60	3rd	pCi/g	0.358	0.357	1.00	Agreement
	Zn-65	3rd	pCi/g	0.465	0.452	1.03	Agreement
	I-131	3rd	pCi/g	0.238	0.255	0.94	Agreement
	Cs-134	3rd	pCi/g	0.467	0.410	1.14	Agreement
	Cs-137	3rd	pCi/g	0.364	0.385	0.95	Agreement

Environmental Cross Check Performance Summary for 2012

Sample	Nuclide	Quarter	Units	HEEC Value	EZA Value	HEEC/EZA Ratio	Evaluation
Gamma Filter 2nd Qtr E10146	Cr-51	2nd	pCi	266	250	1.06	Agreement
	Mn-54	2nd	pCi	94	82.3	1.14	Agreement
	Co-58	2nd	pCi	61	57.5	1.06	Agreement
	Fe-59	2nd	pCi	94	79.5	1.19	Agreement
	Co-60	2nd	pCi	234	221	1.06	Agreement
	Zn-65	2nd	pCi	158	124	1.28	Disagreement
	Cs-134	2nd	pCi	110	109	1.01	Agreement
	Cs-137	2nd	pCi	142	132	1.08	Agreement
	Ce-141	2nd	pCi	52	51.2	1.02	Agreement
Gamma 13 Filter Composite 2nd Qtr E10144	Cr-51	2nd	pCi	332	312	1.07	Agreement
	Mn-54	2nd	pCi	114	103	1.10	Agreement
	Co-58	2nd	pCi	75	71.8	1.04	Agreement
	Fe-59	2nd	pCi	117	99.4	1.18	Agreement
	Co-60	2nd	pCi	288	276	1.04	Agreement
	Zn-65	2nd	pCi	184	155	1.19	Agreement
	Cs-134	2nd	pCi	123	136	0.91	Agreement
	Cs-137	2nd	pCi	175	165	1.06	Agreement
	Ce-141	2nd	pCi	65	63.9	1.01	Agreement
Gamma Water 2nd Qtr E10169	Cr-51	3rd	pCi/L	398	380	1.05	Agreement
	Mn-54	3rd	pCi/L	319	300	1.06	Agreement
	Co-58	3rd	pCi/L	163	154	1.06	Agreement
	Fe-59	3rd	pCi/L	258	233	1.11	Agreement
	Co-60	3rd	pCi/L	249	233	1.07	Agreement
	Zn-65	3rd	pCi/L	317	295	1.08	Agreement
	I-131	3rd	pCi/L	101	99.9	1.01	Agreement
	Cs-134	3rd	pCi/L	164	166	0.99	Agreement
	Cs-137	3rd	pCi/L	276	267	1.03	Agreement
	Ce-141	3rd	pCi/L	253	251	1.01	Agreement

Lower Limits of Detection

All samples analyzed met the LLD required by the ODCM.

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

Drinking Water/Surface Water Samples	
Isotope	**LLD (pCi/L)**
Mn-54	3
Co-58	3
Fe-59	6
Co-60	3
Zn-65	6
Zr-Nb-95	6 / 4
I-131	14
Cs-134	3
Cs-137	3
Ba-La-140	24 / 8
*I-131 (Separation Procedure)	*0.86
Air Particulates (Quarterly Composite)	
Isotope	**LLD (pCi/m^3)**
Cs-134	5.69E-3
Cs-137	3.90E-3
I-131	5.10E-2
Milk	
Isotope	**LLD (pCi/L)**
Cs-134	8
Cs-137	7
Ba-La-140	26 / 9
*I-131 (Separation Procedure)	*0.82
Sediment	
Isotope	**LLD (pCi/kg dry)**
Cs-134	112
Cs-137	112
Fish	
Isotope	**LLD (pCi/kg wet)**
Mn-54	42
Co-58	52
Fe-59	108
Co-60	55
Zn-65	98
Cs-134	54
Cs-137	45

* Instrumental analysis of resin concentrates of samples.

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

Broadleaf Vegetation and Food Crops/Food Products	
Isotope	**LLD (pCi/kg wet)**
I-131	39
Cs-134	32
Cs-137	28
Aquatic Vegetation	
Isotope	**LLD (pCi/kg wet)**
I-131	33
Cs-134	20
Cs-137	19
Ground Water	
Isotope	**LLD (pCi/L)**
Mn-54	7
Co-58	8
Fe-59	15
Co-60	8
Zn-65	16
Zr-Nb-95	13 / 14
I-131	14.8
Cs-134	9
Cs-137	7
Ba-La-140	38 / 15
Air Cartridge	
Isotope	**LLD (pCi/m^3)**
I-131	6.38E-2

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 or eating goat cheese 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.

2012 Land-Use Census Results

The 2011 and 2012 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 2011 to 2012. No gardens were located within 5 miles of the plant for the NNE, NE, ENE, E, SSE, S, SW, W, and WNW sectors. The gardens located in 2012 were the same as the gardens located in 2011, except for the addition of two new gardens in the SE sector (at 2.6 miles) and the NW sector (at 2.4 miles). All meat animals located in 2012 were the same as 2011. No meat animals were found in the NNE, NE, E, SSE, S, SSW, W, and WNW sectors in 2012. Milk goats were again found in the ESE sector and were again incorporated into the HNP environmental monitoring sample program. 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. Harris Lake County Park was included in the 2011 survey based on the described plans that in the future permanent residents (rangers and a campground) would be on the site; however, since the 2011 survey plans have changed and permanent residents will not occur. Therefore, the Harris Lake County Park was not included in the 2012 Land-Use Census survey.

Table 6

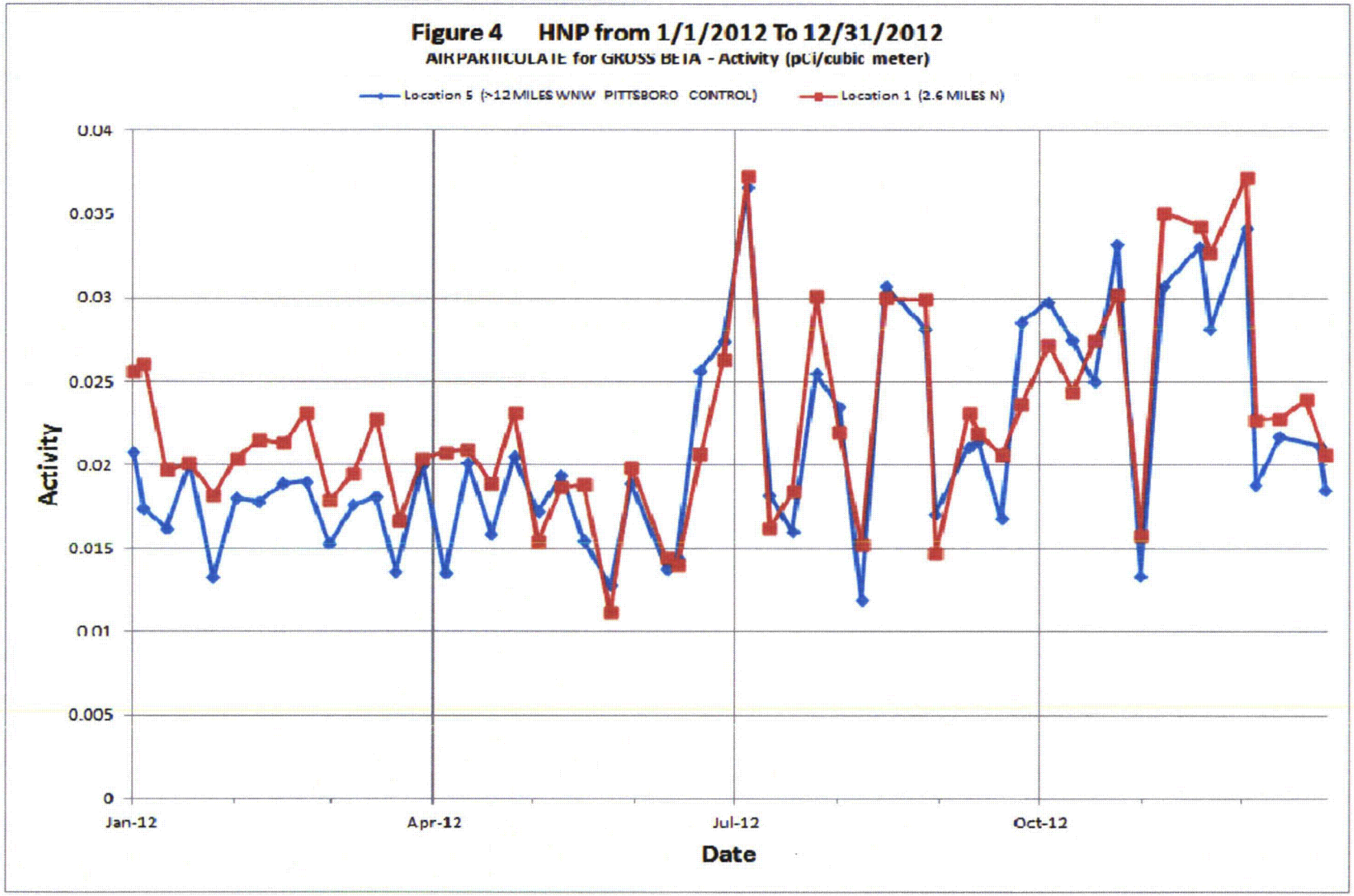
Land-Use Census Comparison (2011-2012)
Nearest Pathway (Miles)

SECTOR	RESIDENT		GARDEN		MEAT ANIMAL		MILK ANIMAL	
	2011	2012	2011	2012	2011	2012	2011	2012
N	2.2	2.2	2.2	2.2	2.2	2.2	---	---
NNE	1.9	1.9	---	---	---	---	---	---
NE	2.3	2.3	---	---	---	---	---	---
ENE	1.6	1.6	---	---	1.8	1.8	---	---
E	1.7	1.7	---	---	---	---	---	---
ESE	2.6	2.6	4.6	4.6	4.6	4.6	4.7	4.7
SE	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	4.3	4.3	---	---	---	---
SW	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	---	---	---	---	---	---
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 1/1/2012 To 12/31/2012



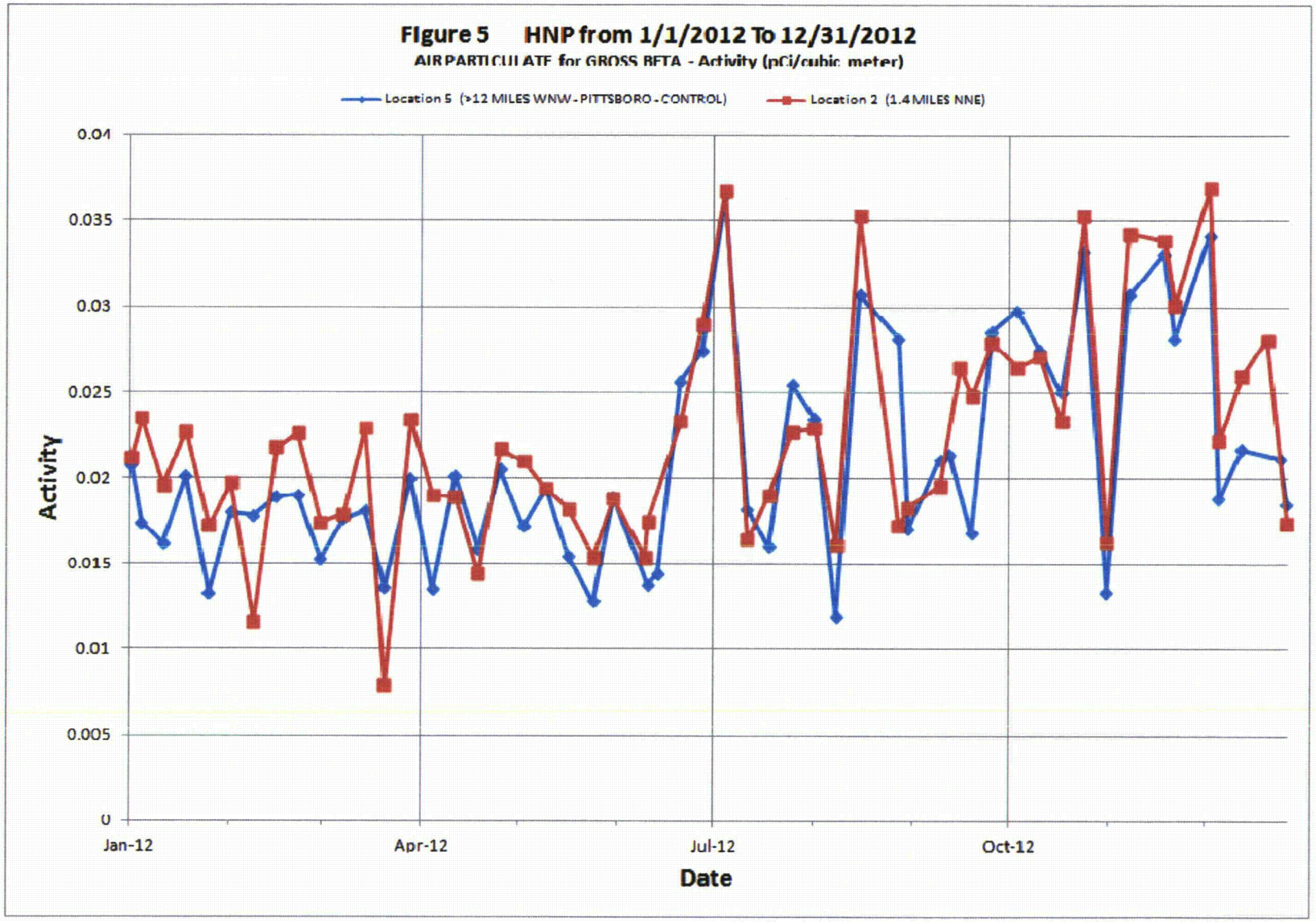


Figure 5 HNP from 1/1/2012 To 12/31/2012
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)
Location 5 (>12 MILES WNW - PITTSBORO - CONTROL)
Location 2 (1.4 MILES NNE)
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
Activity
Jan-12
Apr-12
Jul-12
Oct-12
Date

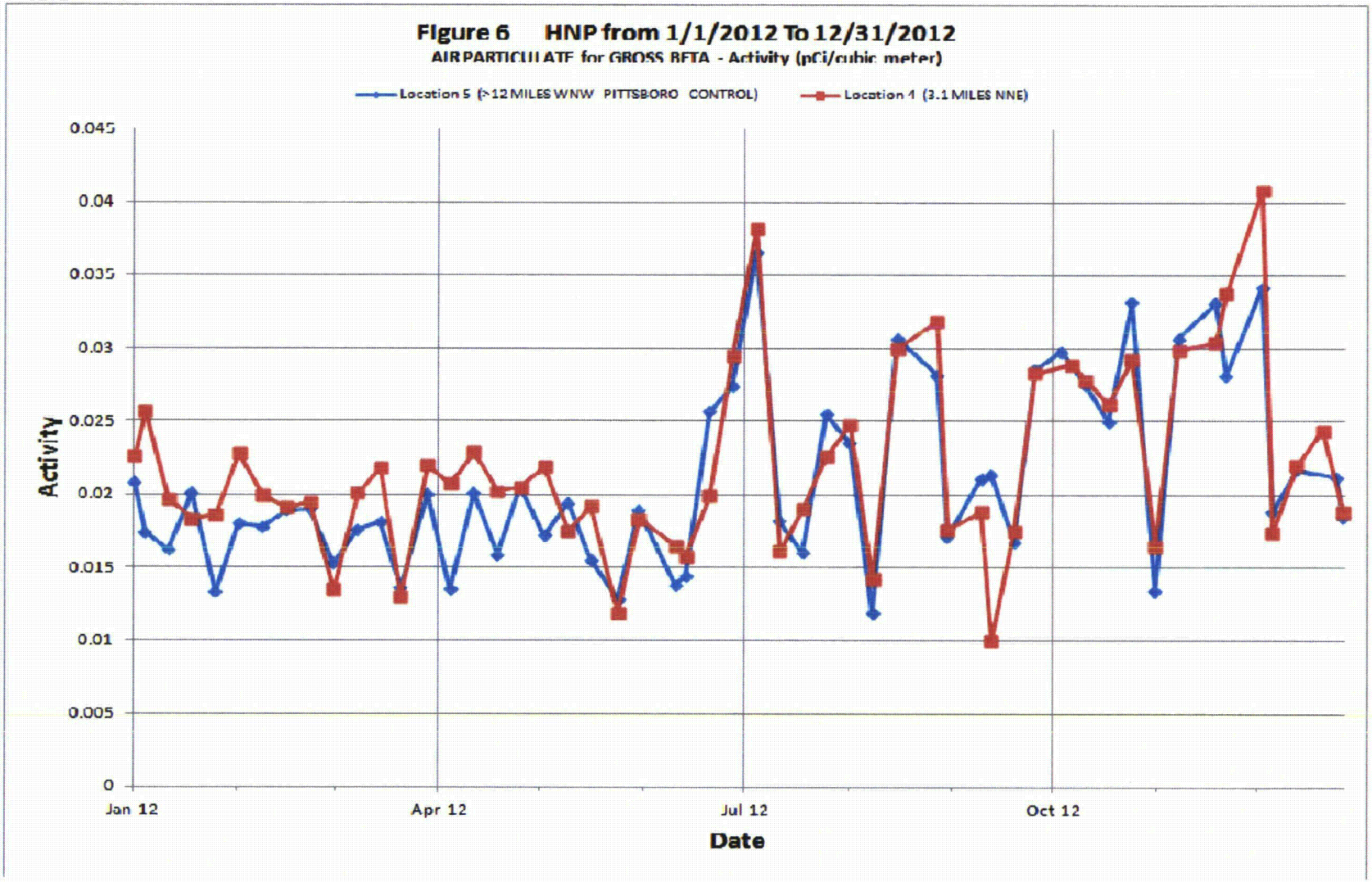


Figure 6 HNP from 1/1/2012 To 12/31/2012
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)
Location 5 (>12 MILES WNW PITTSBORO CONTROL)
Location 1 (3.1 MILES NNE)
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
Activity
Jan 12
Apr 12
Jul 12
Oct 12
Date

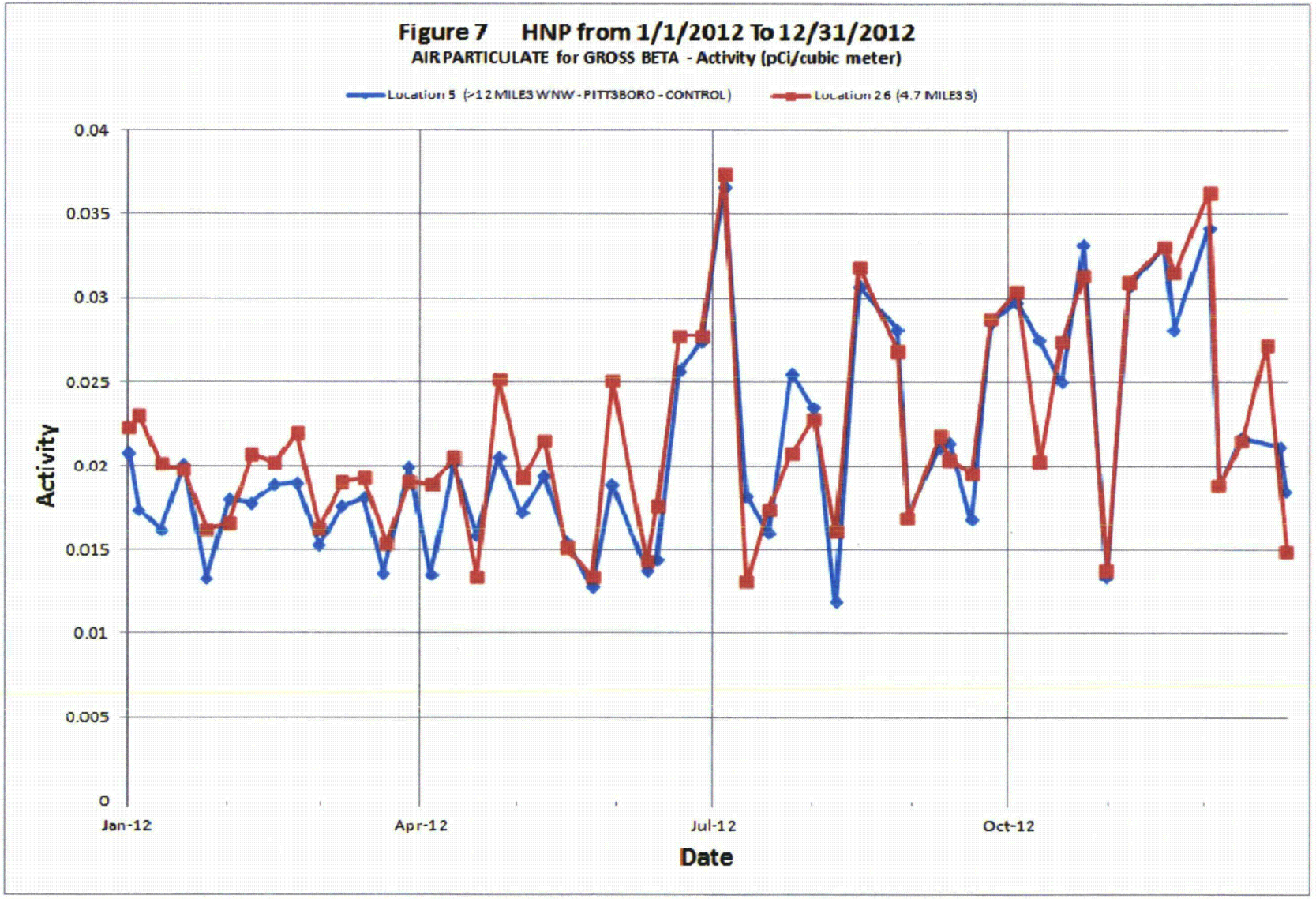


Figure 7 HNP from 1/1/2012 To 12/31/2012
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)
Location 5 (>12 MILES WNW - PITTSBORO - CONTROL)
Location 26 (4.7 MILES S)
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
Activity
Jan-12
Apr-12
Jul-12
Oct-12
Date

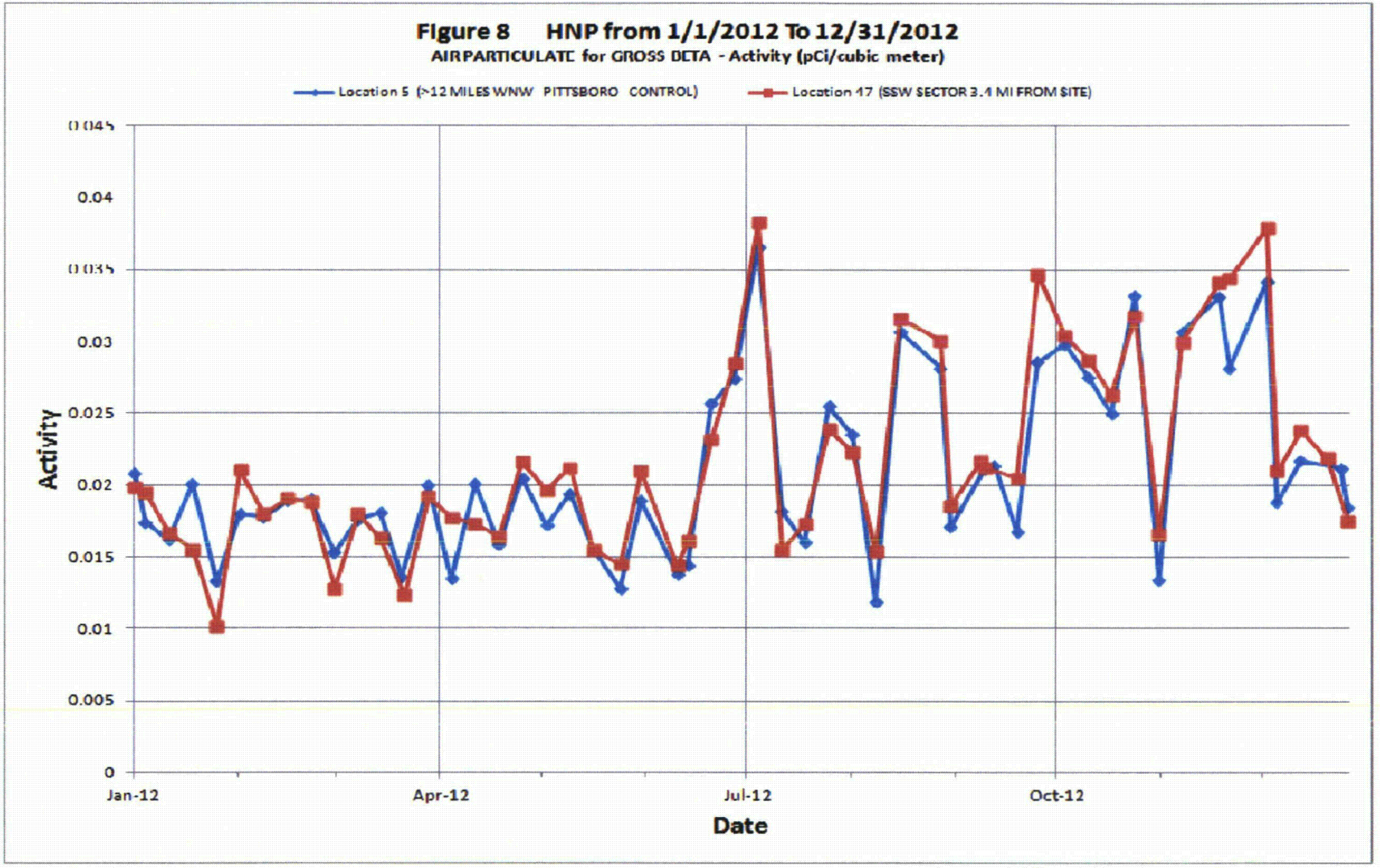


Figure 8 HNP from 1/1/2012 To 12/31/2012
AIRPARTICULATE for GROSS BETA - Activity (pCi/cubic meter)
Location 5 (>12 MILES WNW PITTSBORO CONTROL)
Location 17 (SSW SECTOR 3.4 MI FROM SITE)
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
Activity
Jan-12
Apr-12
Jul-12
Oct-12
Date

Figure 9 HNP from 1/1/2012 To 12/31/2012

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

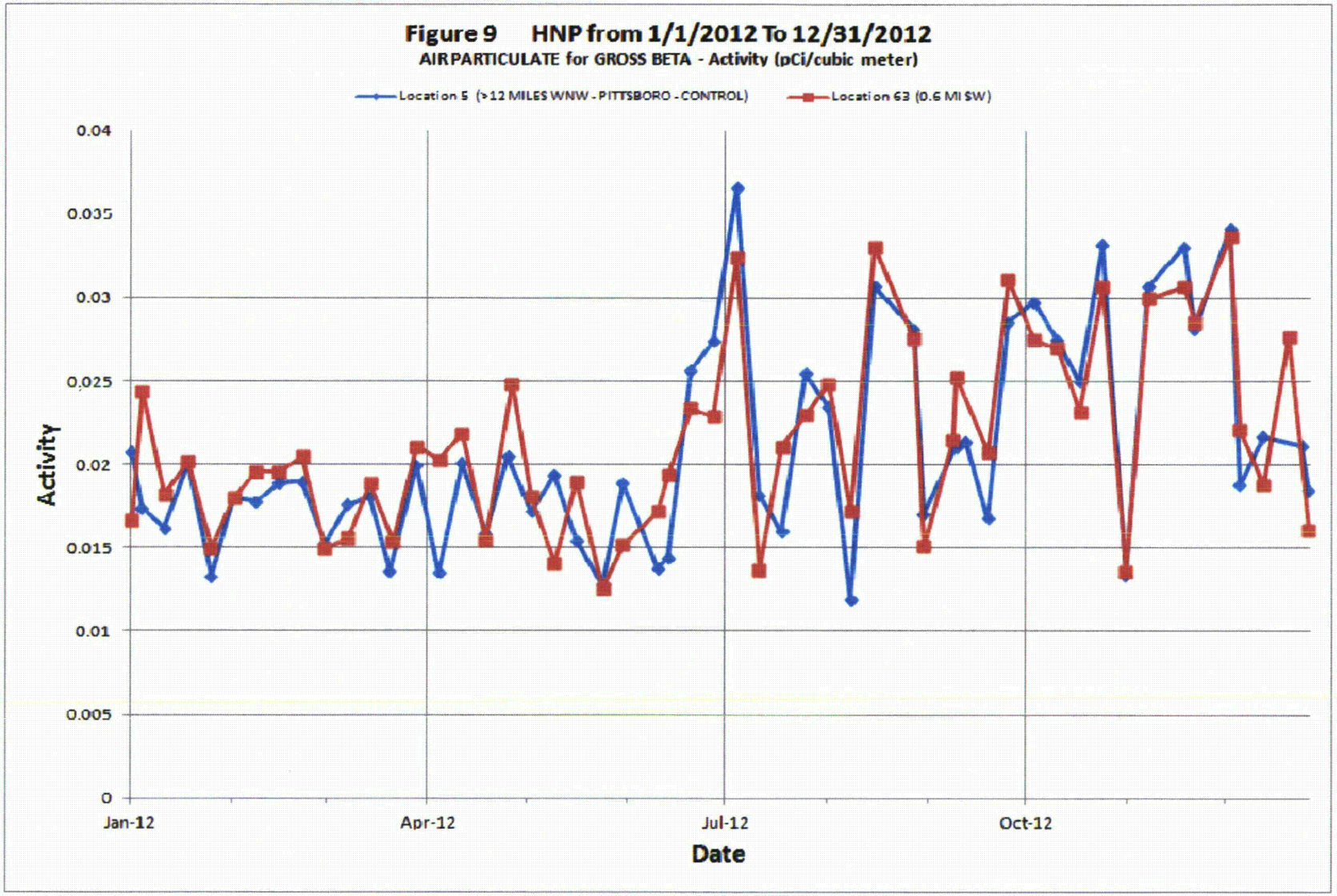


Figure 10 HNP from 1/1/2012 To 12/31/2012

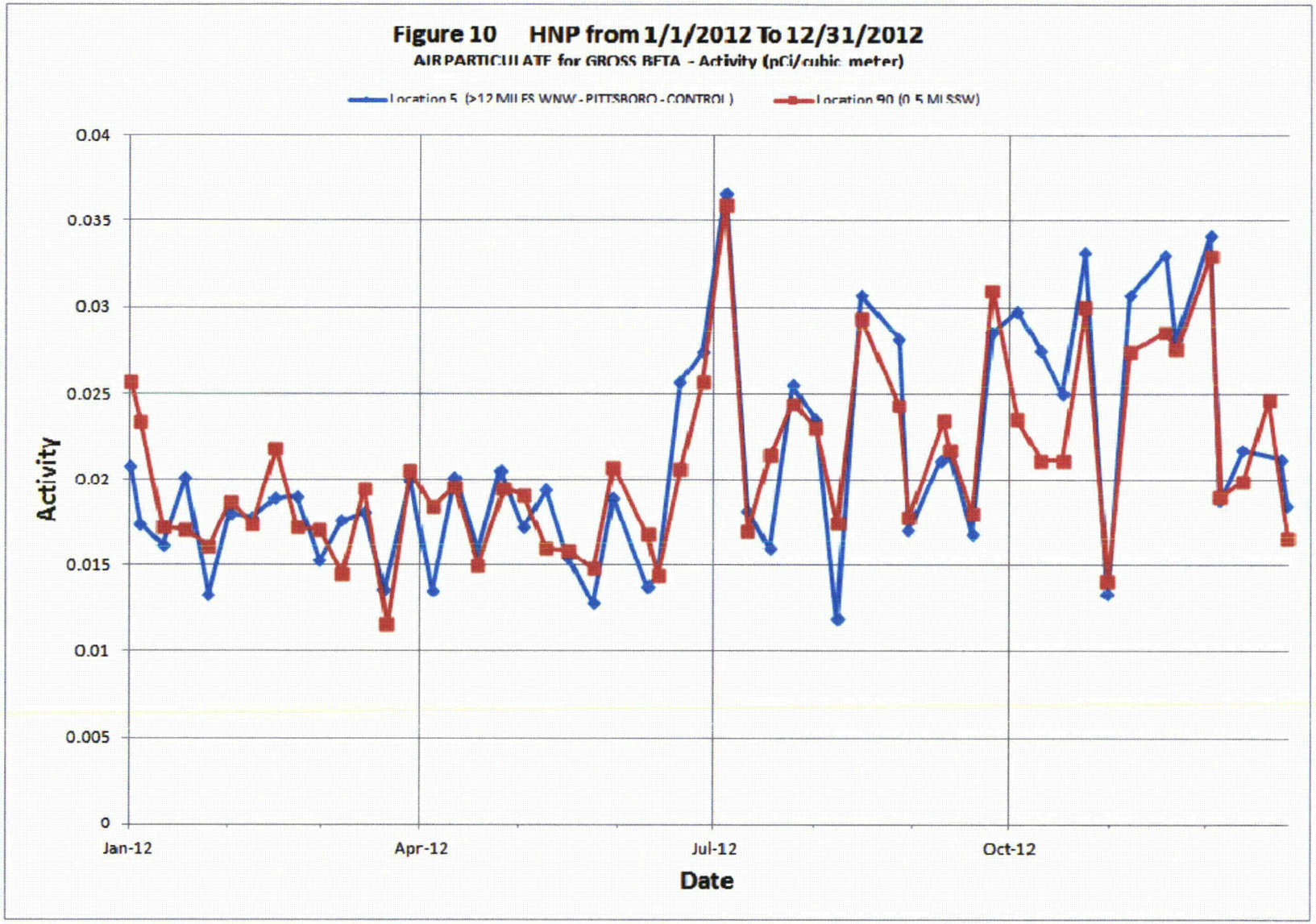
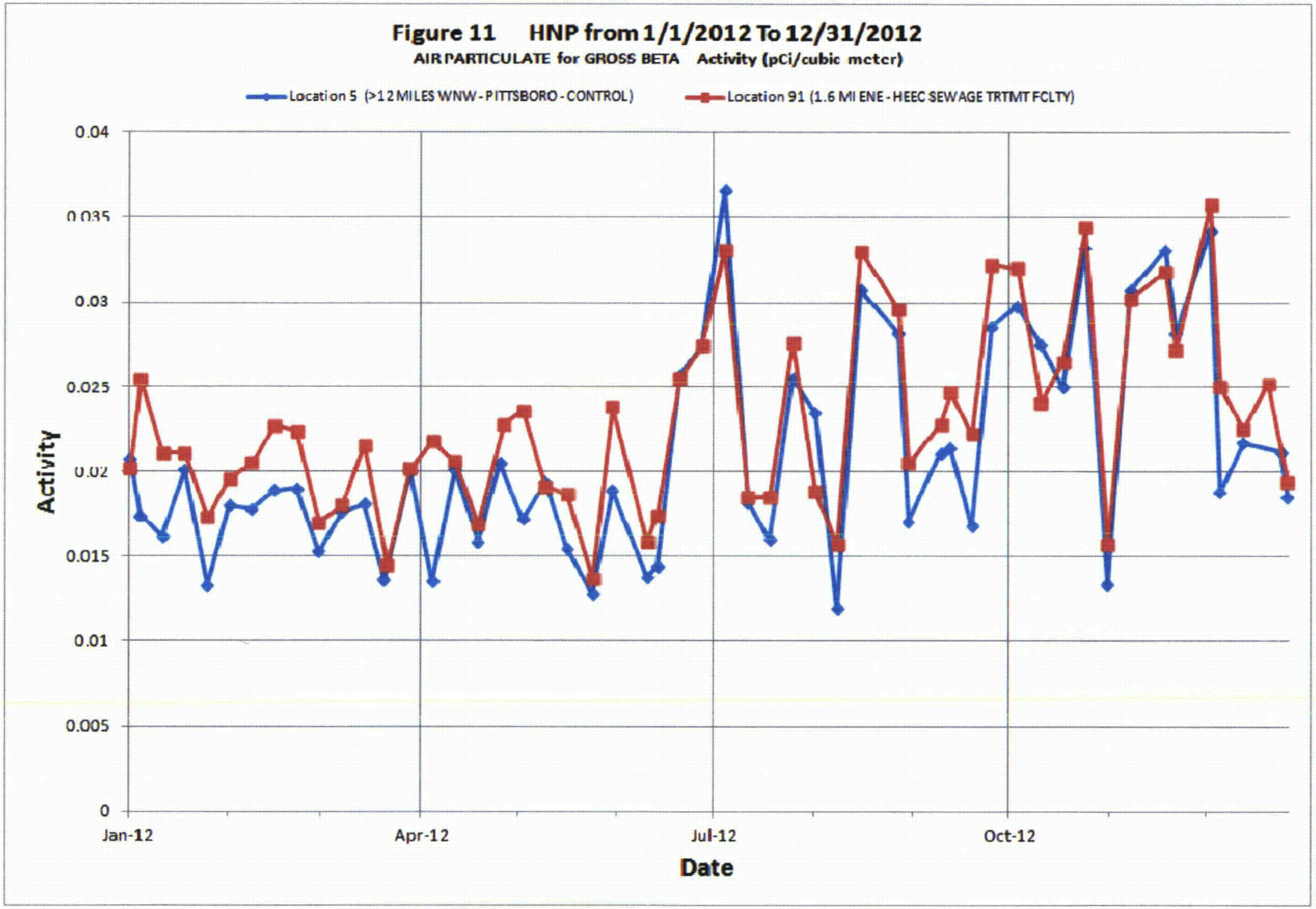


Figure 11 HNP from 1/1/2012 To 12/31/2012



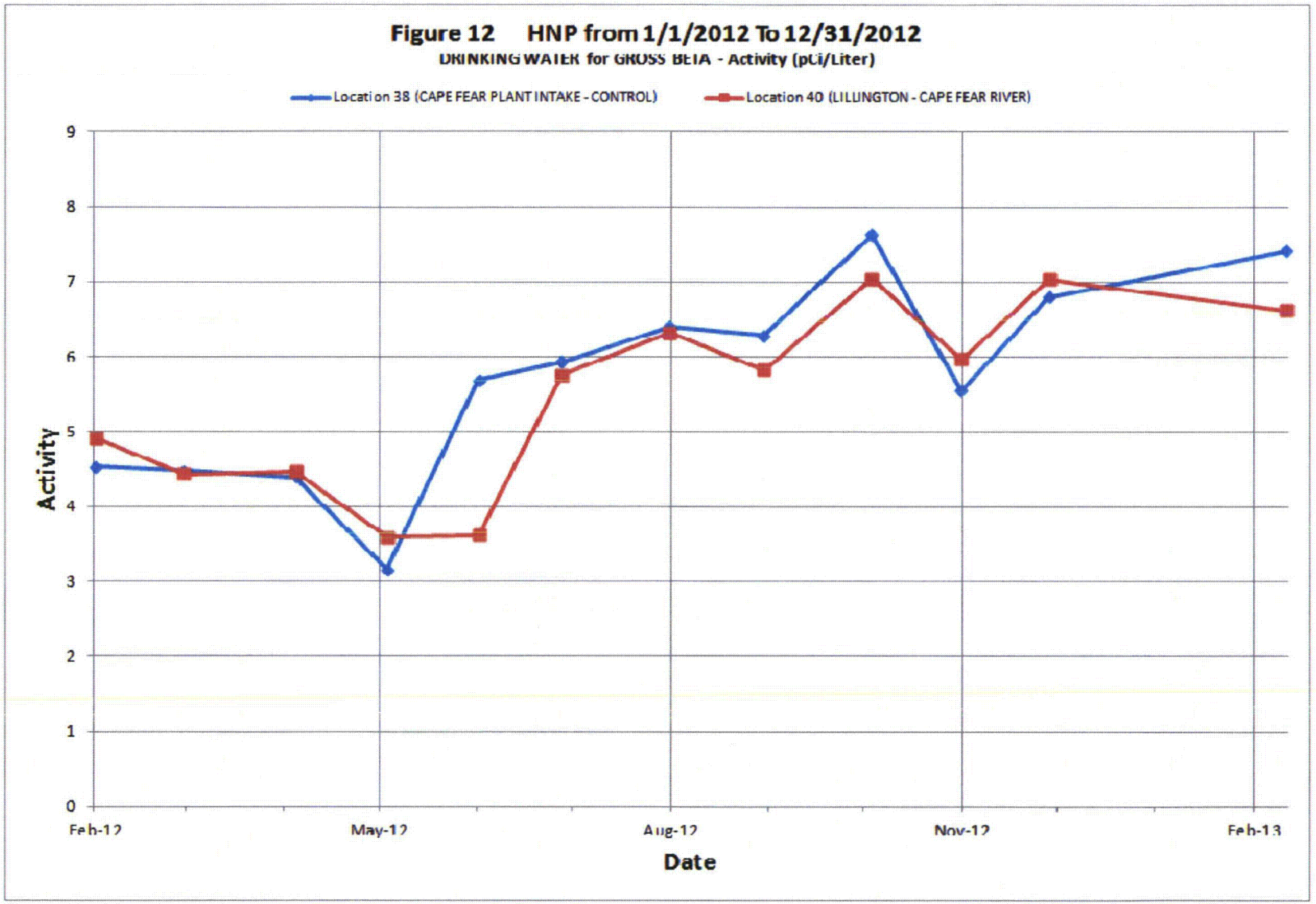


Figure 12 HNP from 1/1/2012 To 12/31/2012
DRINKING WATER for GROSS BETA - Activity (pCi/Liter)
Location 38 (CAPE FEAR PLANT INTAKE - CONTROL)
Location 40 (LILLINGTON - CAPE FEAR RIVER)
Activity
0
1
2
3
4
5
6
7
8
9
Feb-12
May-12
Aug-12
Nov-12
Feb-13
Date

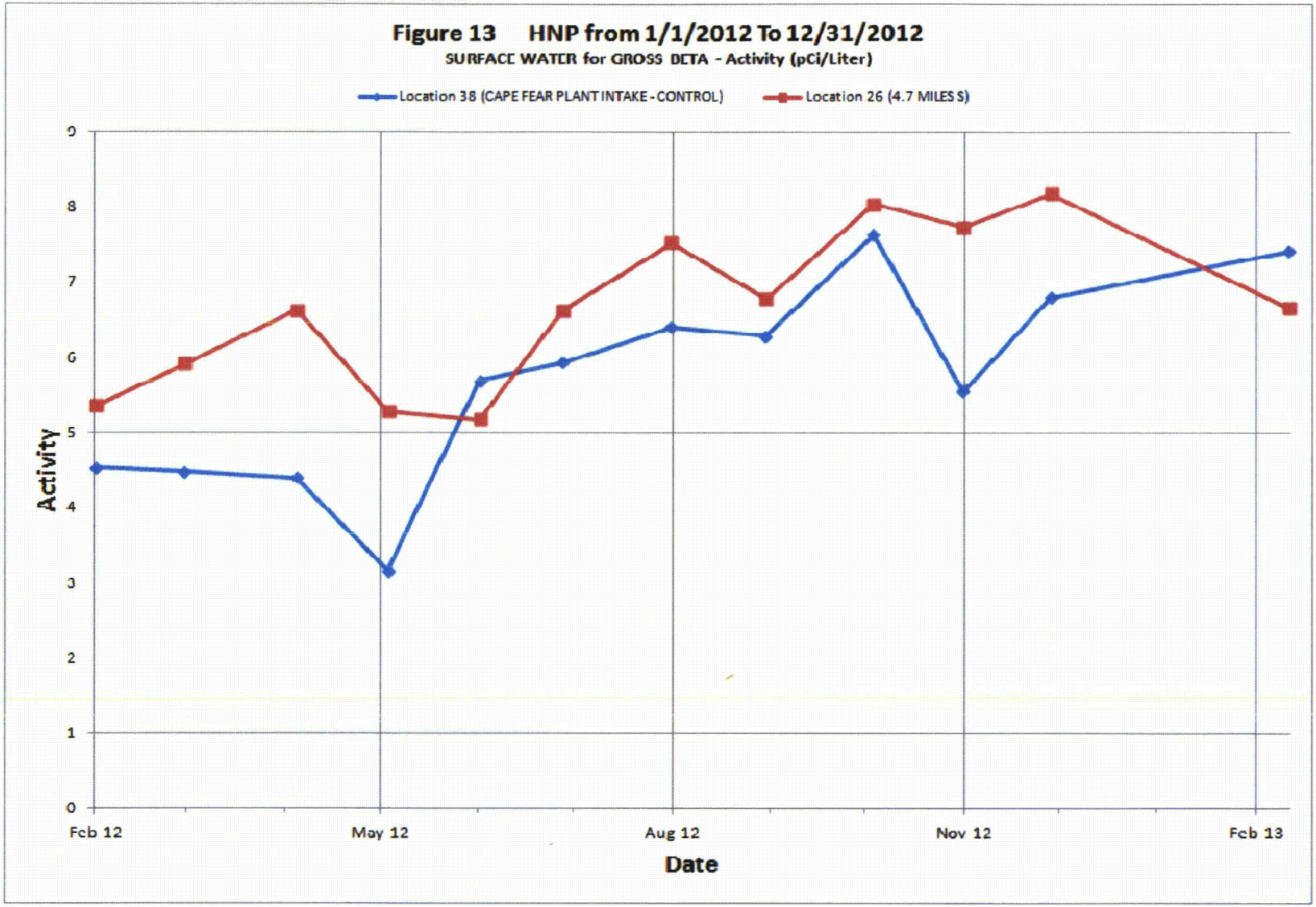


Figure 13 HNP from 1/1/2012 To 12/31/2012
SURFACE WATER for GROSS BETA - Activity (pCi/Liter)
Location 38 (CAPE FEAR PLANT INTAKE - CONTROL)
Location 26 (4.7 MILES S)
Activity
0
1
2
3
4
5
6
7
8
9
Feb 12
May 12
Aug 12
Nov 12
Feb 13
Date

Figure 14 HNP 2012 Surface Water Tritium Activity

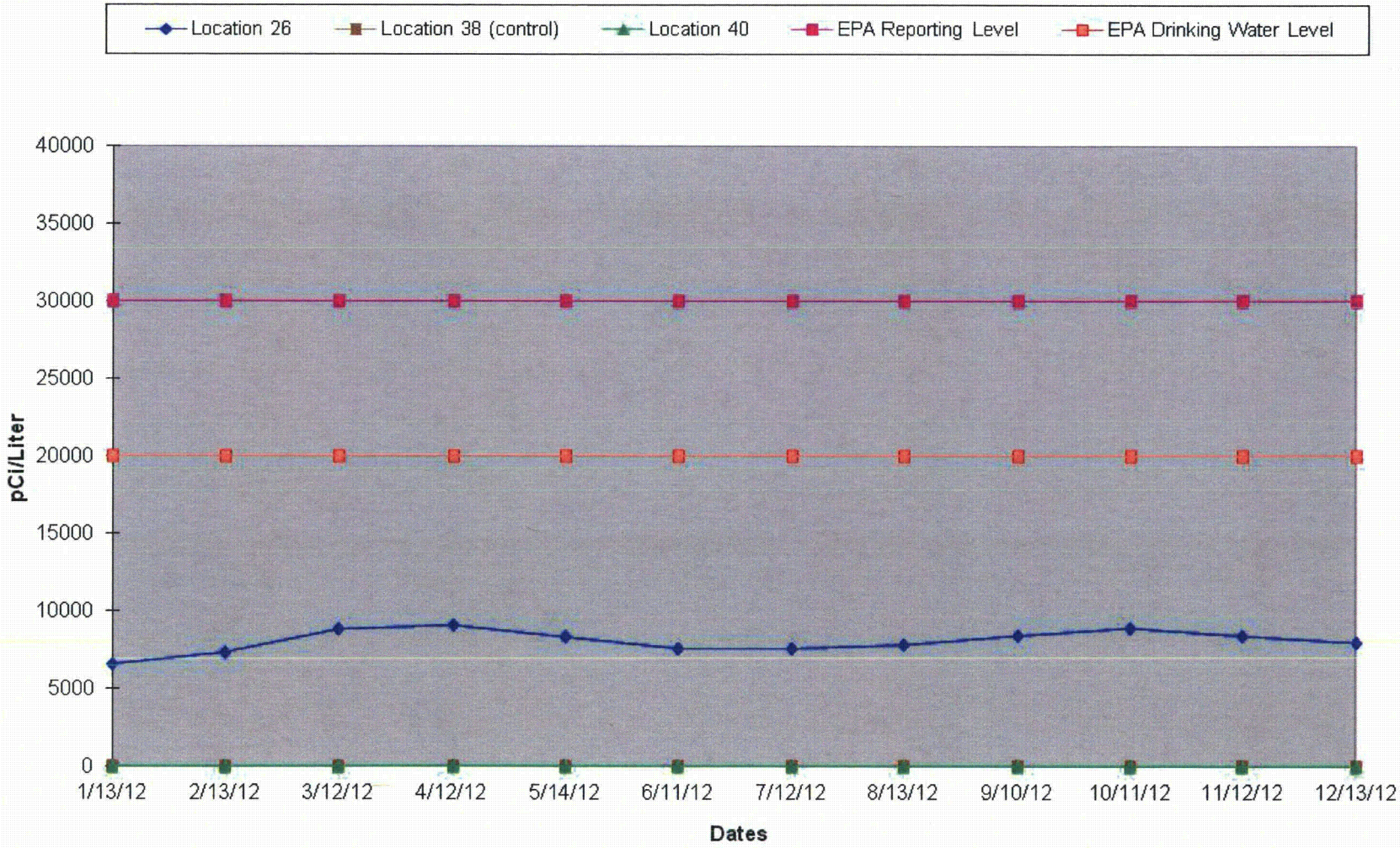
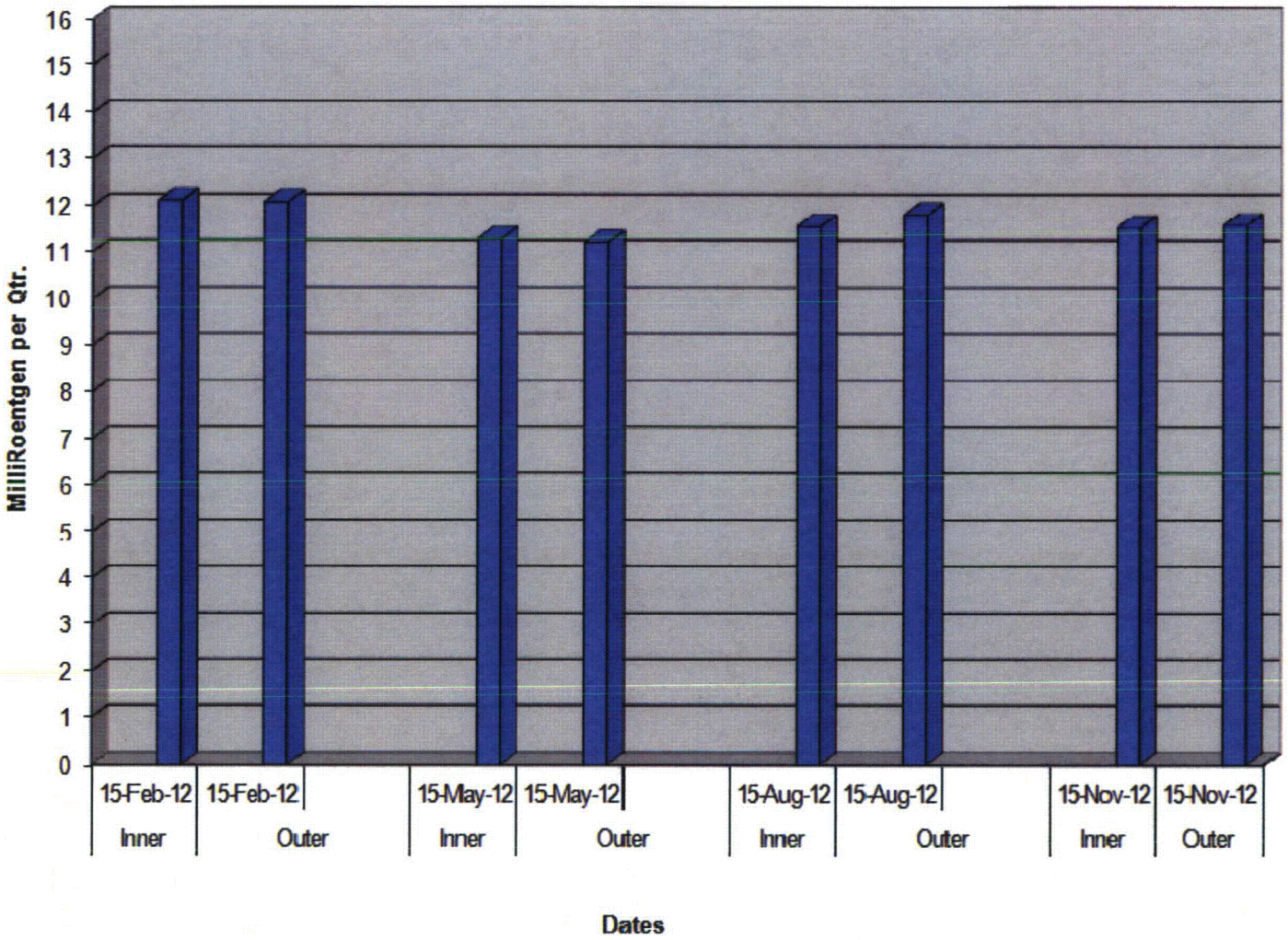


Figure 15 HNP 2012 TLD Averages for Inner and Outer Ring Locations



2012 HNP
Radiological Environmental Monitoring TLD Report

Comments

- All HNP Environmental TLDS were present in 2012, except for the following TLDs:
  - TLD # 15 First Quarter 2012
  - TLE # 19 Fourth Quarter 2012

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	2/15/2012	13	1
1	2.6 MILES N	5/15/2012	13	0.5
1	2.6 MILES N	8/15/2012	12.4	1.6
1	2.6 MILES N	11/15/2012	13	2.6
2	1.4 MILES NNE	2/15/2012	14.7	1.6
2	1.4 MILES NNE	5/15/2012	13.3	1.2
2	1.4 MILES NNE	8/15/2012	13.4	3.5
2	1.4 MILES NNE	11/15/2012	12.8	0.9
3	1.9 MILES ENE - HE&EC	2/15/2012	12	1.6
3	1.9 MILES ENE - HE&EC	5/15/2012	10.8	0.5
3	1.9 MILES ENE - HE&EC	8/15/2012	11.4	1.6
3	1.9 MILES ENE - HE&EC	11/15/2012	11.1	1.4
4	3.1 MILES NNE	2/15/2012	11.6	1.8
4	3.1 MILES NNE	5/15/2012	10.4	2.3
4	3.1 MILES NNE	8/15/2012	10.7	1
4	3.1 MILES NNE	11/15/2012	10.7	1
5	>12 MILES WNW - PITTSBORO - CONTROL	2/15/2012	15.1	1.2
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	13.7	0.8
5	>12 MILES WNW - PITTSBORO - CONTROL	8/15/2012	15.2	1.6
5	>12 MILES WNW - PITTSBORO - CONTROL	11/15/2012	14.2	1.6
6	0.8 MILES ENE	2/15/2012	12.3	0.9

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
6	0.8 MILES ENE	5/15/2012	11.2	1
6	0.8 MILES ENE	8/15/2012	11.1	1.8
6	0.8 MILES ENE	11/15/2012	11.3	1.8
7	0.7 MILES E	2/15/2012	12.6	1.1
7	0.7 MILES E	5/15/2012	11.6	1.2
7	0.7 MILES E	8/15/2012	12.4	1.7
7	0.7 MILES E	11/15/2012	12.1	0.6
8	0.6 MILES ESE	2/15/2012	11.8	1.7
8	0.6 MILES ESE	5/15/2012	11.4	1.2
8	0.6 MILES ESE	8/15/2012	12.2	2.4
8	0.6 MILES ESE	11/15/2012	11.5	1.9
9	2.2 MILES SE	2/15/2012	10	0.9
9	2.2 MILES SE	5/15/2012	9.3	1.2
9	2.2 MILES SE	8/15/2012	9.4	2.3
9	2.2 MILES SE	11/15/2012	9.7	0.7
10	2.2 MILES SSE	2/15/2012	11.2	1.1
10	2.2 MILES SSE	5/15/2012	10.4	0.8
10	2.2 MILES SSE	8/15/2012	10.6	2.1
10	2.2 MILES SSE	11/15/2012	10.8	0.7
11	0.6 MILES S	2/15/2012	10.8	1
11	0.6 MILES S	5/15/2012	9.9	1
11	0.6 MILES S	8/15/2012	10.7	1.5
11	0.6 MILES S	11/15/2012	10.5	0.9
12	0.9 MILES SSW	2/15/2012	9.8	1

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
12	0.9 MILES SSW	5/15/2012	10.2	0.6
12	0.9 MILES SSW	8/15/2012	9.5	1.5
12	0.9 MILES SSW	11/15/2012	9.9	0.9
13	0.7 MILES WSW	2/15/2012	11.3	1.5
13	0.7 MILES WSW	5/15/2012	9.9	0.6
13	0.7 MILES WSW	8/15/2012	10.1	0.9
13	0.7 MILES WSW	11/15/2012	10.6	0.6
14	1.5 MILES W	2/15/2012	13.5	0.9
14	1.5 MILES W	5/15/2012	13.7	1.6
14	1.5 MILES W	8/15/2012	12.8	2
14	1.5 MILES W	11/15/2012	14.6	2.1
15	2.0 MILES W	5/15/2012	10	1.8
15	2.0 MILES W	8/15/2012	10.5	1.2
15	2.0 MILES W	11/15/2012	10.2	0.6
19	5.0 MILES NNE	2/15/2012	10.5	1.9
19	5.0 MILES NNE	5/15/2012	9.7	0.6
19	5.0 MILES NNE	8/15/2012	10.6	1.2
20	4.5 MILES NE	2/15/2012	13.3	1.2
20	4.5 MILES NE	5/15/2012	12.8	2
20	4.5 MILES NE	8/15/2012	13.1	1.2
20	4.5 MILES NE	11/15/2012	12.9	1.6
21	4.8 MILES ENE	2/15/2012	12.9	1.2
21	4.8 MILES ENE	5/15/2012	10.5	1.2
21	4.8 MILES ENE	8/15/2012	13.4	3.2

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
21	4.8 MILES ENE	11/15/2012	10.4	1.7
22	4.3 MILES E	2/15/2012	10.7	1.9
22	4.3 MILES E	5/15/2012	9.6	1.4
22	4.3 MILES E	8/15/2012	9.8	1.6
22	4.3 MILES E	11/15/2012	10.2	0.9
23	4.8 MILES ESE	2/15/2012	12.8	1.1
23	4.8 MILES ESE	5/15/2012	11.9	0.7
23	4.8 MILES ESE	8/15/2012	12.1	2.1
23	4.8 MILES ESE	11/15/2012	12.5	1.3
24	4.0 MILES SE	2/15/2012	11.5	0.9
24	4.0 MILES SE	5/15/2012	10.3	1.3
24	4.0 MILES SE	8/15/2012	10.7	1.1
24	4.0 MILES SE	11/15/2012	10.9	1.2
25	4.7 MILES SSE	2/15/2012	14.5	1.5
25	4.7 MILES SSE	5/15/2012	11.5	0.5
25	4.7 MILES SSE	8/15/2012	14.1	1.5
25	4.7 MILES SSE	11/15/2012	11.6	1.1
26	4.7 MILES S	2/15/2012	12.1	0.9
26	4.7 MILES S	5/15/2012	11.4	1.5
26	4.7 MILES S	8/15/2012	11.8	1.8
26	4.7 MILES S	11/15/2012	11.9	1.2
27	4.8 MILES SW	2/15/2012	9.4	1.6
27	4.8 MILES SW	5/15/2012	9.1	0.9
27	4.8 MILES SW	8/15/2012	9.6	1.4

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
27	4.8 MILES SW	11/15/2012	9.6	1.1
28	4.8 MILES SSW	2/15/2012	10.9	1
28	4.8 MILES SSW	5/15/2012	9.3	1.3
28	4.8 MILES SSW	8/15/2012	10.8	1.4
28	4.8 MILES SSW	11/15/2012	9.8	1.9
29	5.7 MILES WSW	2/15/2012	13.8	2.1
29	5.7 MILES WSW	5/15/2012	12.7	0.7
29	5.7 MILES WSW	8/15/2012	13.4	2
29	5.7 MILES WSW	11/15/2012	13.1	1.6
30	5.6 MILES W	2/15/2012	9.4	1.1
30	5.6 MILES W	5/15/2012	9.9	2.2
30	5.6 MILES W	8/15/2012	9.1	1.6
30	5.6 MILES W	11/15/2012	9.5	0.9
31	4.7 MILES WNW	2/15/2012	9.3	1.4
31	4.7 MILES WNW	5/15/2012	8.9	0.5
31	4.7 MILES WNW	8/15/2012	9.4	1.2
31	4.7 MILES WNW	11/15/2012	9.5	2.1
32	6.4 MILES NNW	2/15/2012	12.7	1.3
32	6.4 MILES NNW	5/15/2012	11.9	1.3
32	6.4 MILES NNW	8/15/2012	11.3	2.2
32	6.4 MILES NNW	11/15/2012	12.4	1.5
33	4.5 MILES NNW	2/15/2012	10	2.3
33	4.5 MILES NNW	5/15/2012	9.2	0.6
33	4.5 MILES NNW	8/15/2012	10.2	2.1

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
33	4.5 MILES NNW	11/15/2012	9.8	1.7
34	8.7 MILES NE - APEX (POP. CENTER)	2/15/2012	15.7	1.5
34	8.7 MILES NE - APEX (POP. CENTER)	5/15/2012	14.1	1.6
34	8.7 MILES NE - APEX (POP. CENTER)	8/15/2012	15	1
34	8.7 MILES NE - APEX (POP. CENTER)	11/15/2012	15.8	3.1
35	6.9 MILES E - HOLLY SPRINGS (POP. CENTER)	2/15/2012	13.2	1
35	6.9 MILES E - HOLLY SPRINGS (POP. CENTER)	5/15/2012	12.5	1
35	6.9 MILES E - HOLLY SPRINGS (POP. CENTER)	8/15/2012	13.1	2
35	6.9 MILES E - HOLLY SPRINGS (POP. CENTER)	11/15/2012	12.1	1.5
36	10.9 MILES E	2/15/2012	9.9	0.9
36	10.9 MILES E	5/15/2012	9.7	0.5
36	10.9 MILES E	8/15/2012	9.7	2.1
36	10.9 MILES E	11/15/2012	9.8	0.7
37	9.2 MILES ESE - FV AT OLD CP&L OFFICE	2/15/2012	15.2	1.5
37	9.2 MILES ESE - FV AT OLD CP&L OFFICE	5/15/2012	14.6	1.8
37	9.2 MILES ESE - FV AT OLD CP&L OFFICE	8/15/2012	14.6	1.9
37	9.2 MILES ESE - FV AT OLD CP&L OFFICE	11/15/2012	14	2.3
48	4.5 MILES N	2/15/2012	12.3	2.2
48	4.5 MILES N	5/15/2012	13.4	1.5
48	4.5 MILES N	8/15/2012	12.7	1.3
48	4.5 MILES N	11/15/2012	13	1.4
49	2.5 MILES NE	2/15/2012	14.5	1.3
49	2.5 MILES NE	5/15/2012	13.8	1.1
49	2.5 MILES NE	8/15/2012	14.2	3.2

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
49	2.5 MILES NE	11/15/2012	13.5	1.8
50	2.6 MILES ESE - HOLLEMANS CROSSROADS	2/15/2012	11.7	1.4
50	2.6 MILES ESE - HOLLEMANS CROSSROADS	5/15/2012	9.9	0.8
50	2.6 MILES ESE - HOLLEMANS CROSSROADS	8/15/2012	10.2	1.2
50	2.6 MILES ESE - HOLLEMANS CROSSROADS	11/15/2012	10	1.2
53	5.8 MILES NW	2/15/2012	10.7	1.2
53	5.8 MILES NW	5/15/2012	9.9	0.9
53	5.8 MILES NW	8/15/2012	10.2	1.4
53	5.8 MILES NW	11/15/2012	10.2	1.5
56	3.0 MILES WSW	2/15/2012	12.6	0.9
56	3.0 MILES WSW	5/15/2012	10.7	1
56	3.0 MILES WSW	8/15/2012	11.7	1.3
56	3.0 MILES WSW	11/15/2012	11.3	0.7
63	0.6 MI SW	2/15/2012	12.5	1.2
63	0.6 MI SW	5/15/2012	11.9	2.5
63	0.6 MI SW	8/15/2012	12.8	0.9
63	0.6 MI SW	11/15/2012	12	1.8
67	1.2 MI ENE - HEEC SEWAGE TREATMENT FACILITY	2/15/2012	11.5	1.4
67	1.2 MI ENE - HEEC SEWAGE TREATMENT FACILITY	5/15/2012	11.1	1
67	1.2 MI ENE - HEEC SEWAGE TREATMENT FACILITY	8/15/2012	11.3	1
67	1.2 MI ENE - HEEC SEWAGE TREATMENT FACILITY	11/15/2012	10.9	1.3
93	2.2 MI WNW - SR 1911	2/15/2012	12	1
93	2.2 MI WNW - SR 1911	5/15/2012	11.8	1.7
93	2.2 MI WNW - SR 1911	8/15/2012	13.4	1

Dose: mR/std. qtr.

TLD	*TLD Location Description*	*Sample Date*	*Dose*	*2 Sigma Error*
93	2.2 MI WNW - SR 1911	11/15/2012	12.5	1.8
94	2.0 MI NW - OFF OLD US HWY 1	2/15/2012	13.6	1.1
94	2.0 MI NW - OFF OLD US HWY 1	5/15/2012	12.5	0.8
94	2.0 MI NW - OFF OLD US HWY 1	8/15/2012	12.8	2.5
94	2.0 MI NW - OFF OLD US HWY 1	11/15/2012	13	0.9
95	2.0 MI NNW - BONSAL RD.	2/15/2012	11.5	2
95	2.0 MI NNW - BONSAL RD.	5/15/2012	11.6	0.5
95	2.0 MI NNW - BONSAL RD.	8/15/2012	10.7	1.1
95	2.0 MI NNW - BONSAL RD.	11/15/2012	11.8	1

2012 HNP
Radiological Environmental Monitoring Analysis Report

Comments

- The Less than LLD (<LLD) and blank data fields represent 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 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	1/3/2012	276.80			2.04E-02
1	2.6 MILES N	1/9/2012	237.70			1.87E-02
1	2.6 MILES N	1/16/2012	277.70			1.86E-02
1	2.6 MILES N	1/23/2012	277.20			1.83E-02
1	2.6 MILES N	1/30/2012	275.80			2.03E-02
1	2.6 MILES N	2/6/2012	276.00			1.84E-02
1	2.6 MILES N	2/13/2012	275.10			2.08E-02
1	2.6 MILES N	2/20/2012	277.00			2.47E-02
1	2.6 MILES N	2/27/2012	275.50			2.26E-02
1	2.6 MILES N	3/5/2012	275.40			1.91E-02
1	2.6 MILES N	3/12/2012	274.50			1.85E-02
1	2.6 MILES N	3/19/2012	272.90			2.10E-02
1	2.6 MILES N	3/26/2012	273.60			1.90E-02
1	2.6 MILES N	4/2/2012	273.40			2.54E-02
1	2.6 MILES N	4/9/2012	273.90			2.10E-02
1	2.6 MILES N	4/16/2012	274.70			2.81E-02
1	2.6 MILES N	4/23/2012	272.90			1.86E-02
1	2.6 MILES N	4/30/2012	275.70			1.71E-02
1	2.6 MILES N	5/7/2012	295.00			2.26E-02
1	2.6 MILES N	5/14/2012	297.00			1.41E-02
1	2.6 MILES N	5/21/2012	269.10			2.28E-02
1	2.6 MILES N	5/29/2012	306.60			1.91E-02
1	2.6 MILES N	6/4/2012	229.20			2.33E-02
1	2.6 MILES N	6/11/2012	268.30			1.71E-02
1	2.6 MILES N	6/18/2012	273.20			1.78E-02
1	2.6 MILES N	6/25/2012	261.40			1.89E-02
1	2.6 MILES N	7/2/2012	265.10			2.12E-02

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
1	2.6 MILES N	7/9/2012	265.40			2.31E-02
1	2.6 MILES N	7/16/2012	267.40			1.94E-02
1	2.6 MILES N	7/23/2012	264.70			2.00E-02
1	2.6 MILES N	7/30/2012	267.10			1.71E-02
1	2.6 MILES N	8/6/2012	266.40			2.26E-02
1	2.6 MILES N	8/13/2012	266.70			2.79E-02
1	2.6 MILES N	8/20/2012	266.00			1.85E-02
1	2.6 MILES N	8/27/2012	268.40			2.56E-02
1	2.6 MILES N	9/4/2012	303.20			1.71E-02
1	2.6 MILES N	9/10/2012	228.50			2.50E-02
1	2.6 MILES N	9/17/2012	267.60			2.62E-02
1	2.6 MILES N	9/24/2012	266.20			2.83E-02
1	2.6 MILES N	10/1/2012	269.40			2.33E-02
1	2.6 MILES N	10/8/2012	267.50			2.47E-02
1	2.6 MILES N	10/15/2012	268.40			1.85E-02
1	2.6 MILES N	10/22/2012	268.40			1.66E-02
1	2.6 MILES N	10/29/2012	263.60			1.74E-02
1	2.6 MILES N	11/5/2012	276.10			2.45E-02
1	2.6 MILES N	11/12/2012	276.40			2.16E-02
1	2.6 MILES N	11/19/2012	276.10			2.61E-02
1	2.6 MILES N	11/26/2012	277.70			2.37E-02
1	2.6 MILES N	12/3/2012	277.00			1.97E-02
1	2.6 MILES N	12/10/2012	276.00			1.96E-02
1	2.6 MILES N	12/17/2012	276.60			1.88E-02
1	2.6 MILES N	12/23/2012	237.90			3.87E-02
1	2.6 MILES N	12/31/2012	317.00			2.21E-02
2	1.4 MILES NNE	1/3/2012	281.90			2.14E-02

HNP Radiological Environmental Monitoring Analysis Report

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

Sample Point		Sample Date	Quantity	Activity	2 Sigma Error	LLD
2	1.4 MILES NNE	1/9/2012	242.10			2.54E-02
2	1.4 MILES NNE	1/16/2012	282.00			2.00E-02
2	1.4 MILES NNE	1/23/2012	281.40			2.18E-02
2	1.4 MILES NNE	1/30/2012	280.10			2.15E-02
2	1.4 MILES NNE	2/6/2012	281.10			2.40E-02
2	1.4 MILES NNE	2/13/2012	281.70			2.17E-02
2	1.4 MILES NNE	2/20/2012	279.50			1.83E-02
2	1.4 MILES NNE	2/27/2012	277.70			1.73E-02
2	1.4 MILES NNE	3/5/2012	276.60			2.33E-02
2	1.4 MILES NNE	3/12/2012	274.90			2.42E-02
2	1.4 MILES NNE	3/19/2012	272.80			2.83E-02
2	1.4 MILES NNE	3/26/2012	273.40			2.36E-02
2	1.4 MILES NNE	4/2/2012	272.50			1.67E-02
2	1.4 MILES NNE	4/9/2012	273.20			2.88E-02
2	1.4 MILES NNE	4/16/2012	274.30			1.81E-02
2	1.4 MILES NNE	4/23/2012	272.00			2.55E-02
2	1.4 MILES NNE	4/30/2012	274.00			2.74E-02
2	1.4 MILES NNE	5/7/2012	276.10			2.26E-02
2	1.4 MILES NNE	5/14/2012	277.70			2.57E-02
2	1.4 MILES NNE	5/21/2012	278.20			2.36E-02
2	1.4 MILES NNE	5/29/2012	317.20			2.12E-02
2	1.4 MILES NNE	6/4/2012	211.70			2.66E-02
2	1.4 MILES NNE	6/11/2012	248.00			2.81E-02
2	1.4 MILES NNE	6/18/2012	252.60			2.34E-02
2	1.4 MILES NNE	6/25/2012	243.30			2.56E-02
2	1.4 MILES NNE	7/2/2012	246.00			2.71E-02
2	1.4 MILES NNE	7/9/2012	246.10			2.62E-02

HNP Radiological Environmental Monitoring Analysis Report

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

Sample Point		Sample Date	Quantity	Activity	2 Sigma Error	LLD
2	1.4 MILES NNE	7/16/2012	247.90			2.85E-02
2	1.4 MILES NNE	7/23/2012	245.60			2.63E-02
2	1.4 MILES NNE	7/30/2012	247.20			2.01E-02
2	1.4 MILES NNE	8/6/2012	246.60			2.49E-02
2	1.4 MILES NNE	8/13/2012	246.80			2.17E-02
2	1.4 MILES NNE	8/20/2012	246.40			2.26E-02
2	1.4 MILES NNE	8/27/2012	247.70			2.39E-02
2	1.4 MILES NNE	9/4/2012	278.30			2.35E-02
2	1.4 MILES NNE	9/10/2012	209.80			2.71E-02
2	1.4 MILES NNE	9/17/2012	245.50			2.63E-02
2	1.4 MILES NNE	9/24/2012	244.50			2.43E-02
2	1.4 MILES NNE	10/1/2012	247.70			2.05E-02
2	1.4 MILES NNE	10/8/2012	245.60			2.68E-02
2	1.4 MILES NNE	10/15/2012	247.00			2.66E-02
2	1.4 MILES NNE	10/22/2012	247.50			2.73E-02
2	1.4 MILES NNE	10/29/2012	247.60			2.76E-02
2	1.4 MILES NNE	11/5/2012	275.10			3.19E-02
2	1.4 MILES NNE	11/12/2012	278.40			3.14E-02
2	1.4 MILES NNE	11/19/2012	281.20			2.95E-02
2	1.4 MILES NNE	11/26/2012	282.50			2.22E-02
2	1.4 MILES NNE	12/3/2012	282.10			2.41E-02
2	1.4 MILES NNE	12/10/2012	281.10			2.19E-02
2	1.4 MILES NNE	12/17/2012	279.90			2.45E-02
2	1.4 MILES NNE	12/23/2012	242.10			3.11E-02
2	1.4 MILES NNE	12/31/2012	321.60			2.14E-02
4	3.1 MILES NNE	1/3/2012	271.60			2.39E-02
4	3.1 MILES NNE	1/9/2012	232.90			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
4	3.1 MILES NNE	1/16/2012	271.60			2.10E-02
4	3.1 MILES NNE	1/23/2012	271.00			1.91E-02
4	3.1 MILES NNE	1/30/2012	270.20			1.92E-02
4	3.1 MILES NNE	2/6/2012	270.10			2.20E-02
4	3.1 MILES NNE	2/13/2012	272.30			2.51E-02
4	3.1 MILES NNE	2/20/2012	270.70			2.10E-02
4	3.1 MILES NNE	2/27/2012	244.80			2.69E-02
4	3.1 MILES NNE	3/5/2012	268.90			2.19E-02
4	3.1 MILES NNE	3/12/2012	268.30			2.25E-02
4	3.1 MILES NNE	3/19/2012	266.40			2.58E-02
4	3.1 MILES NNE	3/26/2012	267.20			2.22E-02
4	3.1 MILES NNE	4/2/2012	266.60			1.99E-02
4	3.1 MILES NNE	4/9/2012	267.10			2.28E-02
4	3.1 MILES NNE	4/16/2012	268.10			1.96E-02
4	3.1 MILES NNE	4/23/2012	265.70			2.51E-02
4	3.1 MILES NNE	4/30/2012	268.40			2.41E-02
4	3.1 MILES NNE	5/7/2012	273.70			2.40E-02
4	3.1 MILES NNE	5/14/2012	274.60			2.20E-02
4	3.1 MILES NNE	5/21/2012	275.30			2.31E-02
4	3.1 MILES NNE	5/29/2012	313.50			1.86E-02
4	3.1 MILES NNE	6/4/2012	235.00			2.49E-02
4	3.1 MILES NNE	6/11/2012	274.90			2.09E-02
4	3.1 MILES NNE	6/18/2012	279.20			1.93E-02
4	3.1 MILES NNE	6/25/2012	268.50			1.81E-02
4	3.1 MILES NNE	7/2/2012	272.30			2.53E-02
4	3.1 MILES NNE	7/9/2012	272.30			2.18E-02
4	3.1 MILES NNE	7/16/2012	274.10			2.21E-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	7/23/2012	271.50			2.46E-02
4	3.1 MILES NNE	7/30/2012	274.10			1.77E-02
4	3.1 MILES NNE	8/6/2012	272.80			1.59E-02
4	3.1 MILES NNE	8/13/2012	273.10			2.04E-02
4	3.1 MILES NNE	8/20/2012	272.30			1.84E-02
4	3.1 MILES NNE	8/27/2012	274.80			2.32E-02
4	3.1 MILES NNE	9/4/2012	310.30			1.81E-02
4	3.1 MILES NNE	9/10/2012	234.10			2.03E-02
4	3.1 MILES NNE	9/17/2012	273.50			2.01E-02
4	3.1 MILES NNE	9/24/2012	272.00			2.27E-02
4	3.1 MILES NNE	10/1/2012	274.80			2.40E-02
4	3.1 MILES NNE	10/8/2012	273.20			2.18E-02
4	3.1 MILES NNE	10/15/2012	275.20			2.43E-02
4	3.1 MILES NNE	10/22/2012	275.10			1.86E-02
4	3.1 MILES NNE	10/29/2012	275.40			1.95E-02
4	3.1 MILES NNE	11/5/2012	282.10			2.92E-02
4	3.1 MILES NNE	11/12/2012	282.10			2.74E-02
4	3.1 MILES NNE	11/19/2012	283.00			2.04E-02
4	3.1 MILES NNE	11/26/2012	283.00			2.13E-02
4	3.1 MILES NNE	12/3/2012	282.60			2.00E-02
4	3.1 MILES NNE	12/10/2012	281.00			2.03E-02
4	3.1 MILES NNE	12/17/2012	281.40			2.27E-02
4	3.1 MILES NNE	12/23/2012	242.90			3.28E-02
4	3.1 MILES NNE	12/31/2012	323.60			2.26E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	1/3/2012	284.10			1.81E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	1/9/2012	243.50			2.63E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	1/16/2012	284.70			2.04E-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	1/23/2012	283.90			1.69E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	1/30/2012	284.00			1.90E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	2/6/2012	280.90			2.17E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	2/13/2012	285.40			1.97E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	2/20/2012	281.80			1.79E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	2/27/2012	281.30			1.65E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	3/5/2012	281.00			1.98E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	3/12/2012	279.70			1.72E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	3/19/2012	276.80			1.87E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	3/26/2012	307.70			1.95E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	4/2/2012	270.10			2.38E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	4/9/2012	265.30			2.14E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	4/16/2012	266.90			2.03E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	4/23/2012	267.00			2.44E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	4/30/2012	270.30			2.12E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/7/2012	256.20			1.77E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/14/2012	259.50			2.13E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/21/2012	259.50			2.44E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/29/2012	297.30			1.84E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/4/2012	223.80			2.51E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	258.90			2.48E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/18/2012	265.10			2.35E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/25/2012	254.60			2.52E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/2/2012	258.50			1.82E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/9/2012	257.50			2.13E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	259.80			2.08E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/23/2012	257.80			2.11E-02

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		Sample Date	Quantity	Activity	2 Sigma Error	LLD
5	>12 MILES WNW - PITTSBORO - CONTROL	7/30/2012	258.20			2.20E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/6/2012	257.70			2.65E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/13/2012	258.20			1.71E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/20/2012	257.30			2.08E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/27/2012	258.40			2.01E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/4/2012	293.00			2.11E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/10/2012	220.70			2.71E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/17/2012	255.90			2.45E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/24/2012	256.40			2.51E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/1/2012	258.30			2.20E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/8/2012	256.70			2.18E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/15/2012	257.00			2.10E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/22/2012	258.00			1.67E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/29/2012	260.30			2.16E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	11/5/2012	270.70			2.70E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	11/12/2012	272.10			2.83E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	11/19/2012	274.00			2.77E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	11/26/2012	272.90			3.10E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	12/3/2012	271.70			2.37E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	12/10/2012	270.10			1.33E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	12/17/2012	270.20			1.91E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	12/23/2012	233.50			3.82E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	12/31/2012	278.10			2.04E-02
26	4.7 MILES S	1/3/2012	276.60			2.31E-02
26	4.7 MILES S	1/9/2012	235.80			2.36E-02
26	4.7 MILES S	1/16/2012	277.00			1.73E-02
26	4.7 MILES S	1/23/2012	275.20			2.28E-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	1/30/2012	275.30			2.13E-02
26	4.7 MILES S	2/6/2012	274.70			2.40E-02
26	4.7 MILES S	2/13/2012	276.50			1.89E-02
26	4.7 MILES S	2/20/2012	275.70			2.35E-02
26	4.7 MILES S	2/27/2012	273.50			2.23E-02
26	4.7 MILES S	3/5/2012	273.80			2.47E-02
26	4.7 MILES S	3/12/2012	272.10			2.27E-02
26	4.7 MILES S	3/19/2012	268.90			1.87E-02
26	4.7 MILES S	3/26/2012	272.50			1.80E-02
26	4.7 MILES S	4/2/2012	272.90			2.11E-02
26	4.7 MILES S	4/9/2012	270.10			1.86E-02
26	4.7 MILES S	4/16/2012	272.60			1.97E-02
26	4.7 MILES S	4/23/2012	270.60			1.98E-02
26	4.7 MILES S	4/30/2012	273.00			1.88E-02
26	4.7 MILES S	5/7/2012	273.50			2.21E-02
26	4.7 MILES S	5/14/2012	275.30			2.12E-02
26	4.7 MILES S	5/21/2012	276.40			1.74E-02
26	4.7 MILES S	5/29/2012	314.90			2.35E-02
26	4.7 MILES S	6/4/2012	239.10			2.17E-02
26	4.7 MILES S	6/11/2012	273.10			1.92E-02
26	4.7 MILES S	6/18/2012	279.70			1.76E-02
26	4.7 MILES S	6/25/2012	267.40			1.92E-02
26	4.7 MILES S	7/2/2012	273.90			2.37E-02
26	4.7 MILES S	7/9/2012	271.60			2.03E-02
26	4.7 MILES S	7/16/2012	277.80			1.80E-02
26	4.7 MILES S	7/23/2012	268.70			1.91E-02
26	4.7 MILES S	7/30/2012	260.90			2.14E-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	8/6/2012	271.70			2.35E-02
26	4.7 MILES S	8/13/2012	270.70			2.62E-02
26	4.7 MILES S	8/20/2012	273.50			2.44E-02
26	4.7 MILES S	8/27/2012	272.10			2.32E-02
26	4.7 MILES S	9/4/2012	306.50			2.00E-02
26	4.7 MILES S	9/10/2012	232.20			2.90E-02
26	4.7 MILES S	9/17/2012	271.10			1.97E-02
26	4.7 MILES S	9/24/2012	270.10			1.83E-02
26	4.7 MILES S	10/1/2012	273.10			2.42E-02
26	4.7 MILES S	10/8/2012	269.90			2.29E-02
26	4.7 MILES S	10/15/2012	273.70			2.34E-02
26	4.7 MILES S	10/22/2012	269.60			2.62E-02
26	4.7 MILES S	10/29/2012	274.30			2.06E-02
26	4.7 MILES S	11/5/2012	269.00			3.25E-02
26	4.7 MILES S	11/12/2012	267.80			2.73E-02
26	4.7 MILES S	11/19/2012	272.60			3.02E-02
26	4.7 MILES S	11/26/2012	270.50			2.32E-02
26	4.7 MILES S	12/3/2012	270.30			2.26E-02
26	4.7 MILES S	12/10/2012	269.50			1.95E-02
26	4.7 MILES S	12/17/2012	268.60			1.60E-02
26	4.7 MILES S	12/23/2012	230.10			3.14E-02
26	4.7 MILES S	12/31/2012	304.80			2.08E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/3/2012	288.40			2.22E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/9/2012	246.00			1.89E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/16/2012	288.20			2.31E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/23/2012	286.40			1.79E-02
47	SSW SECTOR 3.4 MI FROM SITE	1/30/2012	286.10			2.04E-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	2/6/2012	284.20			1.43E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/13/2012	287.20			2.03E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/20/2012	286.00			1.86E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/27/2012	283.60			2.22E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/5/2012	285.40			1.82E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/12/2012	281.70			2.27E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/19/2012	279.90			2.14E-02
47	SSW SECTOR 3.4 MI FROM SITE	3/26/2012	283.30			2.37E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/2/2012	283.70			2.06E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/9/2012	282.40			2.50E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/16/2012	285.50			2.59E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/23/2012	284.30			2.28E-02
47	SSW SECTOR 3.4 MI FROM SITE	4/30/2012	287.60			2.15E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/7/2012	264.70			2.49E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/14/2012	266.60			2.15E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/21/2012	267.20			2.36E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/29/2012	305.80			1.88E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/4/2012	232.80			2.26E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/11/2012	265.10			2.52E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/18/2012	271.20			2.28E-02
47	SSW SECTOR 3.4 MI FROM SITE	6/25/2012	261.10			2.68E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/2/2012	266.50			2.20E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/9/2012	264.50			2.46E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/16/2012	270.70			2.32E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/23/2012	259.70			2.02E-02
47	SSW SECTOR 3.4 MI FROM SITE	7/30/2012	255.80			2.58E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/6/2012	264.90			2.34E-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	8/13/2012	266.80			2.80E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/20/2012	268.50			2.08E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/27/2012	266.80			2.33E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/4/2012	301.80			2.11E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/10/2012	228.40			2.53E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/17/2012	266.90			1.85E-02
47	SSW SECTOR 3.4 MI FROM SITE	9/24/2012	265.90			1.89E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/1/2012	269.20			1.83E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/8/2012	265.70			2.42E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/15/2012	270.30			1.91E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/22/2012	266.80			2.33E-02
47	SSW SECTOR 3.4 MI FROM SITE	10/29/2012	271.20			2.42E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/5/2012	287.90			2.22E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/12/2012	286.90			2.93E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/19/2012	293.10			2.24E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/26/2012	293.30			1.70E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/3/2012	293.40			1.74E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/10/2012	292.00			1.74E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/17/2012	293.00			1.88E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/23/2012	251.50			3.24E-02
47	SSW SECTOR 3.4 MI FROM SITE	12/31/2012	333.30			1.65E-02
63	0.6 MI SW	1/3/2012	278.00			2.02E-02
63	0.6 MI SW	1/9/2012	237.50			2.72E-02
63	0.6 MI SW	1/16/2012	278.40			2.13E-02
63	0.6 MI SW	1/23/2012	277.30			2.13E-02
63	0.6 MI SW	1/30/2012	275.50			2.16E-02
63	0.6 MI SW	2/6/2012	275.50			2.27E-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
63	0.6 MI SW	2/13/2012	278.70			2.04E-02
63	0.6 MI SW	2/20/2012	276.70			2.22E-02
63	0.6 MI SW	2/27/2012	273.90			2.13E-02
63	0.6 MI SW	3/5/2012	273.20			2.17E-02
63	0.6 MI SW	3/12/2012	272.80			2.06E-02
63	0.6 MI SW	3/19/2012	269.10			2.04E-02
63	0.6 MI SW	3/26/2012	272.00			1.88E-02
63	0.6 MI SW	4/2/2012	355.00			1.39E-02
63	0.6 MI SW	4/9/2012	260.00			2.25E-02
63	0.6 MI SW	4/16/2012	262.10			2.00E-02
63	0.6 MI SW	4/23/2012	261.20			2.39E-02
63	0.6 MI SW	4/30/2012	261.70			2.35E-02
63	0.6 MI SW	5/7/2012	268.80			2.33E-02
63	0.6 MI SW	5/14/2012	271.90			2.10E-02
63	0.6 MI SW	5/21/2012	262.30			2.17E-02
63	0.6 MI SW	5/29/2012	299.30			1.88E-02
63	0.6 MI SW	6/4/2012	223.70			2.60E-02
63	0.6 MI SW	6/11/2012	261.60			2.15E-02
63	0.6 MI SW	6/18/2012	266.20			2.11E-02
63	0.6 MI SW	6/25/2012	256.90			1.86E-02
63	0.6 MI SW	7/2/2012	243.20			2.06E-02
63	0.6 MI SW	7/9/2012	243.60			2.31E-02
63	0.6 MI SW	7/16/2012	244.70			2.04E-02
63	0.6 MI SW	7/23/2012	240.80			2.65E-02
63	0.6 MI SW	7/30/2012	242.20			1.90E-02
63	0.6 MI SW	8/6/2012	241.80			2.15E-02
63	0.6 MI SW	8/13/2012	242.20			3.01E-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
63	0.6 MI SW	8/20/2012	238.40			2.17E-02
63	0.6 MI SW	8/27/2012	248.60			1.94E-02
63	0.6 MI SW	9/4/2012	263.30			2.34E-02
63	0.6 MI SW	9/10/2012	204.50			3.00E-02
63	0.6 MI SW	9/17/2012	238.40			2.60E-02
63	0.6 MI SW	9/24/2012	237.80			2.90E-02
63	0.6 MI SW	10/1/2012	239.80			2.57E-02
63	0.6 MI SW	10/8/2012	237.70			2.37E-02
63	0.6 MI SW	10/15/2012	234.70			1.85E-02
63	0.6 MI SW	10/22/2012	243.30			2.39E-02
63	0.6 MI SW	10/29/2012	239.70			2.38E-02
63	0.6 MI SW	11/5/2012	280.80			2.67E-02
63	0.6 MI SW	11/12/2012	278.70			2.33E-02
63	0.6 MI SW	11/19/2012	282.90			2.92E-02
63	0.6 MI SW	11/26/2012	280.90			2.36E-02
63	0.6 MI SW	12/3/2012	278.20			1.67E-02
63	0.6 MI SW	12/10/2012	276.90			2.10E-02
63	0.6 MI SW	12/17/2012	277.90			2.22E-02
63	0.6 MI SW	12/23/2012	240.30			2.82E-02
63	0.6 MI SW	12/31/2012	320.00			2.00E-02
90	0.5 MI SSW	1/3/2012	269.60			2.32E-02
90	0.5 MI SSW	1/9/2012	231.10			2.65E-02
90	0.5 MI SSW	1/16/2012	272.10			2.28E-02
90	0.5 MI SSW	1/23/2012	272.50			2.05E-02
90	0.5 MI SSW	1/30/2012	271.40			2.14E-02
90	0.5 MI SSW	2/6/2012	271.10			2.11E-02
90	0.5 MI SSW	2/13/2012	276.50			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
90	0.5 MI SSW	2/20/2012	272.90			1.65E-02
90	0.5 MI SSW	2/27/2012	274.40			1.70E-02
90	0.5 MI SSW	3/5/2012	270.00			2.31E-02
90	0.5 MI SSW	3/12/2012	270.00			2.03E-02
90	0.5 MI SSW	3/19/2012	263.90			2.20E-02
90	0.5 MI SSW	3/26/2012	267.40			2.49E-02
90	0.5 MI SSW	4/2/2012	268.40			2.09E-02
90	0.5 MI SSW	4/9/2012	269.90			1.76E-02
90	0.5 MI SSW	4/16/2012	271.10			2.27E-02
90	0.5 MI SSW	4/23/2012	271.10			1.96E-02
90	0.5 MI SSW	4/30/2012	272.50			1.86E-02
90	0.5 MI SSW	5/7/2012	268.20			1.96E-02
90	0.5 MI SSW	5/14/2012	268.40			1.98E-02
90	0.5 MI SSW	5/21/2012	250.40			2.51E-02
90	0.5 MI SSW	5/29/2012	284.20			2.12E-02
90	0.5 MI SSW	6/4/2012	211.30			2.68E-02
90	0.5 MI SSW	6/11/2012	247.00			2.16E-02
90	0.5 MI SSW	6/18/2012	250.40			2.75E-02
90	0.5 MI SSW	6/25/2012	241.70			2.66E-02
90	0.5 MI SSW	7/2/2012	243.70			2.55E-02
90	0.5 MI SSW	7/9/2012	244.00			2.61E-02
90	0.5 MI SSW	7/16/2012	245.60			2.50E-02
90	0.5 MI SSW	7/23/2012	242.80			2.44E-02
90	0.5 MI SSW	7/30/2012	244.20			2.20E-02
90	0.5 MI SSW	8/6/2012	243.00			2.44E-02
90	0.5 MI SSW	8/13/2012	242.90			2.41E-02
90	0.5 MI SSW	8/20/2012	238.40			2.29E-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
90	0.5 MI SSW	8/27/2012	249.80			2.41E-02
90	0.5 MI SSW	9/4/2012	263.90			2.09E-02
90	0.5 MI SSW	9/10/2012	204.70			2.90E-02
90	0.5 MI SSW	9/17/2012	237.70			2.87E-02
90	0.5 MI SSW	9/24/2012	237.20			2.70E-02
90	0.5 MI SSW	10/1/2012	239.20			2.33E-02
90	0.5 MI SSW	10/8/2012	238.10			2.63E-02
90	0.5 MI SSW	10/15/2012	237.40			2.45E-02
90	0.5 MI SSW	10/22/2012	237.50			2.89E-02
90	0.5 MI SSW	10/29/2012	238.30			2.61E-02
90	0.5 MI SSW	11/5/2012	273.00			2.66E-02
90	0.5 MI SSW	11/12/2012	269.50			3.06E-02
90	0.5 MI SSW	11/19/2012	274.00			2.70E-02
90	0.5 MI SSW	11/26/2012	275.30			1.44E-02
90	0.5 MI SSW	12/3/2012	273.10			2.27E-02
90	0.5 MI SSW	12/10/2012	271.30			1.83E-02
90	0.5 MI SSW	12/17/2012	273.80			1.90E-02
90	0.5 MI SSW	12/23/2012	234.90			3.63E-02
90	0.5 MI SSW	12/31/2012	311.50			2.19E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	1/3/2012	271.10			2.42E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	1/9/2012	232.40			2.58E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	1/16/2012	270.90			2.25E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	1/23/2012	270.20			2.11E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	1/30/2012	270.10			1.86E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	2/6/2012	269.80			2.03E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	2/13/2012	271.00			2.54E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	2/20/2012	270.30			2.34E-02

HNP Radiological Environmental Monitoring Analysis Report

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

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	2/27/2012	268.60			1.93E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	3/5/2012	269.70			2.16E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	3/12/2012	268.00			2.00E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	3/19/2012	267.50			1.92E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	3/26/2012	268.80			2.65E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	4/2/2012	267.80			2.09E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	4/9/2012	268.70			2.08E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	4/16/2012	270.10			1.81E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	4/23/2012	267.70			2.54E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	4/30/2012	269.40			2.72E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	5/7/2012	271.20			2.02E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	5/14/2012	273.10			2.26E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	5/21/2012	273.20			2.31E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	5/29/2012	309.90			1.89E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	6/4/2012	234.20			2.81E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	6/11/2012	273.90			1.79E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	6/18/2012	256.50			2.26E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	6/25/2012	249.50			2.46E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	7/2/2012	249.90			2.18E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	7/9/2012	249.10			2.40E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	7/16/2012	252.00			2.12E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	7/23/2012	249.40			2.16E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	7/30/2012	250.90			2.10E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	8/6/2012	249.90			2.11E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	8/13/2012	248.00			2.59E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	8/20/2012	246.80			2.50E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	8/27/2012	250.10			2.40E-02

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	9/4/2012	280.90			2.09E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	9/10/2012	212.20			3.06E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	9/17/2012	249.30			2.02E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	9/24/2012	248.40			2.31E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	10/1/2012	251.60			2.83E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	10/8/2012	249.90			2.15E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	10/15/2012	252.80			2.22E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	10/22/2012	253.00			2.13E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	10/29/2012	252.20			2.70E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	11/5/2012	276.80			2.91E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	11/12/2012	276.70			2.55E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	11/19/2012	276.70			2.78E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	11/26/2012	277.20			2.53E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	12/3/2012	277.00			1.87E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	12/10/2012	275.00			2.10E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	12/17/2012	275.30			1.82E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	12/23/2012	237.40			3.17E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	12/31/2012	316.00			1.95E-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	1/2/2012	4.00			5.03E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/16/2012	4.00			4.86E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/30/2012	4.00	6.65E-01	4.21E-01	
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	4.00	4.92E-01	3.66E-01	
38	CAPE FEAR PLANT INTAKE - CONTROL	2/27/2012	4.00			4.93E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	4.00			4.55E-02
38	CAPE FEAR PLANT INTAKE - CONTROL	3/26/2012	4.00			6.20E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/9/2012	4.00			4.49E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/23/2012	4.00	1.21E+00	5.73E-01	
38	CAPE FEAR PLANT INTAKE - CONTROL	5/7/2012	4.00			4.79E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/21/2012	4.00			5.26E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/4/2012	4.00			4.64E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/18/2012	4.00			6.20E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/2/2012	4.00			5.82E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/16/2012	4.00			4.92E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/30/2012	4.00			5.89E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	4.00			4.65E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/27/2012	4.00			5.74E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	4.00			5.68E-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	9/24/2012	4.00			5.03E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/8/2012	4.00			4.69E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/22/2012	4.00			5.24E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/5/2012	4.00			6.33E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/19/2012	4.00			4.60E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/3/2012	4.00			5.53E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/17/2012	4.00			6.10E-01
40	LILLINGTON - CAPE FEAR RIVER	1/2/2012	4.00			5.65E-01
40	LILLINGTON - CAPE FEAR RIVER	1/16/2012	4.00			5.27E-01
40	LILLINGTON - CAPE FEAR RIVER	1/30/2012	4.00			5.13E-01
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	4.00			5.12E-01
40	LILLINGTON - CAPE FEAR RIVER	2/27/2012	4.00			5.47E-01
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	4.00			5.53E-01
40	LILLINGTON - CAPE FEAR RIVER	3/26/2012	4.00			5.25E-01
40	LILLINGTON - CAPE FEAR RIVER	4/9/2012	4.00			5.65E-01
40	LILLINGTON - CAPE FEAR RIVER	4/23/2012	4.00	7.62E-01	4.48E-01	
40	LILLINGTON - CAPE FEAR RIVER	5/7/2012	4.00			6.06E-01
40	LILLINGTON - CAPE FEAR RIVER	5/21/2012	4.00			6.04E-01
40	LILLINGTON - CAPE FEAR RIVER	6/4/2012	4.00			5.63E-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	6/18/2012	4.00			6.00E-01
40	LILLINGTON - CAPE FEAR RIVER	7/2/2012	4.00			4.62E-01
40	LILLINGTON - CAPE FEAR RIVER	7/16/2012	4.00			5.68E-01
40	LILLINGTON - CAPE FEAR RIVER	7/30/2012	4.00			6.18E-01
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	4.00			4.93E-01
40	LILLINGTON - CAPE FEAR RIVER	8/27/2012	4.00			5.92E-01
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	4.00			4.58E-01
40	LILLINGTON - CAPE FEAR RIVER	9/24/2012	4.00			5.58E-01
40	LILLINGTON - CAPE FEAR RIVER	10/8/2012	4.00			5.45E-01
40	LILLINGTON - CAPE FEAR RIVER	10/22/2012	4.00			5.97E-01
40	LILLINGTON - CAPE FEAR RIVER	11/5/2012	4.00			7.01E-01
40	LILLINGTON - CAPE FEAR RIVER	11/19/2012	4.00			5.78E-01
40	LILLINGTON - CAPE FEAR RIVER	12/3/2012	4.00			4.57E-01
40	LILLINGTON - CAPE FEAR RIVER	12/17/2012	4.00			7.25E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/2/2012	4.00			5.00E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/16/2012	4.00			5.16E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/30/2012	4.00			5.23E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/13/2012	4.00			5.04E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/27/2012	4.00			4.72E-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	3/12/2012	4.00			4.69E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/26/2012	4.00			5.16E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/9/2012	4.00			4.77E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/23/2012	4.00			6.95E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/7/2012	4.00			5.03E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/21/2012	4.00			5.20E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/4/2012	4.00			4.71E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/18/2012	4.00			5.31E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/2/2012	4.00			4.80E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/16/2012	4.00			4.97E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/30/2012	4.00			4.95E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2012	4.00			5.19E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/27/2012	4.00			7.06E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/10/2012	4.00			4.90E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/24/2012	4.00			6.61E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/8/2012	4.00			5.26E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/22/2012	4.00			6.93E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/5/2012	4.00			7.05E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/19/2012	4.00			4.90E-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	12/3/2012	4.00			4.91E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/17/2012	4.00			6.28E-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	1/3/2012	4.00	<LLD		3.90E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	2/6/2012	4.00	<LLD		3.10E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	3/5/2012	4.00	<LLD		3.61E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	4/2/2012	4.00	<LLD		3.68E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/7/2012	4.00	<LLD		3.21E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/21/2012	4.00	<LLD		3.28E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/4/2012	4.00	<LLD		4.39E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/18/2012	4.00	<LLD		3.36E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/2/2012	4.00	<LLD		4.00E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	4.00	<LLD		4.21E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/30/2012	4.00	<LLD		3.58E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/13/2012	4.00	<LLD		3.61E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/27/2012	4.00	<LLD		4.52E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/10/2012	4.00	<LLD		3.16E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/24/2012	4.00	<LLD		3.53E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/8/2012	4.00	<LLD		3.08E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/22/2012	4.00	<LLD		3.30E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	11/5/2012	4.00	<LLD		5.61E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	12/3/2012	4.00	<LLD		3.54E-01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	5/21/2012	4.00	<LLD		3.63E-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*
96	4.6 MI ESE HUMBUG FARM ON SR 1127	6/4/2012	4.00	<LLD		3.24E-01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	6/18/2012	4.00	<LLD		3.47E-01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/2/2012	4.00	<LLD		3.41E-01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/16/2012	4.00	<LLD		3.03E-01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/30/2012	4.00	<LLD		3.43E-01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	8/13/2012	4.00	<LLD		3.41E-01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	8/27/2012	4.00	<LLD		3.83E-01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	9/24/2012	4.00	<LLD		3.44E-01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	10/8/2012	4.00	<LLD		4.37E-01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	10/22/2012	4.00	<LLD		3.73E-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*
26	4.7 MILES S	4/23/2012	4.00			6.10E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/2/2012	4.00			5.03E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/16/2012	4.00			4.86E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/30/2012	4.00	6.65E-01	4.21E-01	
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	4.00	4.92E-01	3.66E-01	
38	CAPE FEAR PLANT INTAKE - CONTROL	2/27/2012	4.00			4.93E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	4.00			4.55E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/26/2012	4.00			6.20E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/9/2012	4.00			4.49E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/23/2012	4.00	1.21E+00	5.73E-01	
38	CAPE FEAR PLANT INTAKE - CONTROL	5/7/2012	4.00			4.79E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/21/2012	4.00			5.26E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/4/2012	4.00			4.64E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/18/2012	4.00			6.20E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/2/2012	4.00			5.82E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/16/2012	4.00			4.92E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/30/2012	4.00			5.89E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	4.00			4.65E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/27/2012	4.00			5.74E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	4.00			5.68E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/24/2012	4.00			5.03E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/8/2012	4.00			4.69E-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	10/22/2012	4.00			5.24E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/5/2012	4.00			6.33E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/19/2012	4.00			4.60E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/3/2012	4.00			5.53E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/17/2012	4.00			6.10E-01
40	LILLINGTON - CAPE FEAR RIVER	1/2/2012	4.00			5.65E-01
40	LILLINGTON - CAPE FEAR RIVER	1/16/2012	4.00			5.27E-01
40	LILLINGTON - CAPE FEAR RIVER	1/30/2012	4.00			5.13E-01
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	4.00			5.12E-01
40	LILLINGTON - CAPE FEAR RIVER	2/27/2012	4.00			5.47E-01
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	4.00			5.53E-01
40	LILLINGTON - CAPE FEAR RIVER	3/26/2012	4.00			5.25E-01
40	LILLINGTON - CAPE FEAR RIVER	4/9/2012	4.00			5.65E-01
40	LILLINGTON - CAPE FEAR RIVER	4/23/2012	4.00	7.62E-01	4.48E-01	
40	LILLINGTON - CAPE FEAR RIVER	5/7/2012	4.00			6.06E-01
40	LILLINGTON - CAPE FEAR RIVER	5/21/2012	4.00			6.04E-01
40	LILLINGTON - CAPE FEAR RIVER	6/4/2012	4.00			5.63E-01
40	LILLINGTON - CAPE FEAR RIVER	6/18/2012	4.00			6.00E-01
40	LILLINGTON - CAPE FEAR RIVER	7/2/2012	4.00			4.62E-01
40	LILLINGTON - CAPE FEAR RIVER	7/16/2012	4.00			5.68E-01
40	LILLINGTON - CAPE FEAR RIVER	7/30/2012	4.00			6.18E-01
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	4.00			4.93E-01

HNP Radiological Environmental Monitoring Analysis Report

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

Analysis: Iodine

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
40	LILLINGTON - CAPE FEAR RIVER	8/27/2012	4.00			5.92E-01
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	4.00			4.58E-01
40	LILLINGTON - CAPE FEAR RIVER	9/24/2012	4.00			5.58E-01
40	LILLINGTON - CAPE FEAR RIVER	10/8/2012	4.00			5.45E-01
40	LILLINGTON - CAPE FEAR RIVER	10/22/2012	4.00			5.97E-01
40	LILLINGTON - CAPE FEAR RIVER	11/5/2012	4.00			7.01E-01
40	LILLINGTON - CAPE FEAR RIVER	11/19/2012	4.00			5.78E-01
40	LILLINGTON - CAPE FEAR RIVER	12/3/2012	4.00			4.57E-01
40	LILLINGTON - CAPE FEAR RIVER	12/17/2012	4.00			7.25E-01

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	1/3/2012	276.8	2.56E-02	3.57E-03	3.16E-03
1	2.6 MILES N	1/9/2012	237.7	2.61E-02	4.05E-03	3.89E-03
1	2.6 MILES N	1/16/2012	277.7	1.97E-02	3.27E-03	3.17E-03
1	2.6 MILES N	1/23/2012	277.2	2.01E-02	3.36E-03	3.36E-03
1	2.6 MILES N	1/30/2012	275.8	1.82E-02	3.26E-03	3.35E-03
1	2.6 MILES N	2/6/2012	276	2.04E-02	3.31E-03	3.17E-03
1	2.6 MILES N	2/13/2012	275.1	2.15E-02	3.37E-03	3.15E-03
1	2.6 MILES N	2/20/2012	277	2.13E-02	3.23E-03	2.78E-03
1	2.6 MILES N	2/27/2012	275.5	2.31E-02	3.43E-03	3.09E-03
1	2.6 MILES N	3/5/2012	275.4	1.79E-02	3.31E-03	3.51E-03
1	2.6 MILES N	3/12/2012	274.5	1.95E-02	3.27E-03	3.18E-03
1	2.6 MILES N	3/19/2012	272.9	2.28E-02	3.37E-03	2.91E-03
1	2.6 MILES N	3/26/2012	273.6	1.67E-02	3.20E-03	3.38E-03
1	2.6 MILES N	4/2/2012	273.4	2.04E-02	3.37E-03	3.30E-03
1	2.6 MILES N	4/9/2012	273.9	2.08E-02	3.27E-03	2.96E-03
1	2.6 MILES N	4/16/2012	274.7	2.09E-02	3.27E-03	2.95E-03
1	2.6 MILES N	4/23/2012	272.9	1.89E-02	3.21E-03	3.09E-03
1	2.6 MILES N	4/30/2012	275.7	2.31E-02	3.56E-03	3.46E-03
1	2.6 MILES N	5/7/2012	295	1.54E-02	2.98E-03	3.18E-03
1	2.6 MILES N	5/14/2012	297	1.87E-02	3.18E-03	3.26E-03
1	2.6 MILES N	5/21/2012	269.1	1.88E-02	3.33E-03	3.38E-03
1	2.6 MILES N	5/29/2012	306.6	1.12E-02	2.65E-03	3.04E-03
1	2.6 MILES N	6/4/2012	229.2	1.99E-02	3.82E-03	4.05E-03
1	2.6 MILES N	6/11/2012	268.3	1.44E-02	3.08E-03	3.38E-03
1	2.6 MILES N	6/18/2012	273.2	1.40E-02	3.09E-03	3.50E-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	6/25/2012	261.4	2.07E-02	3.56E-03	3.63E-03
1	2.6 MILES N	7/2/2012	265.1	2.63E-02	3.84E-03	3.68E-03
1	2.6 MILES N	7/9/2012	265.4	3.73E-02	4.14E-03	2.97E-03
1	2.6 MILES N	7/16/2012	267.4	1.62E-02	3.17E-03	3.33E-03
1	2.6 MILES N	7/23/2012	264.7	1.84E-02	3.18E-03	2.98E-03
1	2.6 MILES N	7/30/2012	267.1	3.01E-02	3.84E-03	3.14E-03
1	2.6 MILES N	8/6/2012	266.4	2.20E-02	3.50E-03	3.34E-03
1	2.6 MILES N	8/13/2012	266.7	1.52E-02	3.08E-03	3.23E-03
1	2.6 MILES N	8/20/2012	266	3.00E-02	3.98E-03	3.57E-03
1	2.6 MILES N	8/27/2012	268.4	2.99E-02	3.91E-03	3.40E-03
1	2.6 MILES N	9/4/2012	303.2	1.47E-02	2.89E-03	3.11E-03
1	2.6 MILES N	9/10/2012	228.5	2.31E-02	3.90E-03	3.77E-03
1	2.6 MILES N	9/17/2012	267.6	2.19E-02	3.44E-03	3.19E-03
1	2.6 MILES N	9/24/2012	266.2	2.06E-02	3.45E-03	3.40E-03
1	2.6 MILES N	10/1/2012	269.4	2.37E-02	3.53E-03	3.20E-03
1	2.6 MILES N	10/8/2012	267.5	2.72E-02	3.81E-03	3.49E-03
1	2.6 MILES N	10/15/2012	268.4	2.44E-02	3.55E-03	3.15E-03
1	2.6 MILES N	10/22/2012	268.4	2.74E-02	3.83E-03	3.53E-03
1	2.6 MILES N	10/29/2012	263.6	3.02E-02	3.91E-03	3.30E-03
1	2.6 MILES N	11/5/2012	276.1	1.58E-02	3.17E-03	3.46E-03
1	2.6 MILES N	11/12/2012	276.4	3.51E-02	3.95E-03	2.88E-03
1	2.6 MILES N	11/19/2012	276.1	3.43E-02	4.01E-03	3.23E-03
1	2.6 MILES N	11/26/2012	277.7	3.27E-02	3.99E-03	3.42E-03
1	2.6 MILES N	12/3/2012	277	3.72E-02	4.15E-03	3.27E-03
1	2.6 MILES N	12/10/2012	276	2.27E-02	3.48E-03	3.28E-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	12/17/2012	276.6	2.28E-02	3.44E-03	3.17E-03
1	2.6 MILES N	12/23/2012	237.9	2.39E-02	3.90E-03	3.81E-03
1	2.6 MILES N	12/31/2012	317	2.06E-02	3.11E-03	2.99E-03
2	1.4 MILES NNE	1/3/2012	281.9	2.12E-02	3.31E-03	3.10E-03
2	1.4 MILES NNE	1/9/2012	242.1	2.35E-02	3.86E-03	3.82E-03
2	1.4 MILES NNE	1/16/2012	282	1.96E-02	3.23E-03	3.13E-03
2	1.4 MILES NNE	1/23/2012	281.4	2.27E-02	3.46E-03	3.31E-03
2	1.4 MILES NNE	1/30/2012	280.1	1.72E-02	3.17E-03	3.30E-03
2	1.4 MILES NNE	2/6/2012	281.1	1.97E-02	3.23E-03	3.11E-03
2	1.4 MILES NNE	2/13/2012	281.7	1.16E-02	2.75E-03	3.07E-03
2	1.4 MILES NNE	2/20/2012	279.5	2.18E-02	3.23E-03	2.75E-03
2	1.4 MILES NNE	2/27/2012	277.7	2.26E-02	3.39E-03	3.06E-03
2	1.4 MILES NNE	3/5/2012	276.6	1.74E-02	3.27E-03	3.50E-03
2	1.4 MILES NNE	3/12/2012	274.9	1.79E-02	3.18E-03	3.18E-03
2	1.4 MILES NNE	3/19/2012	272.8	2.29E-02	3.38E-03	2.91E-03
2	1.4 MILES NNE	3/26/2012	273.4	7.92E-03	2.66E-03	3.38E-03
2	1.4 MILES NNE	4/2/2012	272.5	2.34E-02	3.54E-03	3.32E-03
2	1.4 MILES NNE	4/9/2012	273.2	1.90E-02	3.18E-03	2.97E-03
2	1.4 MILES NNE	4/16/2012	274.3	1.89E-02	3.17E-03	2.96E-03
2	1.4 MILES NNE	4/23/2012	272	1.44E-02	2.96E-03	3.10E-03
2	1.4 MILES NNE	4/30/2012	274	2.17E-02	3.50E-03	3.48E-03
2	1.4 MILES NNE	5/7/2012	276.1	2.10E-02	3.43E-03	3.40E-03
2	1.4 MILES NNE	5/14/2012	277.7	1.94E-02	3.37E-03	3.48E-03
2	1.4 MILES NNE	5/21/2012	278.2	1.82E-02	3.22E-03	3.27E-03
2	1.4 MILES NNE	5/29/2012	317.2	1.54E-02	2.82E-03	2.94E-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	6/4/2012	211.7	1.88E-02	3.98E-03	4.38E-03
2	1.4 MILES NNE	6/11/2012	248	1.75E-02	3.45E-03	3.65E-03
2	1.4 MILES NNE	6/18/2012	252.6	1.54E-02	3.36E-03	3.78E-03
2	1.4 MILES NNE	6/25/2012	243.3	2.33E-02	3.88E-03	3.90E-03
2	1.4 MILES NNE	7/2/2012	246	2.90E-02	4.18E-03	3.97E-03
2	1.4 MILES NNE	7/9/2012	246.1	3.68E-02	4.31E-03	3.20E-03
2	1.4 MILES NNE	7/16/2012	247.9	1.64E-02	3.36E-03	3.59E-03
2	1.4 MILES NNE	7/23/2012	245.6	1.90E-02	3.38E-03	3.21E-03
2	1.4 MILES NNE	7/30/2012	247.2	2.27E-02	3.64E-03	3.39E-03
2	1.4 MILES NNE	8/6/2012	246.6	2.29E-02	3.74E-03	3.61E-03
2	1.4 MILES NNE	8/13/2012	246.8	1.61E-02	3.30E-03	3.49E-03
2	1.4 MILES NNE	8/20/2012	246.4	3.53E-02	4.43E-03	3.85E-03
2	1.4 MILES NNE	8/27/2012	247.7	1.72E-02	3.45E-03	3.69E-03
2	1.4 MILES NNE	9/4/2012	278.3	1.83E-02	3.27E-03	3.38E-03
2	1.4 MILES NNE	9/10/2012	209.8	1.96E-02	3.93E-03	4.10E-03
2	1.4 MILES NNE	9/17/2012	245.5	2.65E-02	3.89E-03	3.48E-03
2	1.4 MILES NNE	9/24/2012	244.5	2.48E-02	3.88E-03	3.71E-03
2	1.4 MILES NNE	10/1/2012	247.7	2.79E-02	3.95E-03	3.48E-03
2	1.4 MILES NNE	10/8/2012	245.6	2.65E-02	4.00E-03	3.81E-03
2	1.4 MILES NNE	10/15/2012	247	2.71E-02	3.89E-03	3.42E-03
2	1.4 MILES NNE	10/22/2012	247.5	2.33E-02	3.84E-03	3.83E-03
2	1.4 MILES NNE	10/29/2012	247.6	3.53E-02	4.31E-03	3.51E-03
2	1.4 MILES NNE	11/5/2012	275.1	1.63E-02	3.21E-03	3.47E-03
2	1.4 MILES NNE	11/12/2012	278.4	3.43E-02	3.90E-03	2.86E-03
2	1.4 MILES NNE	11/19/2012	281.2	3.39E-02	3.95E-03	3.17E-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	11/26/2012	282.5	3.01E-02	3.83E-03	3.36E-03
2	1.4 MILES NNE	12/3/2012	282.1	3.69E-02	4.09E-03	3.21E-03
2	1.4 MILES NNE	12/10/2012	281.1	2.22E-02	3.41E-03	3.22E-03
2	1.4 MILES NNE	12/17/2012	279.9	2.60E-02	3.58E-03	3.13E-03
2	1.4 MILES NNE	12/23/2012	242.1	2.81E-02	4.08E-03	3.74E-03
2	1.4 MILES NNE	12/31/2012	321.6	1.74E-02	2.92E-03	2.95E-03
4	3.1 MILES NNE	1/3/2012	271.6	2.26E-02	3.46E-03	3.22E-03
4	3.1 MILES NNE	1/9/2012	232.9	2.57E-02	4.08E-03	3.97E-03
4	3.1 MILES NNE	1/16/2012	271.6	1.97E-02	3.32E-03	3.24E-03
4	3.1 MILES NNE	1/23/2012	271	1.83E-02	3.31E-03	3.44E-03
4	3.1 MILES NNE	1/30/2012	270.2	1.86E-02	3.33E-03	3.42E-03
4	3.1 MILES NNE	2/6/2012	270.1	2.28E-02	3.49E-03	3.24E-03
4	3.1 MILES NNE	2/13/2012	272.3	1.99E-02	3.30E-03	3.18E-03
4	3.1 MILES NNE	2/20/2012	270.7	1.91E-02	3.15E-03	2.84E-03
4	3.1 MILES NNE	2/27/2012	244.8	1.95E-02	3.51E-03	3.48E-03
4	3.1 MILES NNE	3/5/2012	268.9	1.35E-02	3.11E-03	3.60E-03
4	3.1 MILES NNE	3/12/2012	268.3	2.01E-02	3.36E-03	3.26E-03
4	3.1 MILES NNE	3/19/2012	266.4	2.18E-02	3.37E-03	2.98E-03
4	3.1 MILES NNE	3/26/2012	267.2	1.30E-02	3.03E-03	3.46E-03
4	3.1 MILES NNE	4/2/2012	266.6	2.20E-02	3.51E-03	3.39E-03
4	3.1 MILES NNE	4/9/2012	267.1	2.07E-02	3.32E-03	3.04E-03
4	3.1 MILES NNE	4/16/2012	268.1	2.29E-02	3.43E-03	3.03E-03
4	3.1 MILES NNE	4/23/2012	265.7	2.02E-02	3.35E-03	3.17E-03
4	3.1 MILES NNE	4/30/2012	268.4	2.05E-02	3.48E-03	3.55E-03
4	3.1 MILES NNE	5/7/2012	273.7	2.19E-02	3.49E-03	3.43E-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	5/14/2012	274.6	1.75E-02	3.29E-03	3.52E-03
4	3.1 MILES NNE	5/21/2012	275.3	1.92E-02	3.30E-03	3.31E-03
4	3.1 MILES NNE	5/29/2012	313.5	1.19E-02	2.64E-03	2.97E-03
4	3.1 MILES NNE	6/4/2012	235	1.83E-02	3.66E-03	3.95E-03
4	3.1 MILES NNE	6/11/2012	274.9	1.65E-02	3.15E-03	3.30E-03
4	3.1 MILES NNE	6/18/2012	279.2	1.58E-02	3.15E-03	3.42E-03
4	3.1 MILES NNE	6/25/2012	268.5	1.99E-02	3.45E-03	3.53E-03
4	3.1 MILES NNE	7/2/2012	272.3	2.95E-02	3.93E-03	3.59E-03
4	3.1 MILES NNE	7/9/2012	272.3	3.82E-02	4.11E-03	2.90E-03
4	3.1 MILES NNE	7/16/2012	274.1	1.61E-02	3.11E-03	3.25E-03
4	3.1 MILES NNE	7/23/2012	271.5	1.90E-02	3.16E-03	2.91E-03
4	3.1 MILES NNE	7/30/2012	274.1	2.26E-02	3.40E-03	3.06E-03
4	3.1 MILES NNE	8/6/2012	272.8	2.48E-02	3.59E-03	3.27E-03
4	3.1 MILES NNE	8/13/2012	273.1	1.42E-02	2.96E-03	3.15E-03
4	3.1 MILES NNE	8/20/2012	272.3	3.00E-02	3.92E-03	3.48E-03
4	3.1 MILES NNE	8/27/2012	274.8	3.19E-02	3.94E-03	3.32E-03
4	3.1 MILES NNE	9/4/2012	310.3	1.76E-02	3.00E-03	3.03E-03
4	3.1 MILES NNE	9/10/2012	234.1	1.88E-02	3.59E-03	3.68E-03
4	3.1 MILES NNE	9/17/2012	273.5	1.00E-02	2.68E-03	3.12E-03
4	3.1 MILES NNE	9/24/2012	272	1.75E-02	3.23E-03	3.33E-03
4	3.1 MILES NNE	10/1/2012	274.8	2.83E-02	3.71E-03	3.13E-03
4	3.1 MILES NNE	10/8/2012	273.2	2.89E-02	3.84E-03	3.42E-03
4	3.1 MILES NNE	10/15/2012	275.2	2.78E-02	3.67E-03	3.07E-03
4	3.1 MILES NNE	10/22/2012	275.1	2.62E-02	3.71E-03	3.45E-03
4	3.1 MILES NNE	10/29/2012	275.4	2.92E-02	3.76E-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*
4	3.1 MILES NNE	11/5/2012	282.1	1.65E-02	3.16E-03	3.39E-03
4	3.1 MILES NNE	11/12/2012	282.1	2.99E-02	3.66E-03	2.83E-03
4	3.1 MILES NNE	11/19/2012	283	3.04E-02	3.77E-03	3.15E-03
4	3.1 MILES NNE	11/26/2012	283	3.38E-02	3.99E-03	3.35E-03
4	3.1 MILES NNE	12/3/2012	282.6	4.08E-02	4.25E-03	3.21E-03
4	3.1 MILES NNE	12/10/2012	281	1.74E-02	3.15E-03	3.22E-03
4	3.1 MILES NNE	12/17/2012	281.4	2.20E-02	3.36E-03	3.11E-03
4	3.1 MILES NNE	12/23/2012	242.9	2.44E-02	3.88E-03	3.73E-03
4	3.1 MILES NNE	12/31/2012	323.6	1.88E-02	2.98E-03	2.93E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	1/3/2012	284.1	2.08E-02	3.27E-03	3.08E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	1/9/2012	243.5	1.74E-02	3.51E-03	3.80E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	1/16/2012	284.7	1.62E-02	3.02E-03	3.10E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	1/23/2012	283.9	2.01E-02	3.31E-03	3.28E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	1/30/2012	284	1.33E-02	2.92E-03	3.26E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	2/6/2012	280.9	1.80E-02	3.14E-03	3.11E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	2/13/2012	285.4	1.78E-02	3.09E-03	3.04E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	2/20/2012	281.8	1.89E-02	3.06E-03	2.73E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	2/27/2012	281.3	1.90E-02	3.16E-03	3.02E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	3/5/2012	281	1.53E-02	3.12E-03	3.44E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	3/12/2012	279.7	1.76E-02	3.13E-03	3.12E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	3/19/2012	276.8	1.81E-02	3.08E-03	2.87E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	3/26/2012	307.7	1.36E-02	2.77E-03	3.01E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	4/2/2012	264.7	2.00E-02	3.42E-03	3.41E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	4/9/2012	265.3	1.35E-02	2.90E-03	3.06E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	4/16/2012	266.9	2.01E-02	3.29E-03	3.04E-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	4/23/2012	267	1.59E-02	3.09E-03	3.16E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	4/30/2012	270.3	2.05E-02	3.47E-03	3.53E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	5/7/2012	256.2	1.72E-02	3.40E-03	3.67E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	5/14/2012	259.5	1.94E-02	3.53E-03	3.73E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	5/21/2012	259.5	1.55E-02	3.23E-03	3.51E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	5/29/2012	297.3	1.28E-02	2.81E-03	3.14E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	6/4/2012	223.8	1.89E-02	3.83E-03	4.14E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	258.9	1.38E-02	3.13E-03	3.50E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	6/18/2012	265.1	1.44E-02	3.19E-03	3.60E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	6/25/2012	254.6	2.57E-02	3.88E-03	3.73E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	7/2/2012	258.5	2.74E-02	3.96E-03	3.78E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	7/9/2012	257.5	3.66E-02	4.18E-03	3.06E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	259.8	1.82E-02	3.36E-03	3.43E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	7/23/2012	257.8	1.60E-02	3.09E-03	3.06E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	7/30/2012	258.2	2.55E-02	3.69E-03	3.24E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	8/6/2012	257.7	2.35E-02	3.66E-03	3.46E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	8/13/2012	258.2	1.19E-02	2.94E-03	3.33E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	8/20/2012	257.3	3.07E-02	4.10E-03	3.69E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	8/27/2012	258.4	2.82E-02	3.92E-03	3.53E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	9/4/2012	293	1.71E-02	3.09E-03	3.21E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	9/10/2012	220.7	2.11E-02	3.88E-03	3.90E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	9/17/2012	255.9	2.14E-02	3.51E-03	3.33E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	9/24/2012	256.4	1.68E-02	3.32E-03	3.53E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	10/1/2012	258.3	2.86E-02	3.87E-03	3.33E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	10/8/2012	256.7	2.98E-02	4.04E-03	3.64E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
5	>12 MILES WNW - PITTSBORO - CONTROL	10/15/2012	257	2.75E-02	3.81E-03	3.29E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	10/22/2012	258	2.50E-02	3.81E-03	3.68E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	10/29/2012	260.3	3.32E-02	4.09E-03	3.34E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	11/5/2012	270.7	1.34E-02	3.08E-03	3.53E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	11/12/2012	272.1	3.07E-02	3.78E-03	2.93E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	11/19/2012	274	3.31E-02	3.98E-03	3.25E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	11/26/2012	272.9	2.82E-02	3.83E-03	3.48E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	12/3/2012	271.7	3.42E-02	4.06E-03	3.33E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	12/10/2012	270.1	1.88E-02	3.32E-03	3.35E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	12/17/2012	270.2	2.17E-02	3.44E-03	3.24E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	12/23/2012	233.5	2.12E-02	3.81E-03	3.88E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	12/31/2012	278.1	1.85E-02	3.29E-03	3.41E-03
26	4.7 MILES S	1/3/2012	276.6	2.23E-02	3.41E-03	3.16E-03
26	4.7 MILES S	1/9/2012	235.8	2.30E-02	3.91E-03	3.92E-03
26	4.7 MILES S	1/16/2012	277	2.01E-02	3.30E-03	3.18E-03
26	4.7 MILES S	1/23/2012	275.2	1.98E-02	3.36E-03	3.39E-03
26	4.7 MILES S	1/30/2012	275.3	1.62E-02	3.15E-03	3.36E-03
26	4.7 MILES S	2/6/2012	274.7	1.66E-02	3.11E-03	3.18E-03
26	4.7 MILES S	2/13/2012	276.5	2.07E-02	3.31E-03	3.13E-03
26	4.7 MILES S	2/20/2012	275.7	2.02E-02	3.17E-03	2.79E-03
26	4.7 MILES S	2/27/2012	273.5	2.20E-02	3.39E-03	3.11E-03
26	4.7 MILES S	3/5/2012	273.8	1.63E-02	3.23E-03	3.53E-03
26	4.7 MILES S	3/12/2012	272.1	1.91E-02	3.27E-03	3.21E-03
26	4.7 MILES S	3/19/2012	268.9	1.93E-02	3.21E-03	2.96E-03
26	4.7 MILES S	3/26/2012	272.5	1.54E-02	3.13E-03	3.39E-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	4/2/2012	272.9	1.91E-02	3.31E-03	3.31E-03
26	4.7 MILES S	4/9/2012	270.1	1.89E-02	3.19E-03	3.00E-03
26	4.7 MILES S	4/16/2012	272.6	2.05E-02	3.27E-03	2.98E-03
26	4.7 MILES S	4/23/2012	270.6	1.34E-02	2.91E-03	3.12E-03
26	4.7 MILES S	4/30/2012	273	2.52E-02	3.68E-03	3.49E-03
26	4.7 MILES S	5/7/2012	273.5	1.93E-02	3.36E-03	3.43E-03
26	4.7 MILES S	5/14/2012	275.3	2.15E-02	3.50E-03	3.51E-03
26	4.7 MILES S	5/21/2012	276.4	1.51E-02	3.06E-03	3.29E-03
26	4.7 MILES S	5/29/2012	314.9	1.34E-02	2.73E-03	2.96E-03
26	4.7 MILES S	6/4/2012	239.1	2.51E-02	3.99E-03	3.88E-03
26	4.7 MILES S	6/11/2012	273.1	1.43E-02	3.04E-03	3.32E-03
26	4.7 MILES S	6/18/2012	279.7	1.76E-02	3.24E-03	3.42E-03
26	4.7 MILES S	6/25/2012	267.4	2.78E-02	3.86E-03	3.55E-03
26	4.7 MILES S	7/2/2012	273.9	2.78E-02	3.84E-03	3.56E-03
26	4.7 MILES S	7/9/2012	271.6	3.74E-02	4.08E-03	2.90E-03
26	4.7 MILES S	7/16/2012	277.8	1.31E-02	2.90E-03	3.21E-03
26	4.7 MILES S	7/23/2012	268.7	1.74E-02	3.09E-03	2.94E-03
26	4.7 MILES S	7/30/2012	260.9	2.08E-02	3.42E-03	3.21E-03
26	4.7 MILES S	8/6/2012	271.7	2.28E-02	3.50E-03	3.28E-03
26	4.7 MILES S	8/13/2012	270.7	1.61E-02	3.10E-03	3.18E-03
26	4.7 MILES S	8/20/2012	273.5	3.19E-02	3.99E-03	3.47E-03
26	4.7 MILES S	8/27/2012	272.1	2.69E-02	3.73E-03	3.36E-03
26	4.7 MILES S	9/4/2012	306.5	1.69E-02	2.99E-03	3.07E-03
26	4.7 MILES S	9/10/2012	232.2	2.18E-02	3.79E-03	3.71E-03
26	4.7 MILES S	9/17/2012	271.1	2.04E-02	3.33E-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*
26	4.7 MILES S	9/24/2012	270.1	1.96E-02	3.36E-03	3.35E-03
26	4.7 MILES S	10/1/2012	273.1	2.88E-02	3.75E-03	3.15E-03
26	4.7 MILES S	10/8/2012	269.9	3.04E-02	3.94E-03	3.46E-03
26	4.7 MILES S	10/15/2012	273.7	2.03E-02	3.29E-03	3.09E-03
26	4.7 MILES S	10/22/2012	269.6	2.74E-02	3.82E-03	3.52E-03
26	4.7 MILES S	10/29/2012	274.3	3.14E-02	3.87E-03	3.17E-03
26	4.7 MILES S	11/5/2012	269	1.38E-02	3.11E-03	3.55E-03
26	4.7 MILES S	11/12/2012	267.8	3.10E-02	3.83E-03	2.98E-03
26	4.7 MILES S	11/19/2012	272.6	3.31E-02	3.99E-03	3.27E-03
26	4.7 MILES S	11/26/2012	270.5	3.15E-02	4.00E-03	3.51E-03
26	4.7 MILES S	12/3/2012	270.3	3.63E-02	4.17E-03	3.35E-03
26	4.7 MILES S	12/10/2012	269.5	1.88E-02	3.32E-03	3.36E-03
26	4.7 MILES S	12/17/2012	268.6	2.15E-02	3.44E-03	3.26E-03
26	4.7 MILES S	12/23/2012	230.1	2.72E-02	4.17E-03	3.94E-03
26	4.7 MILES S	12/31/2012	304.8	1.49E-02	2.90E-03	3.11E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/3/2012	288.4	1.98E-02	3.18E-03	3.03E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/9/2012	246	1.95E-02	3.61E-03	3.76E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/16/2012	288.2	1.67E-02	3.03E-03	3.06E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/23/2012	286.4	1.55E-02	3.04E-03	3.25E-03
47	SSW SECTOR 3.4 MI FROM SITE	1/30/2012	286.1	1.02E-02	2.72E-03	3.23E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/6/2012	284.2	2.11E-02	3.29E-03	3.07E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/13/2012	287.2	1.80E-02	3.09E-03	3.02E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/20/2012	286	1.91E-02	3.04E-03	2.69E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/27/2012	283.6	1.88E-02	3.14E-03	3.00E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/5/2012	285.4	1.28E-02	2.94E-03	3.39E-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	3/12/2012	281.7	1.80E-02	3.14E-03	3.10E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/19/2012	279.9	1.63E-02	2.95E-03	2.84E-03
47	SSW SECTOR 3.4 MI FROM SITE	3/26/2012	283.3	1.23E-02	2.86E-03	3.27E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/2/2012	283.7	1.92E-02	3.22E-03	3.18E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/9/2012	282.4	1.78E-02	3.04E-03	2.87E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/16/2012	285.5	1.73E-02	2.99E-03	2.84E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/23/2012	284.3	1.64E-02	2.98E-03	2.97E-03
47	SSW SECTOR 3.4 MI FROM SITE	4/30/2012	287.6	2.16E-02	3.38E-03	3.31E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/7/2012	264.7	1.97E-02	3.46E-03	3.55E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/14/2012	266.6	2.12E-02	3.56E-03	3.63E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/21/2012	267.2	1.55E-02	3.16E-03	3.41E-03
47	SSW SECTOR 3.4 MI FROM SITE	5/29/2012	305.8	1.45E-02	2.84E-03	3.05E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/4/2012	232.8	2.10E-02	3.84E-03	3.98E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/11/2012	265.1	1.44E-02	3.11E-03	3.42E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/18/2012	271.2	1.61E-02	3.23E-03	3.52E-03
47	SSW SECTOR 3.4 MI FROM SITE	6/25/2012	261.1	2.32E-02	3.69E-03	3.63E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/2/2012	266.5	2.85E-02	3.94E-03	3.66E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/9/2012	264.5	3.83E-02	4.19E-03	2.98E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/16/2012	270.7	1.55E-02	3.11E-03	3.29E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/23/2012	259.7	1.73E-02	3.16E-03	3.04E-03
47	SSW SECTOR 3.4 MI FROM SITE	7/30/2012	255.8	2.39E-02	3.63E-03	3.27E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/6/2012	264.9	2.23E-02	3.53E-03	3.36E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/13/2012	266.8	1.54E-02	3.09E-03	3.23E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/20/2012	268.5	3.16E-02	4.03E-03	3.53E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/27/2012	266.8	3.01E-02	3.93E-03	3.42E-03

HNP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate *Analysis: Beta*

Quantity: cubic meters

Concentration (Activity): pCi/cubic meter

Sample Point		*Sample Date*	*Quantity*	*Activity*	*2 Sigma Error*	*LLD*
47	SSW SECTOR 3.4 MI FROM SITE	9/4/2012	301.8	1.86E-02	3.11E-03	3.12E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/10/2012	228.4	2.12E-02	3.79E-03	3.77E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/17/2012	266.9	2.17E-02	3.44E-03	3.20E-03
47	SSW SECTOR 3.4 MI FROM SITE	9/24/2012	265.9	2.05E-02	3.45E-03	3.41E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/1/2012	269.2	3.47E-02	4.06E-03	3.20E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/8/2012	265.7	3.04E-02	3.98E-03	3.52E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/15/2012	270.3	2.87E-02	3.75E-03	3.13E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/22/2012	266.8	2.63E-02	3.79E-03	3.56E-03
47	SSW SECTOR 3.4 MI FROM SITE	10/29/2012	271.2	3.18E-02	3.92E-03	3.20E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/5/2012	287.9	1.66E-02	3.12E-03	3.32E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/12/2012	286.9	3.00E-02	3.63E-03	2.78E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/19/2012	293.1	3.41E-02	3.86E-03	3.04E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/26/2012	293.3	3.44E-02	3.93E-03	3.23E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/3/2012	293.4	3.79E-02	4.03E-03	3.09E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/10/2012	292	2.10E-02	3.27E-03	3.10E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/17/2012	293	2.38E-02	3.36E-03	2.99E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/23/2012	251.5	2.19E-02	3.66E-03	3.60E-03
47	SSW SECTOR 3.4 MI FROM SITE	12/31/2012	333.3	1.75E-02	2.86E-03	2.85E-03
63	0.6 MI SW	1/3/2012	278	1.67E-02	3.09E-03	3.14E-03
63	0.6 MI SW	1/9/2012	237.5	2.44E-02	3.96E-03	3.89E-03
63	0.6 MI SW	1/16/2012	278.4	1.82E-02	3.18E-03	3.17E-03
63	0.6 MI SW	1/23/2012	277.3	2.02E-02	3.37E-03	3.36E-03
63	0.6 MI SW	1/30/2012	275.5	1.50E-02	3.08E-03	3.36E-03
63	0.6 MI SW	2/6/2012	275.5	1.80E-02	3.19E-03	3.17E-03
63	0.6 MI SW	2/13/2012	278.7	1.96E-02	3.24E-03	3.11E-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*
63	0.6 MI SW	2/20/2012	276.7	1.96E-02	3.13E-03	2.78E-03
63	0.6 MI SW	2/27/2012	273.9	2.05E-02	3.30E-03	3.11E-03
63	0.6 MI SW	3/5/2012	273.2	1.50E-02	3.16E-03	3.54E-03
63	0.6 MI SW	3/12/2012	272.8	1.56E-02	3.07E-03	3.20E-03
63	0.6 MI SW	3/19/2012	269.1	1.89E-02	3.18E-03	2.95E-03
63	0.6 MI SW	3/26/2012	272	1.54E-02	3.13E-03	3.40E-03
63	0.6 MI SW	4/2/2012	355	2.11E-02	2.87E-03	2.54E-03
63	0.6 MI SW	4/9/2012	260	2.03E-02	3.36E-03	3.12E-03
63	0.6 MI SW	4/16/2012	262.1	2.19E-02	3.43E-03	3.10E-03
63	0.6 MI SW	4/23/2012	261.2	1.55E-02	3.11E-03	3.23E-03
63	0.6 MI SW	4/30/2012	261.7	2.49E-02	3.78E-03	3.64E-03
63	0.6 MI SW	5/7/2012	268.8	1.81E-02	3.34E-03	3.49E-03
63	0.6 MI SW	5/14/2012	271.9	1.41E-02	3.13E-03	3.56E-03
63	0.6 MI SW	5/21/2012	262.3	1.90E-02	3.40E-03	3.47E-03
63	0.6 MI SW	5/29/2012	299.3	1.26E-02	2.78E-03	3.11E-03
63	0.6 MI SW	6/4/2012	223.7	1.52E-02	3.61E-03	4.15E-03
63	0.6 MI SW	6/11/2012	261.6	1.72E-02	3.30E-03	3.46E-03
63	0.6 MI SW	6/18/2012	266.2	1.94E-02	3.45E-03	3.59E-03
63	0.6 MI SW	6/25/2012	256.9	2.34E-02	3.75E-03	3.69E-03
63	0.6 MI SW	7/2/2012	243.2	2.29E-02	3.90E-03	4.01E-03
63	0.6 MI SW	7/9/2012	243.6	3.24E-02	4.12E-03	3.24E-03
63	0.6 MI SW	7/16/2012	244.7	1.37E-02	3.23E-03	3.64E-03
63	0.6 MI SW	7/23/2012	240.8	2.11E-02	3.55E-03	3.28E-03
63	0.6 MI SW	7/30/2012	242.2	2.30E-02	3.71E-03	3.46E-03
63	0.6 MI SW	8/6/2012	241.8	2.49E-02	3.90E-03	3.69E-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*
63	0.6 MI SW	8/13/2012	242.2	1.72E-02	3.42E-03	3.55E-03
63	0.6 MI SW	8/20/2012	238.4	3.31E-02	4.42E-03	3.98E-03
63	0.6 MI SW	8/27/2012	248.6	2.76E-02	3.99E-03	3.67E-03
63	0.6 MI SW	9/4/2012	263.3	1.51E-02	3.22E-03	3.58E-03
63	0.6 MI SW	9/10/2012	204.5	2.53E-02	4.33E-03	4.21E-03
63	0.6 MI SW	9/17/2012	238.4	2.15E-02	3.69E-03	3.58E-03
63	0.6 MI SW	9/24/2012	237.8	2.08E-02	3.74E-03	3.81E-03
63	0.6 MI SW	10/1/2012	239.8	3.11E-02	4.19E-03	3.59E-03
63	0.6 MI SW	10/8/2012	237.7	2.75E-02	4.14E-03	3.93E-03
63	0.6 MI SW	10/15/2012	234.7	2.70E-02	4.02E-03	3.60E-03
63	0.6 MI SW	10/22/2012	243.3	2.32E-02	3.88E-03	3.90E-03
63	0.6 MI SW	10/29/2012	239.7	3.07E-02	4.18E-03	3.62E-03
63	0.6 MI SW	11/5/2012	280.8	1.36E-02	3.01E-03	3.40E-03
63	0.6 MI SW	11/12/2012	278.7	3.00E-02	3.69E-03	2.86E-03
63	0.6 MI SW	11/19/2012	282.9	3.07E-02	3.79E-03	3.15E-03
63	0.6 MI SW	11/26/2012	280.9	2.86E-02	3.78E-03	3.38E-03
63	0.6 MI SW	12/3/2012	278.2	3.37E-02	3.98E-03	3.26E-03
63	0.6 MI SW	12/10/2012	276.9	2.21E-02	3.44E-03	3.27E-03
63	0.6 MI SW	12/17/2012	277.9	1.88E-02	3.22E-03	3.15E-03
63	0.6 MI SW	12/23/2012	240.3	2.77E-02	4.08E-03	3.77E-03
63	0.6 MI SW	12/31/2012	320	1.61E-02	2.87E-03	2.96E-03
90	0.5 MI SSW	1/3/2012	269.6	2.57E-02	3.64E-03	3.24E-03
90	0.5 MI SSW	1/9/2012	231.1	2.33E-02	3.98E-03	4.00E-03
90	0.5 MI SSW	1/16/2012	272.1	1.72E-02	3.18E-03	3.24E-03
90	0.5 MI SSW	1/23/2012	272.5	1.71E-02	3.24E-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
90	0.5 MI SSW	1/30/2012	271.4	1.61E-02	3.18E-03	3.41E-03
90	0.5 MI SSW	2/6/2012	271.1	1.87E-02	3.26E-03	3.22E-03
90	0.5 MI SSW	2/13/2012	276.5	1.74E-02	3.13E-03	3.13E-03
90	0.5 MI SSW	2/20/2012	272.9	2.18E-02	3.29E-03	2.82E-03
90	0.5 MI SSW	2/27/2012	274.4	1.72E-02	3.12E-03	3.10E-03
90	0.5 MI SSW	3/5/2012	270	1.71E-02	3.31E-03	3.58E-03
90	0.5 MI SSW	3/12/2012	270	1.45E-02	3.02E-03	3.24E-03
90	0.5 MI SSW	3/19/2012	263.9	1.95E-02	3.26E-03	3.01E-03
90	0.5 MI SSW	3/26/2012	267.4	1.16E-02	2.95E-03	3.46E-03
90	0.5 MI SSW	4/2/2012	268.4	2.05E-02	3.42E-03	3.37E-03
90	0.5 MI SSW	4/9/2012	269.9	1.84E-02	3.17E-03	3.01E-03
90	0.5 MI SSW	4/16/2012	271.1	1.96E-02	3.23E-03	2.99E-03
90	0.5 MI SSW	4/23/2012	271.1	1.50E-02	3.00E-02	3.11E-03
90	0.5 MI SSW	4/30/2012	272.5	1.95E-02	3.40E-03	3.50E-03
90	0.5 MI SSW	5/7/2012	268.2	1.91E-02	3.39E-03	3.50E-03
90	0.5 MI SSW	5/14/2012	268.4	1.60E-02	3.26E-03	3.60E-03
90	0.5 MI SSW	5/21/2012	250.4	1.59E-02	3.34E-03	3.64E-03
90	0.5 MI SSW	5/29/2012	284.7	1.48E-02	3.02E-03	3.28E-03
90	0.5 MI SSW	6/4/2012	211.3	2.07E-02	4.09E-03	4.39E-03
90	0.5 MI SSW	6/11/2012	247	1.68E-02	3.42E-03	3.67E-03
90	0.5 MI SSW	6/18/2012	250.4	1.44E-02	3.32E-03	3.82E-03
90	0.5 MI SSW	6/25/2012	241.7	2.06E-02	3.75E-03	3.93E-03
90	0.5 MI SSW	7/2/2012	243.7	2.57E-02	4.04E-03	4.01E-03
90	0.5 MI SSW	7/9/2012	244	3.60E-02	4.29E-03	3.23E-03
90	0.5 MI SSW	7/16/2012	245.6	1.70E-02	3.42E-03	3.63E-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
90	0.5 MI SSW	7/23/2012	242.8	2.14E-02	3.55E-03	3.25E-03
90	0.5 MI SSW	7/30/2012	244.2	2.44E-02	3.77E-03	3.43E-03
90	0.5 MI SSW	8/6/2012	243	2.30E-02	3.78E-03	3.67E-03.
90	0.5 MI SSW	8/13/2012	242.9	1.75E-02	3.42E-03	3.54E-03
90	0.5 MI SSW	8/20/2012	238.4	2.94E-02	4.24E-03	3.98E-03
90	0.5 MI SSW	8/27/2012	249.8	2.43E-02	3.81E-03	3.66E-03
90	0.5 MI SSW	9/4/2012	263.9	1.78E-02	3.37E-03	3.57E-03
90	0.5 MI SSW	9/10/2012	204.7	2.34E-02	4.22E-03	4.21E-03
90	0.5 MI SSW	9/17/2012	237.7	2.17E-02	3.71E-03	3.59E-03
90	0.5 MI SSW	9/24/2012	237.2	1.80E-02	3.59E-03	3.82E-03
90	0.5 MI SSW	10/1/2012	239.2	3.10E-02	4.19E-03	3.60E-03
90	0.5 MI SSW	10/8/2012	238.1	2.35E-02	3.93E-03	3.93E-03
90	0.5 MI SSW	10/15/2012	237.4	2.11E-02	3.67E-02	3.56E-03
90	0.5 MI SSW	10/22/2012	237.5	2.11E-02	3.83E-03	3.99E-03
90	0.5 MI SSW	10/29/2012	238.3	3.00E-02	4.16E-03	3.64E-03
90	0.5 MI SSW	11/5/2012	273	1.41E-02	3.10E-03	3.50E-03
90	0.5 MI SSW	11/12/2012	269.5	2.74E-02	3.64E-03	2.96E-03
90	0.5 MI SSW	11/19/2012	274	2.86E-02	3.77E-03	3.25E-03
90	0.5 MI SSW	11/26/2012	275.3	2.76E-02	3.78E-03	3.45E-03
90	0.5 MI SSW	12/3/2012	273.1	3.30E-02	4.00E-03	3.32E-03
90	0.5 MI SSW	12/10/2012	271.3	1.90E-02	3.32E-03	3.34E-03
90	0.5 MI SSW	12/17/2012	273.8	1.99E-02	3.31E-03	3.20E-03
90	0.5 MI SSW	12/23/2012	234.9	2.46E-02	3.98E-03	3.86E-03
90	0.5 MI SSW	12/31/2012	311.5	1.66E-02	2.94E-03	3.05E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	1/3/2012	271.1	2.02E-02	3.34E-03	3.22E-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*
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	1/9/2012	232.4	2.54E-02	4.07E-03	3.98E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	1/16/2012	270.9	2.11E-02	3.40E-03	3.25E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	1/23/2012	270.2	2.11E-02	3.48E-03	3.45E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	1/30/2012	270.1	1.73E-02	3.26E-03	3.42E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	2/6/2012	269.8	1.96E-02	3.32E-03	3.24E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	2/13/2012	271	2.05E-02	3.35E-03	3.20E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	2/20/2012	270.3	2.27E-02	3.35E-03	2.85E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	2/27/2012	268.6	2.24E-02	3.45E-03	3.17E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	3/5/2012	269.7	1.70E-02	3.31E-03	3.58E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	3/12/2012	268	1.80E-02	3.24E-03	3.26E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	3/19/2012	267.5	2.16E-02	3.35E-03	2.97E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	3/26/2012	268.8	1.45E-02	3.11E-03	3.44E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	4/2/2012	267.8	2.02E-02	3.41E-03	3.37E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	4/9/2012	268.7	2.18E-02	3.37E-03	3.02E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	4/16/2012	270.1	2.06E-02	3.29E-03	3.00E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	4/23/2012	267.7	1.69E-02	3.14E-03	3.15E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	4/30/2012	269.4	2.28E-02	3.59E-03	3.54E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	5/7/2012	271.2	2.36E-02	3.60E-03	3.46E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	5/14/2012	273.1	1.91E-02	3.39E-03	3.54E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	5/21/2012	273.2	1.87E-02	3.29E-03	3.33E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	5/29/2012	309.9	1.37E-02	2.77E-03	3.01E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	6/4/2012	234.2	2.38E-02	3.98E-03	3.96E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	6/11/2012	273.9	1.59E-02	3.12E-03	3.31E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	6/18/2012	256.5	1.74E-02	3.44E-03	3.73E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	6/25/2012	249.5	2.55E-02	3.93E-03	3.80E-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*
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	7/2/2012	249.9	2.74E-02	4.05E-03	3.91E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	7/9/2012	249.1	3.31E-02	4.10E-03	3.17E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	7/16/2012	252	1.85E-02	3.44E-03	3.54E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	7/23/2012	249.4	1.85E-02	3.32E-03	3.16E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	7/30/2012	250.9	2.76E-02	3.87E-03	3.34E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	8/6/2012	249.9	1.88E-02	3.48E-03	3.57E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	8/13/2012	248	1.57E-02	3.27E-03	3.47E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	8/20/2012	246.8	3.30E-02	4.32E-03	3.84E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	8/27/2012	250.1	2.96E-02	4.07E-03	3.65E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	9/4/2012	280.9	2.05E-02	3.37E-03	3.35E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	9/10/2012	212.2	2.28E-02	4.08E-03	4.06E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	9/17/2012	249.3	2.47E-02	3.75E-03	3.42E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	9/24/2012	248.4	2.22E-02	3.70E-03	3.65E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	10/1/2012	251.6	3.22E-02	4.12E-03	3.42E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	10/8/2012	249.9	3.20E-02	4.22E-03	3.74E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	10/15/2012	252.8	2.41E-02	3.68E-03	3.34E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	10/22/2012	253	2.65E-02	3.94E-03	3.75E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	10/29/2012	252.2	3.44E-02	4.22E-03	3.44E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	11/5/2012	276.8	1.57E-02	3.16E-03	3.45E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	11/12/2012	276.7	3.02E-02	3.72E-03	2.88E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	11/19/2012	276.7	3.18E-02	3.90E-03	3.22E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	11/26/2012	277.2	2.72E-02	3.74E-03	3.42E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	12/3/2012	277	3.57E-02	4.08E-03	3.27E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	12/10/2012	275	2.50E-02	3.60E-03	3.29E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	12/17/2012	275.3	2.25E-02	3.44E-03	3.18E-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*
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	12/23/2012	237.4	2.52E-02	3.98E-03	3.82E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	12/31/2012	316	1.94E-02	3.07E-03	3.00E-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	1/13/2012	1.00	4.53E+00	8.29E-01	6.44E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	1.00	4.47E+00	8.97E-01	8.39E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1.00	4.39E+00	8.79E-01	7.74E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1.00	3.16E+00	8.34E-01	9.14E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1.00	5.69E+00	9.31E-01	6.72E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	1.00	5.93E+00	9.70E-01	7.58E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1.00	6.41E+00	1.04E+00	8.16E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1.00	6.29E+00	1.09E+00	9.66E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1.00	7.63E+00	1.17E+00	9.02E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	1.00	5.55E+00	1.00E+00	8.49E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	1.00	6.80E+00	1.12E+00	8.95E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1.00	7.42E+00	1.23E+00	1.01E+00
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	1.00	4.91E+00	8.67E-01	6.59E-01
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1.00	4.43E+00	8.84E-01	8.25E-01
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	1.00	4.47E+00	8.75E-01	7.61E-01
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1.00	3.59E+00	8.61E-01	9.08E-01
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	1.00	3.62E+00	7.80E-01	6.70E-01
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1.00	5.76E+00	9.63E-01	7.63E-01
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1.00	6.32E+00	1.01E+00	7.85E-01
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	1.00	5.83E+00	1.05E+00	9.51E-01
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	1.00	7.05E+00	1.12E+00	8.78E-01
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	1.00	5.97E+00	1.02E+00	8.42E-01
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1.00	7.04E+00	1.12E+00	8.81E-01
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1.00	6.62E+00	1.14E+00	9.69E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/13/2012	1.00	3.07E+00	6.96E-01	6.15E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/13/2012	1.00	3.69E+00	7.98E-01	7.76E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2012	1.00	3.67E+00	7.63E-01	6.86E-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	4/12/2012	1.00	1.73E+00	6.46E-01	7.95E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/14/2012	1.00	2.54E+00	6.45E-01	6.04E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2012	1.00	4.78E+00	8.61E-01	7.14E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/12/2012	1.00	4.92E+00	8.87E-01	7.44E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2012	1.00	3.53E+00	8.43E-01	8.74E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/10/2012	1.00	5.81E+00	1.00E+00	8.24E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/11/2012	1.00	4.35E+00	8.86E-01	8.04E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2012	1.00	4.68E+00	9.08E-01	8.01E-01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/13/2012	1.00	3.62E+00	8.38E-01	8.29E-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	1/13/2012	1.00	5.36E+00	9.03E-01	6.65E-01
26	4.7 MILES S	2/13/2012	1.00	5.91E+00	1.00E+00	8.54E-01
26	4.7 MILES S	3/12/2012	1.00	6.63E+00	1.02E+00	7.61E-01
26	4.7 MILES S	4/12/2012	1.00	5.28E+00	9.75E-01	9.11E-01
26	4.7 MILES S	5/14/2012	1.00	5.17E+00	8.78E-01	6.50E-01
26	4.7 MILES S	6/11/2012	1.00	6.63E+00	9.93E-01	7.33E-01
26	4.7 MILES S	7/12/2012	1.00	7.52E+00	1.07E+00	7.77E-01
26	4.7 MILES S	8/13/2012	1.00	6.79E+00	1.08E+00	9.11E-01
26	4.7 MILES S	9/10/2012	1.00	8.04E+00	1.18E+00	8.84E-01
26	4.7 MILES S	10/11/2012	1.00	7.74E+00	1.16E+00	8.78E-01
26	4.7 MILES S	11/12/2012	1.00	8.18E+00	1.19E+00	8.81E-01
26	4.7 MILES S	12/13/2012	1.00	6.66E+00	1.11E+00	9.24E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/13/2012	1.00	4.53E+00	8.29E-01	6.44E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	1.00	4.47E+00	8.97E-01	8.39E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1.00	4.39E+00	8.79E-01	7.74E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1.00	3.16E+00	8.34E-01	9.14E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1.00	5.69E+00	9.31E-01	6.72E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	1.00	5.93E+00	9.70E-01	7.58E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1.00	6.41E+00	1.04E+00	8.16E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1.00	6.29E+00	1.09E+00	9.66E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1.00	7.63E+00	1.17E+00	9.02E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	1.00	5.55E+00	1.00E+00	8.49E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	1.00	6.80E+00	1.12E+00	8.95E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1.00	7.42E+00	1.23E+00	1.01E+00
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	1.00	4.91E+00	8.67E-01	6.59E-01
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1.00	4.43E+00	8.84E-01	8.25E-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	3/12/2012	1.00	4.47E+00	8.75E-01	7.61E-01
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1.00	3.59E+00	8.61E-01	9.08E-01
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	1.00	3.62E+00	7.80E-01	6.70E-01
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1.00	5.76E+00	9.63E-01	7.63E-01
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1.00	6.32E+00	1.01E+00	7.85E-01
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	1.00	5.83E+00	1.05E+00	9.51E-01
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	1.00	7.05E+00	1.12E+00	8.78E-01
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	1.00	5.97E+00	1.02E+00	8.42E-01
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1.00	7.04E+00	1.12E+00	8.81E-01
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1.00	6.62E+00	1.14E+00	9.69E-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	1/13/2012	0.005	<LLD		2.27E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	0.005	<LLD		2.27E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	0.005	<LLD		2.32E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	0.005	<LLD		2.27E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	0.005	<LLD		2.29E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	0.005	<LLD		2.34E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	0.005	<LLD		2.33E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	0.005	<LLD		2.31E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	0.005	<LLD		2.29E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	0.005	<LLD		2.35E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	0.005	<LLD		2.33E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	0.005	<LLD		2.36E+02
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	0.005	<LLD		2.27E+02
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	0.005	<LLD		2.27E+02
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	0.005	<LLD		2.32E+02
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	0.005	<LLD		2.29E+02
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	0.005	<LLD		2.30E+02
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	0.005	<LLD		2.33E+02
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	0.005	<LLD		2.33E+02
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	0.005	<LLD		2.31E+02
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	0.005	<LLD		2.30E+02
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	0.005	<LLD		2.35E+02
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	0.005	<LLD		2.33E+02
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	0.005	<LLD		2.36E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/13/2012	0.005	4.62E+03	1.79E+02	2.27E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/13/2012	0.005	5.28E+03	1.84E+02	2.27E+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	3/12/2012	0.005	5.60E+03	1.88E+02	2.31E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/12/2012	0.005	7.00E+03	1.98E+02	2.31E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/14/2012	0.005	4.69E+03	1.80E+02	2.29E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2012	0.005	7.19E+03	1.99E+02	2.31E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/12/2012	0.005	7.23E+03	2.01E+02	2.33E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2012	0.005	6.98E+03	1.98E+02	2.31E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/10/2012	0.005	7.16E+03	1.98E+02	2.29E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/11/2012	0.005	7.66E+03	2.04E+02	2.34E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2012	0.005	7.63E+03	2.03E+02	2.32E+02
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/13/2012	0.005	7.06E+03	2.01E+02	2.36E+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*
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	2/22/2012	0.005	<LLD		2.31E+02
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	5/30/2012	0.005	<LLD		2.28E+02
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	8/15/2012	0.005	<LLD		2.31E+02
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	11/7/2012	0.005	<LLD		2.34E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	2/23/2012	0.005	<LLD		2.29E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	5/30/2012	0.005	<LLD		2.29E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	8/15/2012	0.005	<LLD		2.32E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	11/8/2012	0.005	<LLD		2.33E+02
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	2/23/2012	0.005	<LLD		2.28E+02
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	5/31/2012	0.005	<LLD		2.29E+02
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	8/15/2012	0.005	<LLD		2.31E+02
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	11/8/2012	0.005	<LLD		2.34E+02
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	2/23/2012	0.005	<LLD		2.29E+02
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	5/31/2012	0.005	<LLD		2.28E+02
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	8/15/2012	0.005	<LLD		2.31E+02
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	11/8/2012	0.005	<LLD		2.33E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	2/23/2012	0.005	<LLD		2.29E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	5/30/2012	0.005	<LLD		2.28E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	8/15/2012	0.005	<LLD		2.31E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	11/8/2012	0.005	<LLD		2.34E+02
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	2/23/2012	0.005	<LLD		2.29E+02
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	5/31/2012	0.005	<LLD		2.28E+02
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	8/20/2012	0.005	<LLD		2.31E+02
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	11/8/2012	0.005	<LLD		2.33E+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)	2/23/2012	0.005	<LLD		2.29E+02
71	0.3 MI SE (S OF SWITCH YARD)	5/31/2012	0.005	<LLD		2.28E+02
71	0.3 MI SE (S OF SWITCH YARD)	8/16/2012	0.005	<LLD		2.32E+02
71	0.3 MI SE (S OF SWITCH YARD)	11/8/2012	0.005	<LLD		2.33E+02
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	2/23/2012	0.005	<LLD		2.28E+02
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	5/31/2012	0.005	<LLD		2.29E+02
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	8/15/2012	0.005	<LLD		2.31E+02
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	11/8/2012	0.005	<LLD		2.34E+02
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCTURE)	2/22/2012	0.005	<LLD		2.29E+02
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCTURE)	5/28/2012	0.005	<LLD		2.29E+02
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCTURE)	8/15/2012	0.005	<LLD		2.31E+02
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCTURE)	11/8/2012	0.005	<LLD		2.34E+02
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	2/23/2012	0.005	<LLD		2.29E+02
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	5/31/2012	0.005	<LLD		2.29E+02
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	8/15/2012	0.005	<LLD		2.32E+02
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	11/8/2012	0.005	<LLD		2.35E+02
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	2/23/2012	0.005	<LLD		2.28E+02
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	5/31/2012	0.005	<LLD		2.29E+02
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	8/16/2012	0.005	<LLD		2.31E+02
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	11/8/2012	0.005	<LLD		2.34E+02
76	0.1 MI S (INSD OCA BETWN SB & WPB)	2/23/2012	0.005	3.81E+02	1.43E+02	2.29E+02
76	0.1 MI S (INSD OCA BETWN SB & WPB)	5/31/2012	0.005	4.93E+02	1.44E+02	2.29E+02
76	0.1 MI S (INSD OCA BETWN SB & WPB)	8/20/2012	0.005	4.90E+02	1.45E+02	2.31E+02
76	0.1 MI S (INSD OCA BETWN SB & WPB)	9/26/2012	0.005	6.41E+02	1.45E+02	2.29E+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*
76	0.1 MI S (INSD OCA BETWN SB & WPB)	10/18/2012	0.005	5.60E+02	1.47E+02	2.33E+02
76	0.1 MI S (INSD OCA BETWN SB & WPB)	11/8/2012	0.005	2.71E+02	1.45E+02	2.34E+02
77	0.4 MI S - BD-MW 1	2/23/2012	0.005	4.48E+02	1.44E+02	2.30E+02
77	0.4 MI S - BD-MW 1	5/31/2012	0.005	4.21E+02	1.42E+02	2.27E+02
77	0.4 MI S - BD-MW 1	8/16/2012	0.005	3.83E+02	1.45E+02	2.32E+02
77	0.4 MI S - BD-MW 1	11/7/2012	0.005	5.31E+02	1.47E+02	2.34E+02
78	0.5 MI S - BD-MW 2	2/22/2012	0.005	2.83E+02	1.42E+02	2.29E+02
78	0.5 MI S - BD-MW 2	5/28/2012	0.005	6.57E+02	1.44E+02	2.27E+02
78	0.5 MI S - BD-MW 2	8/16/2012	0.005	5.50E+02	1.46E+02	2.32E+02
78	0.5 MI S - BD-MW 2	11/7/2012	0.005	5.82E+02	1.48E+02	2.34E+02
79	0.5 MI S - BD-MW 3	2/22/2012	0.005	6.83E+02	1.46E+02	2.30E+02
79	0.5 MI S - BD-MW 3	5/28/2012	0.005	6.22E+02	1.45E+02	2.28E+02
79	0.5 MI S - BD-MW 3	8/16/2012	0.005	4.98E+02	1.46E+02	2.32E+02
79	0.5 MI S - BD-MW 3	11/7/2012	0.005	4.89E+02	1.47E+02	2.34E+02
80	0.6 MI S - BD-MW 5	2/22/2012	0.005	5.00E+02	1.44E+02	2.29E+02
80	0.6 MI S - BD-MW 5	5/28/2012	0.005	6.37E+02	1.44E+02	2.27E+02
80	0.6 MI S - BD-MW 5	8/16/2012	0.005	6.03E+02	1.47E+02	2.32E+02
80	0.6 MI S - BD-MW 5	11/7/2012	0.005	9.50E+02	1.51E+02	2.33E+02
81	0.6 MI S - BD-MW 7	2/22/2012	0.005	4.60E+02	1.43E+02	2.28E+02
81	0.6 MI S - BD-MW 7	5/28/2012	0.005	5.43E+02	1.44E+02	2.28E+02
81	0.6 MI S - BD-MW 7	8/16/2012	0.005	3.56E+02	1.44E+02	2.32E+02
81	0.6 MI S - BD-MW 7	11/7/2012	0.005	4.88E+02	1.47E+02	2.34E+02
82	0.6 MI S - BD-MW 8	2/22/2012	0.005	<LLD		2.28E+02
82	0.6 MI S - BD-MW 8	5/28/2012	0.005	<LLD		2.28E+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*
82	0.6 MI S - BD-MW 8	8/16/2012	0.005	<LLD		2.32E+02
82	0.6 MI S - BD-MW 8	11/7/2012	0.005	<LLD		2.34E+02
83	1.6 MI SSW - BD-MW 16	2/22/2012	0.005	1.29E+04	2.35E+02	2.28E+02
83	1.6 MI SSW - BD-MW 16	5/28/2012	0.005	5.84E+03	1.89E+02	2.29E+02
83	1.6 MI SSW - BD-MW 16	8/16/2012	0.005	3.67E+03	1.74E+02	2.33E+02
83	1.6 MI SSW - BD-MW 16	11/7/2012	0.005	3.04E+03	1.69E+02	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	1/13/2012	0.005	6.55E+03	1.93E+02	2.27E+02
26	4.7 MILES S	2/13/2012	0.005	7.33E+03	1.98E+02	2.27E+02
26	4.7 MILES S	3/12/2012	0.005	8.86E+03	2.11E+02	2.31E+02
26	4.7 MILES S	4/12/2012	0.005	9.07E+03	2.11E+02	2.29E+02
26	4.7 MILES S	5/14/2012	0.005	8.32E+03	2.06E+02	2.28E+02
26	4.7 MILES S	6/11/2012	0.005	7.59E+03	2.03E+02	2.33E+02
26	4.7 MILES S	7/12/2012	0.005	7.55E+03	2.03E+02	2.33E+02
26	4.7 MILES S	8/13/2012	0.005	7.83E+03	2.04E+02	2.32E+02
26	4.7 MILES S	9/10/2012	0.005	8.42E+03	2.07E+02	2.29E+02
26	4.7 MILES S	10/11/2012	0.005	8.94E+03	2.13E+02	2.34E+02
26	4.7 MILES S	11/12/2012	0.005	8.43E+03	2.09E+02	2.33E+02
26	4.7 MILES S	12/13/2012	0.005	8.02E+03	2.08E+02	2.36E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	1/13/2012	0.005	<LLD		2.27E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	0.005	<LLD		2.27E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	0.005	<LLD		2.32E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	0.005	<LLD		2.27E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	0.005	<LLD		2.29E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	0.005	<LLD		2.34E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	0.005	<LLD		2.33E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	0.005	<LLD		2.31E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	0.005	<LLD		2.29E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	0.005	<LLD		2.35E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	0.005	<LLD		2.33E+02
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	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	1/13/2012	0.005	<LLD		2.27E+02
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	0.005	<LLD		2.27E+02
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	0.005	<LLD		2.32E+02
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	0.005	<LLD		2.29E+02
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	0.005	<LLD		2.30E+02
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	0.005	<LLD		2.33E+02
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	0.005	<LLD		2.33E+02
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	0.005	<LLD		2.31E+02
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	0.005	<LLD		2.30E+02
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	0.005	<LLD		2.35E+02
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	0.005	<LLD		2.33E+02
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	0.005	<LLD		2.36E+02

2012 HNP
Radiological Environmental Monitoring Gamma Isotopic Report

Comments

- None

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	2/13/2012	3545.2	PB-214	4.88E-03	3.14E-03
1	2.6 MILES N	2/13/2012	3545.2	K-40	4.55E-02	2.46E-02
1	2.6 MILES N	2/13/2012	3545.2	BE-7	1.19E-01	3.45E-02
1	2.6 MILES N	2/13/2012	3545.2	BI-214	5.32E-03	2.53E-03
1	2.6 MILES N	5/14/2012	3570.4	K-40	2.95E-02	1.67E-02
1	2.6 MILES N	5/14/2012	3570.4	BE-7	1.57E-01	2.89E-02
1	2.6 MILES N	8/13/2012	3462.7	BE-7	1.19E-01	2.71E-02
1	2.6 MILES N	8/13/2012	3462.7	BI-214	4.21E-03	2.04E-03
1	2.6 MILES N	11/15/2012	3828.1	PB-214	3.35E-03	2.31E-03
1	2.6 MILES N	11/15/2012	3828.1	K-40	7.03E-02	2.34E-02
1	2.6 MILES N	11/15/2012	3828.1	BE-7	1.10E-01	3.01E-02
2	1.4 MILES NNE	2/13/2012	3585.2	PB-214	3.34E-03	2.23E-03
2	1.4 MILES NNE	2/13/2012	3585.2	TH-234	2.76E-02	2.40E-02
2	1.4 MILES NNE	2/13/2012	3585.2	K-40	2.93E-02	1.81E-02
2	1.4 MILES NNE	2/13/2012	3585.2	BE-7	1.34E-01	3.18E-02
2	1.4 MILES NNE	5/14/2012	3470.8	K-40	4.80E-02	2.99E-02
2	1.4 MILES NNE	5/14/2012	3470.8	BE-7	1.46E-01	3.76E-02
2	1.4 MILES NNE	8/13/2012	3198.4	BE-7	1.24E-01	3.22E-02
2	1.4 MILES NNE	8/13/2012	3198.4	BI-214	4.47E-03	2.27E-03
2	1.4 MILES NNE	8/13/2012	3198.4	K-40	8.83E-02	2.79E-02
2	1.4 MILES NNE	11/15/2012	3759.4	K-40	6.46E-02	2.42E-02
2	1.4 MILES NNE	11/15/2012	3759.4	BE-7	1.08E-01	2.76E-02
2	1.4 MILES NNE	11/15/2012	3759.4	BI-214	2.18E-03	2.21E-03
4	3.1 MILES NNE	2/13/2012	3446	BE-7	1.17E-01	3.20E-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*
4	3.1 MILES NNE	2/13/2012	3446	PB-214	5.12E-03	2.50E-03
4	3.1 MILES NNE	2/13/2012	3446	BI-214	5.45E-03	3.69E-03
4	3.1 MILES NNE	2/13/2012	3446	K-40	7.65E-02	2.49E-02
4	3.1 MILES NNE	5/14/2012	3530.6	K-40	4.96E-02	1.93E-02
4	3.1 MILES NNE	5/14/2012	3530.6	BE-7	1.42E-01	3.13E-02
4	3.1 MILES NNE	8/13/2012	3547.2	K-40	7.58E-02	2.45E-02
4	3.1 MILES NNE	8/13/2012	3547.2	BE-7	1.20E-01	3.13E-02
4	3.1 MILES NNE	11/15/2012	3915.4	BE-7	1.02E-01	2.71E-02
4	3.1 MILES NNE	11/15/2012	3915.4	K-40	5.28E-02	2.04E-02
4	3.1 MILES NNE	11/15/2012	3915.4	BI-214	3.81E-03	2.44E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	2/13/2012	3654.8	K-40	4.41E-02	2.46E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	2/13/2012	3654.8	BE-7	1.05E-01	2.73E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/14/2012	3409.1	K-40	3.76E-02	1.70E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/14/2012	3409.1	BE-7	1.37E-01	3.08E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/14/2012	3409.1	BI-214	2.97E-03	2.34E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	8/13/2012	3349.4	K-40	4.65E-02	1.92E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/13/2012	3349.4	TL-208	1.04E-03	8.66E-04
5	>12 MILES WNW - PITTSBORO - CONTROL	8/13/2012	3349.4	BE-7	1.11E-01	3.45E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	11/15/2012	3703.6	BI-214	1.18E-02	3.59E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	11/15/2012	3703.6	PB-214	1.16E-02	3.14E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	11/15/2012	3703.6	BE-7	1.07E-01	2.96E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	11/15/2012	3703.6	K-40	7.18E-02	2.46E-02
26	4.7 MILES S	2/13/2012	3527.6	RA-226	2.60E-02	1.72E-02
26	4.7 MILES S	2/13/2012	3527.6	K-40	4.37E-02	2.16E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
26	4.7 MILES S	2/13/2012	3527.6	BE-7	1.02E-01	3.14E-02
26	4.7 MILES S	2/13/2012	3527.6	BI-214	3.66E-03	2.38E-03
26	4.7 MILES S	5/14/2012	3558.6	RA-226	4.65E-02	2.30E-02
26	4.7 MILES S	5/14/2012	3558.6	K-40	5.85E-02	2.14E-02
26	4.7 MILES S	5/14/2012	3558.6	BE-7	1.60E-01	3.40E-02
26	4.7 MILES S	8/13/2012	3520.8	BE-7	1.37E-01	3.00E-02
26	4.7 MILES S	8/13/2012	3520.8	RA-226	2.26E-02	1.43E-02
26	4.7 MILES S	8/13/2012	3520.8	K-40	2.35E-02	2.22E-02
26	4.7 MILES S	11/15/2012	3783.8	BI-214	6.68E-03	2.75E-03
26	4.7 MILES S	11/15/2012	3783.8	K-40	4.01E-02	1.86E-02
26	4.7 MILES S	11/15/2012	3783.8	BE-7	8.60E-02	2.86E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/13/2012	3666.4	BI-214	4.16E-03	2.81E-03
47	SSW SECTOR 3.4 MI FROM SITE	2/13/2012	3666.4	BE-7	1.05E-01	2.90E-02
47	SSW SECTOR 3.4 MI FROM SITE	2/13/2012	3666.4	K-40	5.90E-02	2.12E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/14/2012	3558	TH-234	2.53E-02	2.05E-02
47	SSW SECTOR 3.4 MI FROM SITE	5/14/2012	3558	BE-7	1.23E-01	3.91E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/13/2012	3447.2	BI-214	3.44E-03	1.91E-03
47	SSW SECTOR 3.4 MI FROM SITE	8/13/2012	3447.2	K-40	5.49E-02	2.10E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/13/2012	3447.2	BE-7	1.33E-01	3.51E-02
47	SSW SECTOR 3.4 MI FROM SITE	8/13/2012	3447.2	TL-208	1.76E-03	1.30E-03
47	SSW SECTOR 3.4 MI FROM SITE	11/15/2012	3967.6	K-40	5.73E-02	2.10E-02
47	SSW SECTOR 3.4 MI FROM SITE	11/15/2012	3967.6	BE-7	1.04E-01	2.63E-02
63	0.6 MI SW	2/13/2012	3538.6	BI-214	2.25E-03	2.81E-03
63	0.6 MI SW	2/13/2012	3538.6	BE-7	7.98E-02	3.55E-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
63	0.6 MI SW	2/13/2012	3538.6	K-40	3.75E-02	2.04E-02
63	0.6 MI SW	5/14/2012	3510.7	K-40	4.44E-02	1.83E-02
63	0.6 MI SW	5/14/2012	3510.7	BE-7	1.10E-01	3.20E-02
63	0.6 MI SW	8/13/2012	3129.5	BE-7	1.01E-01	2.57E-02
63	0.6 MI SW	8/13/2012	3129.5	K-40	4.77E-02	2.01E-02
63	0.6 MI SW	8/13/2012	3129.5	PB-212	1.36E-03	1.05E-03
63	0.6 MI SW	8/13/2012	3129.5	RA-226	2.15E-02	1.93E-02
63	0.6 MI SW	8/13/2012	3129.5	TH-234	2.52E-02	2.40E-02
63	0.6 MI SW	11/15/2012	3711.8	K-40	3.23E-02	1.63E-02
63	0.6 MI SW	11/15/2012	3711.8	BI-214	2.77E-03	2.36E-03
63	0.6 MI SW	11/15/2012	3711.8	PB-214	5.97E-03	2.36E-03
63	0.6 MI SW	11/15/2012	3711.8	BE-7	9.70E-02	2.59E-02
90	0.5 MI SSW	2/13/2012	3482.9	BE-7	1.15E-01	4.14E-02
90	0.5 MI SSW	2/13/2012	3482.9	K-40	4.12E-02	2.14E-02
90	0.5 MI SSW	2/13/2012	3482.9	BI-214	4.59E-03	2.32E-03
90	0.5 MI SSW	5/14/2012	3374.6	K-40	9.36E-02	2.80E-02
90	0.5 MI SSW	5/14/2012	3374.6	BE-7	1.29E-01	3.44E-02
90	0.5 MI SSW	8/13/2012	3137.9	K-40	1.02E-01	3.52E-02
90	0.5 MI SSW	8/13/2012	3137.9	RA-226	5.44E-02	5.06E-02
90	0.5 MI SSW	8/13/2012	3137.9	BE-7	1.21E-01	3.54E-02
90	0.5 MI SSW	11/15/2012	3646.9	K-40	7.55E-02	2.64E-02
90	0.5 MI SSW	11/15/2012	3646.9	BE-7	1.13E-01	2.82E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	2/13/2012	3468.4	BI-214	5.63E-03	2.83E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	2/13/2012	3468.4	BE-7	1.27E-01	2.88E-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*
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	5/14/2012	3485.2	K-40	4.23E-02	1.79E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	5/14/2012	3485.2	RA-226	3.25E-02	2.17E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	5/14/2012	3485.2	BE-7	1.68E-01	3.35E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	8/13/2012	3236.9	BE-7	1.09E-01	3.23E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	8/13/2012	3236.9	K-40	5.53E-02	2.53E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	8/13/2012	3236.9	BI-214	4.18E-03	3.01E-03
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	11/15/2012	3747.6	K-40	5.10E-02	2.15E-02
91	1.6 MI ENE - HEEC SEWAGE TRTMT FCLTY	11/15/2012	3747.6	BE-7	8.31E-02	2.59E-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	11/15/2012	619.1	TH-234	4.48E-01	2.49E-01
26	4.7 MILES S	11/15/2012	619.1	K-40	3.07E+00	3.75E-01
26	4.7 MILES S	11/15/2012	619.1	TL-208	1.28E-02	9.39E-03
26	4.7 MILES S	11/15/2012	619.1	PB-212	2.05E-02	1.49E-02
26	4.7 MILES S	11/15/2012	619.1	BI-214	6.43E-02	2.29E-02
26	4.7 MILES S	11/15/2012	619.1	PB-214	5.17E-02	1.78E-02
26	4.7 MILES S	11/15/2012	619.1	RA-226	2.29E-01	1.76E-01
26	4.7 MILES S	11/15/2012	619.1	BE-7	1.49E-01	7.11E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/15/2012	586.2	RA-226	4.90E-01	1.91E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/15/2012	586.2	PB-214	6.31E-02	2.14E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/15/2012	586.2	BI-214	9.82E-02	2.56E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/15/2012	586.2	PB-212	2.83E-02	1.38E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/15/2012	586.2	BE-7	9.88E-02	7.61E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/15/2012	586.2	TH-234	3.54E-01	2.56E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	11/15/2012	586.2	K-40	2.54E+00	3.23E-01
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	692.8	I-131	2.67E-02	9.70E-03
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	654.4	BE-7	1.08E-01	7.13E-02
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	654.4	RA-226	3.36E-01	1.80E-01
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	654.4	PB-214	5.76E-02	2.08E-02
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	654.4	BI-214	7.76E-02	2.31E-02
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	654.4	PB-212	3.55E-02	1.53E-02
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	654.4	TL-208	1.33E-02	8.86E-03
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	692.8	K-40	3.37E+00	3.80E-01
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	654.4	K-40	2.41E+00	3.02E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	654.4	AC-228	1.71E-01	4.20E-02
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	692.8	TH-234	2.76E-01	2.03E-01
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	692.8	AC-228	1.56E-01	4.25E-02
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	692.8	RA-226	3.88E-01	2.00E-01
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	692.8	BI-214	2.76E-02	1.78E-02
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	692.8	PB-212	4.86E-02	1.60E-02
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	692.8	TL-208	2.13E-02	9.97E-03
61	2.5 MI E - HARRIS LK E NH-HOLLEMAN RD (CONTROL)	11/15/2012	654.4	I-131	1.27E-02	1.10E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: Catfish

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
44	SITE VARIES WITHIN HARRIS LAKE	5/1/2012	647.8	BI-214	8.21E-02	3.44E-02
44	SITE VARIES WITHIN HARRIS LAKE	5/1/2012	647.8	RA-226	4.80E-01	3.01E-01
44	SITE VARIES WITHIN HARRIS LAKE	5/1/2012	647.8	K-40	3.95E+00	6.56E-01
44	SITE VARIES WITHIN HARRIS LAKE	11/13/2012	599.3	BI-214	1.49E-01	4.81E-02
44	SITE VARIES WITHIN HARRIS LAKE	11/13/2012	599.3	PB-214	1.06E-01	4.83E-02
44	SITE VARIES WITHIN HARRIS LAKE	11/13/2012	599.3	K-40	4.52E+00	7.55E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/1/2012	724.6	K-40	4.88E+00	7.42E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/1/2012	724.6	BI-214	1.07E-01	4.11E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/1/2012	724.6	PB-214	7.88E-02	5.73E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/12/2012	647.9	K-40	5.27E+00	8.05E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/12/2012	647.9	BI-214	3.86E-02	3.08E-02

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: FIG LEAF

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	383.4	BE-7	2.04E+00	2.85E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	383.4	TH-234	6.36E-01	4.83E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	383.4	AC-228	2.21E-01	8.64E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	383.4	RA-226	4.90E-01	3.18E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	383.4	PB-214	7.33E-02	3.65E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	383.4	BI-214	1.12E-01	3.37E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	383.4	PB-212	1.92E-01	3.68E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	383.4	K-40	4.39E+00	5.82E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	383.4	TL-208	8.30E-02	2.56E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	494.8	AC-228	1.93E-01	6.22E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	494.8	RA-226	4.89E-01	3.06E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	494.8	PB-214	6.90E-02	3.69E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	494.8	BI-214	1.00E-01	4.07E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	494.8	PB-212	3.31E-01	4.66E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	494.8	BI-212	4.20E-01	1.57E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	494.8	TL-208	1.24E-01	2.24E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	494.8	K-40	4.60E+00	5.25E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	494.8	BE-7	1.91E+00	2.54E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	446.5	K-40	5.08E+00	6.13E-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	7/16/2012	446.5	AC-228	2.82E-01	7.39E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	446.5	RA-226	6.71E-01	3.62E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	446.5	PB-214	7.74E-02	3.40E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	446.5	BI-214	9.03E-02	3.68E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	446.5	TL-208	5.91E-02	1.77E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	446.5	BE-7	2.11E+00	2.85E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	446.5	PB-212	1.50E-01	2.97E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	386.6	BI-214	9.12E-02	3.39E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	386.6	BE-7	2.00E+00	2.97E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	386.6	K-40	6.63E+00	7.45E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	386.6	TL-208	7.89E-02	2.59E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	386.6	AC-228	3.01E-01	8.89E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	386.6	PB-214	1.35E-01	5.23E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	386.6	RA-226	5.33E-01	4.50E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	386.6	PB-212	2.26E-01	4.43E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	386.6	BI-212	2.11E-01	1.46E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	402.3	AC-228	3.18E-01	9.53E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	402.3	BE-7	3.37E+00	3.92E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	402.3	K-40	6.31E+00	7.06E-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	9/11/2012	402.3	TL-208	9.54E-02	2.65E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	402.3	PB-212	2.15E-01	4.49E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	402.3	BI-214	8.51E-02	3.98E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	402.3	PB-214	1.15E-01	4.59E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	402.3	RA-226	5.39E-01	3.42E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	380.7	RA-226	7.89E-01	3.71E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	380.7	PB-214	1.47E-01	5.21E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	380.7	BI-214	1.37E-01	5.07E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	380.7	PB-212	2.44E-01	4.46E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	380.7	TL-208	9.51E-02	2.85E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	380.7	K-40	5.98E+00	7.01E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	380.7	BE-7	5.75E+00	5.85E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	380.7	AC-228	4.16E-01	9.84E-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	5/15/2012	390.2	TL-208	1.18E-01	2.57E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	390.2	BI-214	4.48E-02	2.96E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	390.2	BE-7	1.26E+00	2.33E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	390.2	K-40	4.26E+00	5.29E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	390.2	PB-212	3.07E-01	4.78E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	390.2	BI-212	2.39E-01	1.31E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	390.2	RA-226	4.10E-01	4.09E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	384.6	PB-212	5.91E-01	6.34E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	384.6	K-40	3.78E+00	5.24E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	384.6	BE-7	1.41E+00	2.12E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	384.6	RA-226	7.69E-01	3.42E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	384.6	TL-208	2.30E-01	3.50E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	384.6	PB-214	1.11E-01	3.85E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	384.6	BI-214	1.15E-01	4.45E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	384.6	AC-228	1.73E-01	7.24E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	384.6	BI-212	3.88E-01	1.83E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	430.6	RA-226	3.78E-01	2.76E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	430.6	BI-214	8.71E-02	3.84E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	430.6	BI-212	1.59E-01	7.31E-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	7/16/2012	430.6	K-40	4.31E+00	5.08E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	430.6	AC-228	9.68E-02	7.48E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	430.6	PB-212	1.04E-01	3.25E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	430.6	BE-7	9.44E-01	2.03E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	430.6	TL-208	4.64E-02	1.82E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	351.1	TH-234	6.38E-01	6.35E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	351.1	AC-228	1.26E-01	7.24E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	351.1	RA-226	6.69E-01	3.88E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	351.1	PB-214	7.06E-02	4.03E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	351.1	BI-214	1.01E-01	3.47E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	351.1	PB-212	2.18E-01	4.12E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	351.1	BI-212	2.81E-01	1.39E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	351.1	TL-208	9.99E-02	2.41E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	351.1	BE-7	2.48E+00	3.35E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	351.1	K-40	4.52E+00	5.62E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	358.5	K-40	4.67E+00	6.01E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	358.5	BI-212	1.94E-01	1.45E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	358.5	PB-212	2.86E-01	4.33E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	358.5	BI-214	7.74E-02	3.21E-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	9/11/2012	358.5	PB-214	6.53E-02	3.61E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	358.5	TL-208	8.98E-02	2.12E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	358.5	TH-234	7.49E-01	5.62E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	358.5	BE-7	1.67E+00	2.67E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	358.5	AC-228	1.74E-01	8.11E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	358.5	RA-226	9.38E-01	4.91E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	356.8	BE-7	2.74E+00	3.74E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	356.8	K-40	5.13E+00	6.17E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	356.8	TL-208	1.11E-01	3.08E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	356.8	AC-228	2.03E-01	8.78E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	356.8	BI-212	2.24E-01	1.38E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	356.8	PB-212	2.40E-01	5.20E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	356.8	BI-214	8.55E-02	4.17E-02
12	0.9 MILES SSW	5/15/2012	362.4	BE-7	6.92E-01	1.81E-01
12	0.9 MILES SSW	5/15/2012	362.4	K-40	4.51E+00	5.70E-01
12	0.9 MILES SSW	5/15/2012	362.4	PB-212	1.56E-01	3.57E-02
12	0.9 MILES SSW	5/15/2012	362.4	BI-214	9.39E-02	3.90E-02
12	0.9 MILES SSW	5/15/2012	362.4	RA-226	9.37E-01	4.87E-01
12	0.9 MILES SSW	5/15/2012	362.4	PB-214	4.19E-02	3.89E-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*
12	0.9 MILES SSW	5/15/2012	362.4	TL-208	6.45E-02	2.06E-02
12	0.9 MILES SSW	5/15/2012	362.4	TH-234	9.22E-01	4.86E-01
12	0.9 MILES SSW	6/11/2012	352.2	TL-208	7.98E-02	2.34E-02
12	0.9 MILES SSW	6/11/2012	352.2	K-40	3.27E+00	5.17E-01
12	0.9 MILES SSW	6/11/2012	352.2	PB-212	2.02E-01	3.97E-02
12	0.9 MILES SSW	6/11/2012	352.2	BI-214	1.59E-01	4.19E-02
12	0.9 MILES SSW	6/11/2012	352.2	PB-214	1.26E-01	4.39E-02
12	0.9 MILES SSW	6/11/2012	352.2	RA-226	7.31E-01	3.99E-01
12	0.9 MILES SSW	6/11/2012	352.2	TH-234	1.01E+00	5.71E-01
12	0.9 MILES SSW	6/11/2012	352.2	BE-7	1.08E+00	2.34E-01
12	0.9 MILES SSW	7/17/2012	349.7	K-40	3.09E+00	4.79E-01
12	0.9 MILES SSW	7/17/2012	349.7	TL-208	6.06E-02	2.92E-02
12	0.9 MILES SSW	7/17/2012	349.7	PB-214	6.12E-01	8.23E-02
12	0.9 MILES SSW	7/17/2012	349.7	BI-214	1.52E+00	1.68E-01
12	0.9 MILES SSW	7/17/2012	349.7	PB-212	2.65E-01	4.39E-02
12	0.9 MILES SSW	7/17/2012	349.7	BI-212	2.39E-01	1.51E-01
12	0.9 MILES SSW	7/17/2012	349.7	RA-226	5.52E-01	4.42E-01
12	0.9 MILES SSW	7/17/2012	349.7	BE-7	1.02E+00	2.38E-01
12	0.9 MILES SSW	8/14/2012	323.4	BI-214	1.35E-01	4.84E-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*
12	0.9 MILES SSW	8/14/2012	323.4	BE-7	8.70E-01	2.48E-01
12	0.9 MILES SSW	8/14/2012	323.4	K-40	3.50E+00	5.02E-01
12	0.9 MILES SSW	8/14/2012	323.4	TL-208	5.53E-02	2.17E-02
12	0.9 MILES SSW	8/14/2012	323.4	PB-212	9.83E-02	4.26E-02
12	0.9 MILES SSW	8/14/2012	323.4	PB-214	1.04E-01	4.90E-02
12	0.9 MILES SSW	8/14/2012	323.4	RA-226	5.12E-01	3.58E-01
12	0.9 MILES SSW	8/14/2012	323.4	TH-234	9.98E-01	6.32E-01
12	0.9 MILES SSW	9/11/2012	387.1	RA-226	7.32E-01	3.03E-01
12	0.9 MILES SSW	9/11/2012	387.1	TL-208	3.77E-02	1.53E-02
12	0.9 MILES SSW	9/11/2012	387.1	PB-212	6.26E-02	2.18E-02
12	0.9 MILES SSW	9/11/2012	387.1	BE-7	2.16E+00	2.66E-01
12	0.9 MILES SSW	9/11/2012	387.1	BI-214	7.47E-02	2.60E-02
12	0.9 MILES SSW	9/11/2012	387.1	PB-214	5.96E-02	3.27E-02
12	0.9 MILES SSW	9/11/2012	387.1	K-40	3.28E+00	4.21E-01
12	0.9 MILES SSW	10/17/2012	323.9	PB-214	1.06E-01	4.44E-02
12	0.9 MILES SSW	10/17/2012	323.9	K-40	2.70E+00	4.79E-01
12	0.9 MILES SSW	10/17/2012	323.9	BE-7	2.73E+00	3.49E-01
12	0.9 MILES SSW	10/17/2012	323.9	TL-208	5.84E-02	2.68E-02
12	0.9 MILES SSW	10/17/2012	323.9	BI-214	1.18E-01	5.00E-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*
12	0.9 MILES SSW	10/17/2012	323.9	RA-226	6.53E-01	4.63E-01
12	0.9 MILES SSW	10/17/2012	323.9	TH-234	1.30E+00	6.20E-01
12	0.9 MILES SSW	10/17/2012	323.9	PB-212	1.32E-01	3.72E-02
63	0.6 MI SW	5/15/2012	383.3	PB-214	5.07E-02	3.15E-02
63	0.6 MI SW	5/15/2012	383.3	BI-214	7.80E-02	4.18E-02
63	0.6 MI SW	5/15/2012	383.3	PB-212	1.61E-01	3.12E-02
63	0.6 MI SW	5/15/2012	383.3	TL-208	7.84E-02	2.01E-02
63	0.6 MI SW	5/15/2012	383.3	RA-226	7.43E-01	3.83E-01
63	0.6 MI SW	5/15/2012	383.3	K-40	3.91E+00	4.90E-01
63	0.6 MI SW	5/15/2012	383.3	TH-234	5.90E-01	4.89E-01
63	0.6 MI SW	5/15/2012	383.3	BE-7	6.06E-01	1.71E-01
63	0.6 MI SW	6/11/2012	365.7	PB-212	2.72E-01	3.86E-02
63	0.6 MI SW	6/11/2012	365.7	RA-226	7.13E-01	4.42E-01
63	0.6 MI SW	6/11/2012	365.7	TH-234	6.79E-01	5.24E-01
63	0.6 MI SW	6/11/2012	365.7	BI-214	4.75E-01	7.16E-02
63	0.6 MI SW	6/11/2012	365.7	TL-208	9.85E-02	2.47E-02
63	0.6 MI SW	6/11/2012	365.7	K-40	4.20E+00	5.39E-01
63	0.6 MI SW	6/11/2012	365.7	BE-7	9.46E-01	2.05E-01
63	0.6 MI SW	6/11/2012	365.7	PB-212	2.03E-01	4.44E-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*
63	0.6 MI SW	7/17/2012	534	K-40	3.04E+00	3.75E-01
63	0.6 MI SW	7/17/2012	534	RA-226	3.00E-01	2.49E-01
63	0.6 MI SW	7/17/2012	534	TL-208	4.89E-02	1.44E-02
63	0.6 MI SW	7/17/2012	534	BE-7	8.08E-01	1.79E-01
63	0.6 MI SW	7/17/2012	534	BI-214	6.33E-02	3.15E-02
63	0.6 MI SW	7/17/2012	534	PB-212	1.35E-01	3.10E-02
63	0.6 MI SW	8/14/2012	350.4	BE-7	2.54E+00	3.28E-01
63	0.6 MI SW	8/14/2012	350.4	TL-208	9.01E-02	2.30E-02
63	0.6 MI SW	8/14/2012	350.4	K-40	3.65E+00	5.45E-01
63	0.6 MI SW	8/14/2012	350.4	TH-234	9.83E-01	5.68E-01
63	0.6 MI SW	8/14/2012	350.4	AC-228	1.04E-01	7.31E-02
63	0.6 MI SW	8/14/2012	350.4	RA-226	1.03E+00	4.95E-01
63	0.6 MI SW	8/14/2012	350.4	PB-214	8.74E-02	4.52E-02
63	0.6 MI SW	8/14/2012	350.4	BI-214	1.51E-01	4.96E-02
63	0.6 MI SW	8/14/2012	350.4	PB-212	1.52E-01	3.72E-02
63	0.6 MI SW	8/14/2012	350.4	BI-212	1.83E-01	1.14E-01
63	0.6 MI SW	9/11/2012	363.6	K-40	4.07E+00	5.36E-01
63	0.6 MI SW	9/11/2012	363.6	TL-208	3.90E-02	1.79E-02
63	0.6 MI SW	9/11/2012	363.6	PB-212	1.19E-01	3.19E-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*
63	0.6 MI SW	9/11/2012	363.6	BI-214	6.01E-02	4.65E-02
63	0.6 MI SW	9/11/2012	363.6	PB-214	5.85E-02	5.51E-02
63	0.6 MI SW	9/11/2012	363.6	BE-7	2.89E+00	3.72E-01
63	0.6 MI SW	10/17/2012	420.3	TL-208	1.29E-01	2.55E-02
63	0.6 MI SW	10/17/2012	420.3	TH-234	7.49E-01	4.69E-01
63	0.6 MI SW	10/17/2012	420.3	K-40	3.16E+00	4.49E-01
63	0.6 MI SW	10/17/2012	420.3	PB-214	9.91E-02	3.52E-02
63	0.6 MI SW	10/17/2012	420.3	BI-212	2.40E-01	1.58E-01
63	0.6 MI SW	10/17/2012	420.3	PB-212	3.28E-01	4.68E-02
63	0.6 MI SW	10/17/2012	420.3	BI-214	1.08E-01	3.86E-02
63	0.6 MI SW	10/17/2012	420.3	BE-7	2.95E+00	3.52E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: SWEETGUM

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	520.7	K-40	2.40E+00	3.25E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	520.7	TL-208	6.05E-02	1.69E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	520.7	BI-212	1.24E-01	8.70E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	520.7	TH-234	8.45E-01	3.95E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	520.7	PB-212	1.36E-01	3.13E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	520.7	BE-7	1.10E+00	1.68E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	520.7	AC-228	1.55E-01	4.62E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	520.7	BI-214	5.42E-02	2.37E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/15/2012	520.7	RA-226	5.20E-01	2.61E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	497	BI-212	3.61E-01	1.43E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	497	AC-228	2.38E-01	6.30E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	497	RA-226	7.25E-01	3.63E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	497	BE-7	1.06E+00	1.82E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	497	TL-208	2.07E-01	2.94E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	497	PB-212	5.60E-01	6.22E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	497	BI-214	6.00E-02	2.71E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	497	PB-214	4.86E-02	3.42E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/11/2012	497	K-40	3.63E+00	4.69E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	446.8	PB-212	1.91E-01	3.13E-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	7/16/2012	446.8	BI-214	5.14E-02	3.69E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	446.8	K-40	3.48E+00	4.74E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	446.8	RA-226	5.63E-01	2.62E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	446.8	TL-208	5.86E-02	1.85E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	446.8	BE-7	9.53E-01	1.87E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	446.8	AC-228	1.49E-01	6.65E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	425.4	BE-7	3.22E+00	3.72E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	425.4	TL-208	1.07E-01	2.09E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	425.4	BI-212	1.93E-01	1.27E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	425.4	PB-212	2.48E-01	4.55E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	425.4	AC-228	4.90E-01	8.15E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	425.4	BI-214	8.14E-02	3.21E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	425.4	PB-214	4.79E-02	3.44E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	425.4	K-40	4.46E+00	5.48E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	425.4	RA-226	8.21E-01	4.04E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	468	K-40	3.18E+00	4.24E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	468	AC-228	3.70E-01	6.66E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	468	BI-214	1.45E-01	3.84E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	468	TL-208	8.69E-02	2.05E-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	10/17/2012	468	BI-212	1.65E-01	1.35E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	468	PB-212	2.82E-01	3.54E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	468	RA-226	7.24E-01	3.37E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	468	PB-214	1.21E-01	3.82E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/17/2012	468	BE-7	2.61E+00	3.02E-01
12	0.9 MILES SSW	5/15/2012	480.4	RA-226	4.76E-01	2.71E-01
12	0.9 MILES SSW	5/15/2012	480.4	BE-7	7.74E-01	1.59E-01
12	0.9 MILES SSW	5/15/2012	480.4	K-40	2.76E+00	3.77E-01
12	0.9 MILES SSW	5/15/2012	480.4	TL-208	5.41E-02	1.96E-02
12	0.9 MILES SSW	5/15/2012	480.4	PB-212	1.16E-01	2.41E-02
12	0.9 MILES SSW	5/15/2012	480.4	PB-214	6.24E-02	2.58E-02
12	0.9 MILES SSW	5/15/2012	480.4	TH-234	6.56E-01	4.20E-01
12	0.9 MILES SSW	5/15/2012	480.4	BI-214	6.64E-02	3.76E-02
12	0.9 MILES SSW	6/11/2012	476.4	BI-214	1.04E-01	3.58E-02
12	0.9 MILES SSW	6/11/2012	476.4	BE-7	5.88E-01	1.53E-01
12	0.9 MILES SSW	6/11/2012	476.4	K-40	3.43E+00	4.24E-01
12	0.9 MILES SSW	6/11/2012	476.4	PB-212	1.63E-01	3.08E-02
12	0.9 MILES SSW	6/11/2012	476.4	PB-214	7.85E-02	3.37E-02
12	0.9 MILES SSW	6/11/2012	476.4	RA-226	3.44E-01	2.94E-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	6/11/2012	476.4	BI-212	1.46E-01	9.26E-02
12	0.9 MILES SSW	6/11/2012	476.4	TL-208	6.71E-02	1.87E-02
12	0.9 MILES SSW	7/17/2012	415.5	BE-7	1.07E+00	2.02E-01
12	0.9 MILES SSW	7/17/2012	415.5	K-40	2.83E+00	4.29E-01
12	0.9 MILES SSW	7/17/2012	415.5	TL-208	7.28E-02	2.01E-02
12	0.9 MILES SSW	7/17/2012	415.5	PB-214	3.26E-01	6.21E-02
12	0.9 MILES SSW	7/17/2012	415.5	RA-226	6.26E-01	3.96E-01
12	0.9 MILES SSW	7/17/2012	415.5	PB-212	2.06E-01	3.35E-02
12	0.9 MILES SSW	7/17/2012	415.5	BI-214	7.47E-01	8.98E-02
12	0.9 MILES SSW	8/14/2012	422.2	PB-212	7.60E-02	3.50E-02
12	0.9 MILES SSW	8/14/2012	422.2	BE-7	2.06E+00	2.85E-01
12	0.9 MILES SSW	8/14/2012	422.2	BI-214	7.27E-02	3.50E-02
12	0.9 MILES SSW	8/14/2012	422.2	TL-208	2.39E-02	1.80E-02
12	0.9 MILES SSW	8/14/2012	422.2	K-40	3.33E+00	4.48E-01
12	0.9 MILES SSW	8/14/2012	422.2	RA-226	5.31E-01	3.24E-01
12	0.9 MILES SSW	9/11/2012	368.4	BE-7	2.30E+00	3.08E-01
12	0.9 MILES SSW	9/11/2012	368.4	RA-226	4.62E-01	3.90E-01
12	0.9 MILES SSW	9/11/2012	368.4	TL-208	6.32E-02	1.88E-02
12	0.9 MILES SSW	9/11/2012	368.4	TH-234	1.02E+00	4.96E-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	9/11/2012	368.4	BI-212	1.65E-01	1.33E-01
12	0.9 MILES SSW	9/11/2012	368.4	K-40	2.17E+00	3.49E-01
12	0.9 MILES SSW	9/11/2012	368.4	PB-214	4.22E-02	3.39E-02
12	0.9 MILES SSW	9/11/2012	368.4	BI-214	6.34E-02	3.43E-02
12	0.9 MILES SSW	9/11/2012	368.4	PB-212	1.80E-01	4.18E-02
12	0.9 MILES SSW	10/17/2012	343.1	PB-212	2.56E-01	4.23E-02
12	0.9 MILES SSW	10/17/2012	343.1	TL-208	9.69E-02	2.23E-02
12	0.9 MILES SSW	10/17/2012	343.1	BE-7	2.33E+00	3.20E-01
12	0.9 MILES SSW	10/17/2012	343.1	RA-226	5.76E-01	4.48E-01
12	0.9 MILES SSW	10/17/2012	343.1	BI-214	7.56E-02	4.29E-02
12	0.9 MILES SSW	10/17/2012	343.1	K-40	3.79E+00	5.21E-01
63	0.6 MI SW	5/15/2012	478.3	BI-214	6.11E-02	3.10E-02
63	0.6 MI SW	5/15/2012	478.3	BE-7	4.26E-01	1.43E-01
63	0.6 MI SW	5/15/2012	478.3	K-40	2.94E+00	3.85E-01
63	0.6 MI SW	5/15/2012	478.3	PB-212	1.06E-01	3.10E-02
63	0.6 MI SW	5/15/2012	478.3	RA-226	4.11E-01	2.61E-01
63	0.6 MI SW	5/15/2012	478.3	TH-234	8.46E-01	4.61E-01
63	0.6 MI SW	5/15/2012	478.3	TL-208	3.24E-02	1.73E-02
63	0.6 MI SW	6/11/2012	445.2	PB-214	1.17E-01	3.99E-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 MI SW	6/11/2012	445.2	BE-7	7.53E-01	1.72E-01
63	0.6 MI SW	6/11/2012	445.2	K-40	3.61E+00	4.56E-01
63	0.6 MI SW	6/11/2012	445.2	TH-234	8.54E-01	6.53E-01
63	0.6 MI SW	6/11/2012	445.2	RA-226	6.21E-01	3.41E-01
63	0.6 MI SW	6/11/2012	445.2	TL-208	6.56E-02	1.96E-02
63	0.6 MI SW	6/11/2012	445.2	BI-212	1.17E-01	1.31E-01
63	0.6 MI SW	6/11/2012	445.2	PB-212	1.93E-01	3.53E-02
63	0.6 MI SW	6/11/2012	445.2	BI-214	2.50E-01	4.54E-02
63	0.6 MI SW	7/17/2012	476.1	PB-214	5.99E-02	3.12E-02
63	0.6 MI SW	7/17/2012	476.1	TL-208	4.80E-02	1.83E-02
63	0.6 MI SW	7/17/2012	476.1	TH-234	6.17E-01	3.77E-01
63	0.6 MI SW	7/17/2012	476.1	BI-214	1.05E-01	2.97E-02
63	0.6 MI SW	7/17/2012	476.1	PB-212	1.48E-01	2.49E-02
63	0.6 MI SW	7/17/2012	476.1	BI-212	1.34E+00	9.98E-02
63	0.6 MI SW	7/17/2012	476.1	BE-7	7.16E-01	1.50E-01
63	0.6 MI SW	7/17/2012	476.1	K-40	2.09E+00	3.44E-01
63	0.6 MI SW	7/17/2012	476.1	RA-226	5.19E-01	2.90E-01
63	0.6 MI SW	8/14/2012	461.9	BE-7	1.66E+00	2.29E-01
63	0.6 MI SW	8/14/2012	461.9	PB-214	5.75E-02	3.14E-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 MI SW	8/14/2012	461.9	BI-214	7.04E-02	3.43E-02
63	0.6 MI SW	8/14/2012	461.9	PB-212	9.98E-02	3.01E-02
63	0.6 MI SW	8/14/2012	461.9	TL-208	4.46E-02	1.48E-02
63	0.6 MI SW	8/14/2012	461.9	K-40	2.94E+00	4.15E-01
63	0.6 MI SW	8/14/2012	461.9	RA-226	3.01E-01	2.25E-01
63	0.6 MI SW	8/14/2012	461.9	TH-234	3.98E-01	3.83E-01
63	0.6 MI SW	9/11/2012	403.6	K-40	2.60E+00	4.03E-01
63	0.6 MI SW	9/11/2012	403.6	RA-226	9.58E-01	3.39E-01
63	0.6 MI SW	9/11/2012	403.6	PB-214	6.58E-02	3.56E-02
63	0.6 MI SW	9/11/2012	403.6	BI-214	1.35E-01	4.53E-02
63	0.6 MI SW	9/11/2012	403.6	PB-212	9.86E-02	2.97E-02
63	0.6 MI SW	9/11/2012	403.6	TL-208	3.60E-02	1.66E-02
63	0.6 MI SW	9/11/2012	403.6	BE-7	3.13E+00	3.64E-01
63	0.6 MI SW	10/17/2012	353.9	RA-226	8.98E-01	3.28E-01
63	0.6 MI SW	10/17/2012	353.9	BI-214	9.60E-02	5.23E-02
63	0.6 MI SW	10/17/2012	353.9	PB-212	1.19E-01	3.73E-02
63	0.6 MI SW	10/17/2012	353.9	BE-7	3.02E+00	3.79E-01
63	0.6 MI SW	10/17/2012	353.9	TL-208	7.48E-02	2.10E-02
63	0.6 MI SW	10/17/2012	353.9	K-40	2.69E+00	4.33E-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*
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	460.5	TH-234	9.72E-01	5.68E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	460.5	BI-214	8.09E-02	3.86E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	460.5	RA-226	6.53E-01	3.71E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	460.5	PB-214	4.65E-02	2.47E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	460.5	AC-228	1.66E-01	6.12E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	460.5	PB-212	3.43E-01	4.54E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	460.5	K-40	3.32E+00	4.42E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	460.5	BI-212	2.33E-01	1.10E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	460.5	TL-208	1.27E-01	2.64E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	460.5	BE-7	6.60E-01	1.61E-01
12	0.9 MILES SSW	5/15/2012	397.2	PB-212	2.28E-01	4.18E-02
12	0.9 MILES SSW	5/15/2012	397.2	BE-7	1.81E+00	2.59E-01
12	0.9 MILES SSW	5/15/2012	397.2	TL-208	8.20E-02	2.08E-02
12	0.9 MILES SSW	5/15/2012	397.2	K-40	4.64E+00	5.66E-01
12	0.9 MILES SSW	6/11/2012	414.4	RA-226	7.55E-01	3.03E-01
12	0.9 MILES SSW	6/11/2012	414.4	BI-214	6.26E-02	3.68E-02
12	0.9 MILES SSW	6/11/2012	414.4	BE-7	1.80E+00	2.64E-01
12	0.9 MILES SSW	6/11/2012	414.4	K-40	3.79E+00	4.89E-01
12	0.9 MILES SSW	6/11/2012	414.4	PB-212	9.64E-02	2.50E-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	6/11/2012	414.4	PB-214	1.01E-01	3.38E-02
12	0.9 MILES SSW	6/11/2012	414.4	TH-234	3.84E-01	4.34E-01
12	0.9 MILES SSW	6/11/2012	414.4	TL-208	3.88E-02	1.98E-02
12	0.9 MILES SSW	7/17/2012	366.3	BE-7	2.70E+00	3.38E-01
12	0.9 MILES SSW	7/17/2012	366.3	K-40	3.14E+00	4.70E-01
12	0.9 MILES SSW	7/17/2012	366.3	TL-208	4.54E-02	1.68E-02
12	0.9 MILES SSW	7/17/2012	366.3	PB-212	7.38E-02	2.56E-02
12	0.9 MILES SSW	7/17/2012	366.3	BI-214	9.68E-02	4.54E-02
12	0.9 MILES SSW	7/17/2012	366.3	RA-226	3.69E-01	3.44E-01
12	0.9 MILES SSW	8/14/2012	389.9	AC-228	1.21E-01	5.07E-02
12	0.9 MILES SSW	8/14/2012	389.9	BE-7	3.49E+00	3.97E-01
12	0.9 MILES SSW	8/14/2012	389.9	K-40	2.47E+00	3.91E-01
12	0.9 MILES SSW	8/14/2012	389.9	TL-208	3.09E-02	2.15E-02
12	0.9 MILES SSW	8/14/2012	389.9	PB-212	9.93E-02	2.56E-02
12	0.9 MILES SSW	8/14/2012	389.9	BI-214	9.45E-02	3.35E-02
12	0.9 MILES SSW	8/14/2012	389.9	TH-234	7.98E-01	4.89E-01
12	0.9 MILES SSW	8/14/2012	389.9	RA-226	5.33E-01	3.82E-01
12	0.9 MILES SSW	8/14/2012	389.9	PB-214	7.99E-02	3.68E-02
12	0.9 MILES SSW	9/11/2012	351.2	BI-214	9.54E-02	3.74E-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	9/11/2012	351.2	BE-7	4.70E+00	5.11E-01
12	0.9 MILES SSW	9/11/2012	351.2	PB-212	1.82E-01	4.40E-02
12	0.9 MILES SSW	9/11/2012	351.2	K-40	4.39E+00	5.60E-01
12	0.9 MILES SSW	9/11/2012	351.2	PB-214	7.06E-02	3.81E-02
12	0.9 MILES SSW	9/11/2012	351.2	RA-226	4.44E-01	4.37E-01
12	0.9 MILES SSW	9/11/2012	351.2	TL-208	9.43E-02	2.63E-02
12	0.9 MILES SSW	10/17/2012	333.9	TL-208	9.22E-02	2.87E-02
12	0.9 MILES SSW	10/17/2012	333.9	RA-226	6.36E-01	3.92E-01
12	0.9 MILES SSW	10/17/2012	333.9	PB-214	1.05E-01	3.79E-02
12	0.9 MILES SSW	10/17/2012	333.9	TH-234	9.13E-01	6.05E-01
12	0.9 MILES SSW	10/17/2012	333.9	BI-214	1.16E-01	3.82E-02
12	0.9 MILES SSW	10/17/2012	333.9	BI-212	1.72E-01	1.38E-01
12	0.9 MILES SSW	10/17/2012	333.9	PB-212	2.46E-01	4.64E-02
12	0.9 MILES SSW	10/17/2012	333.9	K-40	3.61E+00	5.03E-01
12	0.9 MILES SSW	10/17/2012	333.9	BE-7	4.72E+00	5.14E-01
63	0.6 MI SW	5/15/2012	359.9	K-40	4.35E+00	5.55E-01
63	0.6 MI SW	5/15/2012	359.9	TL-208	6.33E-02	2.31E-02
63	0.6 MI SW	5/15/2012	359.9	RA-226	6.24E-01	3.71E-01
63	0.6 MI SW	5/15/2012	359.9	PB-214	8.41E-02	3.55E-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 MI SW	5/15/2012	359.9	BI-214	9.83E-02	4.22E-02
63	0.6 MI SW	5/15/2012	359.9	PB-212	1.52E-01	3.60E-02
63	0.6 MI SW	5/15/2012	359.9	TH-234	7.28E-01	3.99E-01
63	0.6 MI SW	5/15/2012	359.9	BE-7	1.45E+00	2.60E-01
63	0.6 MI SW	6/11/2012	402.1	K-40	4.00E+00	5.16E-01
63	0.6 MI SW	6/11/2012	402.1	TL-208	6.77E-02	2.07E-02
63	0.6 MI SW	6/11/2012	402.1	PB-212	8.32E-02	3.37E-02
63	0.6 MI SW	6/11/2012	402.1	BI-214	8.09E-02	4.17E-02
63	0.6 MI SW	6/11/2012	402.1	BE-7	1.32E+00	2.24E-01
63	0.6 MI SW	7/17/2012	556	BI-214	7.42E-02	2.77E-02
63	0.6 MI SW	7/17/2012	556	BE-7	1.02E+00	1.70E-01
63	0.6 MI SW	7/17/2012	556	K-40	2.76E+00	3.54E-01
63	0.6 MI SW	7/17/2012	556	PB-212	2.26E-01	2.97E-02
63	0.6 MI SW	7/17/2012	556	PB-214	5.58E-02	2.24E-02
63	0.6 MI SW	7/17/2012	556	TH-234	3.14E-01	3.47E-01
63	0.6 MI SW	7/17/2012	556	TL-208	8.61E-02	1.75E-02
63	0.6 MI SW	8/14/2012	377.7	BE-7	1.92E+00	2.82E-01
63	0.6 MI SW	8/14/2012	377.7	K-40	4.77E+00	5.66E-01
63	0.6 MI SW	8/14/2012	377.7	TL-208	6.73E-02	2.29E-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 MI SW	8/14/2012	377.7	PB-212	1.53E-01	4.25E-02
63	0.6 MI SW	8/14/2012	377.7	RA-226	5.50E-01	3.93E-01
63	0.6 MI SW	9/11/2012	380.7	K-40	3.08E+00	4.22E-01
63	0.6 MI SW	9/11/2012	380.7	BE-7	2.30E+00	3.09E-01
63	0.6 MI SW	9/11/2012	380.7	TH-234	4.81E-01	4.62E-01
63	0.6 MI SW	9/11/2012	380.7	TL-208	4.85E-02	2.39E-02
63	0.6 MI SW	9/11/2012	380.7	PB-212	1.12E-01	2.89E-02
63	0.6 MI SW	9/11/2012	380.7	BI-214	1.06E-01	3.44E-02
63	0.6 MI SW	9/11/2012	380.7	PB-214	1.28E-01	3.71E-02
63	0.6 MI SW	9/11/2012	380.7	RA-226	5.27E-01	4.41E-01
63	0.6 MI SW	10/17/2012	402.1	BE-7	2.43E+00	3.18E-01
63	0.6 MI SW	10/17/2012	402.1	K-40	3.90E+00	4.96E-01
63	0.6 MI SW	10/17/2012	402.1	TL-208	4.62E-02	2.16E-02
63	0.6 MI SW	10/17/2012	402.1	PB-212	1.29E-01	4.07E-02
63	0.6 MI SW	10/17/2012	402.1	BI-214	4.59E-02	3.23E-02
63	0.6 MI SW	10/17/2012	402.1	RA-226	4.94E-01	3.74E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
38	CAPE FEAR PLANT INTAKE - CONTROL	1/13/2012	1.0	AC-228	1.25E+01	6.43E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	1/13/2012	1.0	K-40	5.12E+02	4.63E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/13/2012	1.0	RA-226	1.03E+02	4.35E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/13/2012	1.0	PB-212	1.14E+01	3.23E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	1/13/2012	1.0	TH-234	1.24E+02	5.69E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/13/2012	1.0	TL-208	4.59E+00	1.76E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	1/13/2012	1.0	BI-214	1.04E+01	3.77E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	1.0	PB-212	9.10E+00	2.90E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	1.0	K-40	5.02E+02	4.66E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	1.0	RA-226	1.15E+02	4.39E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	1.0	TL-208	5.74E+00	1.80E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	1.0	AC-228	1.39E+01	6.30E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	1.0	TH-234	1.29E+02	6.28E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	1.0	BI-214	9.87E+00	4.28E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1.0	TL-208	3.55E+00	1.74E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1.0	PB-212	7.59E+00	2.88E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1.0	TH-234	1.42E+02	6.29E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1.0	AC-228	1.24E+01	5.95E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1.0	BI-214	9.37E+00	3.71E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1.0	K-40	5.57E+02	4.89E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1.0	PB-214	5.78E+00	3.50E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1.0	RA-226	1.26E+02	5.19E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1.0	K-40	2.52E+02	3.06E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1.0	TL-208	3.69E+00	1.73E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1.0	BI-214	1.07E+01	3.34E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1.0	PB-214	1.12E+01	4.36E+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	4/12/2012	1.0	RA-226	1.70E+02	3.08E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1.0	AC-228	9.41E+00	5.06E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1.0	TH-234	1.61E+02	4.98E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1.0	PB-212	7.88E+00	2.36E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1.0	AC-228	1.64E+01	6.53E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1.0	BI-214	1.20E+01	3.41E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1.0	TH-234	1.61E+02	6.93E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1.0	RA-226	1.17E+02	4.01E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1.0	K-40	5.19E+02	4.70E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1.0	PB-214	8.15E+00	3.18E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1.0	PB-212	5.35E+00	2.82E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1.0	TL-208	3.69E+00	1.74E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	1.0	TH-234	2.27E+02	5.50E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	1.0	RA-226	1.93E+02	3.74E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	1.0	BI-214	1.81E+01	4.05E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	1.0	PB-212	8.61E+00	2.44E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	1.0	TL-208	3.90E+00	1.86E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	1.0	PB-214	1.69E+01	4.19E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	1.0	K-40	2.53E+02	3.41E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1.0	AC-228	1.41E+01	5.24E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1.0	TL-208	5.91E+00	1.67E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1.0	PB-212	1.12E+01	2.75E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1.0	RA-226	2.22E+00	4.35E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1.0	BI-214	1.71E+01	4.05E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1.0	K-40	4.02E+02	3.82E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1.0	TH-234	2.38E+02	6.05E+01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1.0	PB-214	1.60E+01	4.83E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1.0	K-40	5.14E+02	4.78E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1.0	TL-208	4.53E+00	1.98E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1.0	BI-214	1.01E+01	3.47E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1.0	AC-228	1.42E+01	6.65E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1.0	TH-234	1.41E+02	6.93E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1.0	PB-214	7.99E+00	3.84E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1.0	RA-226	1.28E+02	4.42E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1.0	PB-212	5.86E+00	2.84E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1.0	BI-214	1.48E+01	4.28E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1.0	K-40	5.67E+02	4.88E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1.0	TL-208	4.13E+00	1.76E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1.0	PB-212	6.85E+00	3.15E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1.0	TH-234	1.45E+01	6.89E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1.0	AC-228	1.89E+01	7.07E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1.0	RA-226	9.45E+01	4.01E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1.0	PB-214	9.35E+00	3.31E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	1.0	TL-208	3.38E+00	1.72E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	1.0	PB-212	7.40E+00	3.19E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	1.0	BI-214	1.12E+01	3.98E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	1.0	PB-214	9.44E+00	4.44E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	1.0	RA-226	1.32E+02	4.45E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	1.0	TH-234	1.20E+02	7.20E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	1.0	K-40	5.75E+02	4.89E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	1.0	PB-212	1.09E+01	5.51E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	1.0	RA-226	1.70E+02	3.12E+01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	1.0	TL-208	4.03E+00	1.43E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	1.0	K-40	2.30E+02	2.84E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	1.0	TH-234	1.97E+02	4.77E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	1.0	BI-214	2.69E+01	3.95E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	1.0	PB-214	2.42E+01	3.80E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1.0	TH-234	2.22E+02	4.85E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1.0	TL-208	6.34E+00	1.56E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1.0	K-40	4.66E+02	3.93E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1.0	PB-212	1.64E+01	2.88E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1.0	PB-214	1.44E+01	3.15E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1.0	AC-228	1.69E+01	5.66E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1.0	RA-226	1.85E+02	3.48E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1.0	BI-214	1.69E+01	3.41E+00
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	1.0	RA-226	1.73E+02	3.89E+01
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	1.0	TH-234	2.28E+02	5.96E+01
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	1.0	PB-212	1.33E+01	2.60E+00
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	1.0	PB-214	1.09E+01	3.47E+00
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	1.0	TL-208	5.34E+00	1.68E+00
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	1.0	BI-214	1.57E+01	4.21E+00
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	1.0	K-40	2.07E+02	3.19E+01
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1.0	PB-212	9.71E+00	2.91E+00
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1.0	BI-214	1.32E+01	3.97E+00
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1.0	TH-234	2.46E+02	6.02E+01
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1.0	PB-214	1.22E+01	3.19E+00
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1.0	BI-212	1.12E+01	1.02E+01
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1.0	TL-208	3.00E+00	1.65E+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	2/13/2012	1.0	K-40	2.01E+02	3.05E+01
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1.0	RA-226	1.84E+02	4.18E+01
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1.0	AC-228	1.35E+01	5.91E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	1.0	TL-208	4.78E+00	1.89E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	1.0	PB-212	9.09E+00	2.43E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	1.0	RA-226	2.10E+02	3.97E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	1.0	K-40	2.60E+02	3.15E+01
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	1.0	BI-214	1.27E+01	3.29E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	1.0	TH-234	2.64E+02	6.45E+01
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	1.0	PB-214	1.33E+01	4.12E+00
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1.0	K-40	2.11E+02	2.74E+01
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1.0	RA-226	1.84E+02	3.99E+01
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1.0	BI-214	1.65E+01	4.64E+00
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1.0	TL-208	5.12E+00	1.67E+00
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1.0	PB-212	8.85E+00	2.44E+00
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1.0	PB-214	1.33E+01	3.26E+00
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1.0	AC-228	8.27E+00	4.89E+00
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1.0	TH-234	2.18E+02	5.45E+01
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	1.0	RA-226	1.71E+02	3.88E+01
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	1.0	PB-212	9.37E+00	2.25E+00
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	1.0	K-40	2.28E+02	3.07E+01
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	1.0	PB-214	1.27E+01	3.78E+00
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	1.0	TH-234	2.01E+02	5.53E+01
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	1.0	TL-208	3.71E+00	1.45E+00
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	1.0	BI-214	1.50E+01	3.44E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1.0	RA-226	2.04E+02	4.02E+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	6/11/2012	1.0	K-40	4.15E+02	3.73E+01
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1.0	TL-208	5.75E+00	1.82E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1.0	PB-214	1.26E+01	3.65E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1.0	PB-212	9.78E+00	3.27E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1.0	TH-234	1.85E+02	6.08E+01
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1.0	AC-228	1.65E+01	5.92E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1.0	BI-214	1.69E+01	3.70E+00
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1.0	K-40	5.54E+02	4.79E+01
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1.0	TL-208	5.20E+00	1.87E+00
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1.0	TH-234	1.19E+02	6.29E+01
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1.0	AC-228	1.12E+02	6.38E+01
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1.0	PB-212	8.30E+00	3.20E+00
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1.0	PB-214	7.97E+00	3.59E+00
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1.0	RA-226	1.27E+02	4.36E+01
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1.0	BI-214	9.30E+00	3.81E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	1.0	PB-214	1.53E+01	4.03E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	1.0	RA-226	1.71E+02	4.24E+01
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	1.0	K-40	2.23E+02	3.04E+01
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	1.0	PB-212	1.03E+01	2.23E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	1.0	TH-234	2.43E+02	6.04E+01
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	1.0	BI-214	1.59E+01	3.61E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	1.0	TL-208	4.16E+00	1.83E+00
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	1.0	PB-212	9.08E+00	2.24E+00
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	1.0	BI-214	1.79E+01	4.65E+00
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	1.0	PB-214	1.77E+01	3.85E+00
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	1.0	RA-226	1.95E+02	3.74E+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	9/10/2012	1.0	TH-234	2.21E+02	5.51E+01
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	1.0	K-40	2.22E+02	2.99E+01
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	1.0	TL-208	4.83E+00	1.59E+00
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	1.0	RA-226	2.12E+02	3.74E+01
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	1.0	BI-214	1.81E+01	4.18E+00
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	1.0	K-40	2.29E+02	3.09E+01
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	1.0	PB-212	7.85E+00	2.40E+00
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	1.0	PB-214	1.85E+01	4.06E+00
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	1.0	TL-208	3.59E+00	1.60E+00
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	1.0	TH-234	2.24E+02	5.56E+01
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1.0	RA-226	2.03E+02	3.68E+01
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1.0	TH-234	1.63E+02	4.70E+01
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1.0	K-40	4.18E+02	3.59E+01
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1.0	PB-212	1.05E+01	2.73E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1.0	AC-228	1.60E+01	5.60E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1.0	PB-214	1.33E+01	3.36E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1.0	BI-214	1.92E+01	3.42E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1.0	TL-208	5.02E+00	1.54E+00
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1.0	PB-212	1.18E+01	2.50E+00
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1.0	BI-214	1.69E+01	3.35E+00
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1.0	PB-212	1.53E+01	3.34E+00
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1.0	TH-234	1.91E+02	4.80E+01
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1.0	AC-228	5.89E+00	3.95E+00
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1.0	RA-226	1.52E+02	3.09E+01
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1.0	K-40	2.13E+02	2.67E+01
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1.0	TL-208	6.98E+00	1.65E+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	1/13/2012	1.0	RA-226	2.03E+02	4.42E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/13/2012	1.0	BI-214	1.94E+01	4.08E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/13/2012	1.0	BI-212	1.84E+01	1.21E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/13/2012	1.0	PB-212	1.61E+01	2.87E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/13/2012	1.0	K-40	4.40E+02	3.92E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/13/2012	1.0	PB-214	1.33E+01	3.95E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/13/2012	1.0	AC-228	1.79E+01	5.57E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/13/2012	1.0	TH-234	1.88E+02	5.10E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	1/13/2012	1.0	TL-208	7.70E+00	1.95E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/13/2012	1.0	PB-212	1.40E+01	2.77E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/13/2012	1.0	AC-228	1.32E+01	5.41E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/13/2012	1.0	RA-226	2.08E+02	4.03E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/13/2012	1.0	PB-214	1.31E+01	3.99E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/13/2012	1.0	TH-234	2.22E+02	6.11E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/13/2012	1.0	BI-214	1.59E+01	3.83E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/13/2012	1.0	K-40	4.10E+02	3.66E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	2/13/2012	1.0	TL-208	6.38E+00	1.98E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2012	1.0	AC-228	1.71E+01	5.80E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2012	1.0	TH-234	2.20E+02	6.15E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2012	1.0	K-40	4.17E+02	3.81E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2012	1.0	TL-208	5.91E+00	1.83E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2012	1.0	PB-212	1.33E+01	2.99E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2012	1.0	BI-214	1.57E+01	4.12E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2012	1.0	PB-214	1.17E+01	3.72E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	3/12/2012	1.0	RA-226	1.87E+02	4.15E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/12/2012	1.0	BI-214	1.32E+01	3.67E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/12/2012	1.0	PB-214	1.08E+01	4.07E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/12/2012	1.0	AC-228	2.10E+01	7.59E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/12/2012	1.0	TH-234	2.22E+02	5.67E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/12/2012	1.0	PB-212	1.01E+01	3.26E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/12/2012	1.0	TL-208	5.33E+00	1.64E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/12/2012	1.0	K-40	4.10E+02	3.80E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	4/12/2012	1.0	RA-226	1.97E+02	4.41E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/14/2012	1.0	RA-226	1.72E+02	4.35E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/14/2012	1.0	PB-214	1.59E+01	4.25E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/14/2012	1.0	K-40	4.13E+02	3.76E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/14/2012	1.0	PB-212	1.20E+01	3.28E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/14/2012	1.0	AC-228	1.76E+01	6.30E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/14/2012	1.0	BI-214	1.66E+01	3.56E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/14/2012	1.0	TL-208	5.73E+00	2.03E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	5/14/2012	1.0	TH-234	2.15E+02	5.63E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2012	1.0	K-40	4.38E+02	3.80E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2012	1.0	TL-208	6.52E+00	1.81E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2012	1.0	PB-212	1.39E+01	3.03E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2012	1.0	BI-214	1.56E+01	3.79E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2012	1.0	RA-226	2.02E+02	4.10E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2012	1.0	PB-214	1.35E+01	3.10E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2012	1.0	AC-228	1.28E+01	5.59E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	6/11/2012	1.0	TH-234	1.99E+02	6.12E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/12/2012	1.0	BI-214	1.88E+01	4.60E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/12/2012	1.0	AC-228	1.60E+01	6.21E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/12/2012	1.0	PB-212	1.54E+01	2.52E+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	7/12/2012	1.0	TL-208	5.80E+00	1.69E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/12/2012	1.0	RA-226	1.82E+02	4.08E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/12/2012	1.0	PB-214	1.04E+01	3.47E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/12/2012	1.0	K-40	4.37E+02	3.82E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	7/12/2012	1.0	TH-234	2.27E+02	6.17E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2012	1.0	BI-214	1.65E+01	3.77E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2012	1.0	AC-228	1.72E+01	5.63E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2012	1.0	K-40	4.01E+02	3.70E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2012	1.0	TL-208	5.28E+00	2.00E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2012	1.0	TH-234	2.51E+02	6.08E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2012	1.0	PB-214	1.44E+01	4.15E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2012	1.0	RA-226	1.91E+02	4.38E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	8/13/2012	1.0	PB-212	1.03E+01	3.28E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/10/2012	1.0	PB-212	1.06E+01	3.31E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/10/2012	1.0	K-40	4.59E+02	3.96E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/10/2012	1.0	RA-226	1.90E+02	4.17E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/10/2012	1.0	PB-214	1.57E+01	4.45E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/10/2012	1.0	TH-234	1.97E+02	6.09E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/10/2012	1.0	TL-208	5.41E+00	1.84E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/10/2012	1.0	BI-214	2.10E+01	3.60E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	9/10/2012	1.0	AC-228	2.30E+01	6.55E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/11/2012	1.0	RA-226	1.93E+02	3.79E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/11/2012	1.0	TL-208	5.89E+00	1.86E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/11/2012	1.0	PB-212	1.06E+01	3.00E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/11/2012	1.0	PB-214	1.33E+01	3.66E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/11/2012	1.0	AC-228	1.37E+01	5.93E+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	10/11/2012	1.0	TH-234	1.98E+02	6.28E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/11/2012	1.0	K-40	4.56E+02	4.14E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	10/11/2012	1.0	BI-214	1.59E+01	4.32E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2012	1.0	TH-234	2.20E+02	4.83E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2012	1.0	BI-212	1.44E+01	1.05E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2012	1.0	K-40	4.43E+02	3.71E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2012	1.0	TL-208	6.45E+00	1.61E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2012	1.0	PB-214	1.36E+01	3.32E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2012	1.0	BI-214	1.84E+01	3.37E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2012	1.0	AC-228	1.37E+01	4.60E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2012	1.0	PB-212	1.10E+01	2.77E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	11/12/2012	1.0	RA-226	2.05E+02	3.70E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/13/2012	1.0	RA-226	1.96E+02	3.75E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/13/2012	1.0	BI-214	1.77E+01	3.26E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/13/2012	1.0	PB-214	1.52E+01	3.36E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/13/2012	1.0	TH-234	1.82E+03	5.24E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/13/2012	1.0	PB-212	1.18E+01	2.64E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/13/2012	1.0	TL-208	5.93E+00	1.59E+00
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/13/2012	1.0	K-40	4.98E+02	4.09E+01
51	WATER TREATMENT BLDG AT HARRIS PLANT	12/13/2012	1.0	AC-228	2.05E+01	5.57E+00

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	2.0 MI NNW (GOODWIN) - RD 1167	1/31/2012	605.8	TL-208	2.02E-02	1.35E-02
55	2.0 MI NNW (GOODWIN) - RD 1167	1/31/2012	605.8	PB-212	5.26E-02	1.74E-02
55	2.0 MI NNW (GOODWIN) - RD 1167	1/31/2012	605.8	BI-214	6.89E-02	2.97E-02
55	2.0 MI NNW (GOODWIN) - RD 1167	1/31/2012	605.8	PB-214	4.29E-02	2.20E-02
55	2.0 MI NNW (GOODWIN) - RD 1167	1/31/2012	605.8	RA-226	2.92E-01	2.10E-01
55	2.0 MI NNW (GOODWIN) - RD 1167	1/31/2012	605.8	TH-234	6.86E-01	3.77E-01
55	2.0 MI NNW (GOODWIN) - RD 1167	1/31/2012	605.8	K-40	3.79E+00	4.65E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: EGGPLANT

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	552.3	K-40	3.14E+00	3.95E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	552.3	PB-212	2.19E-02	1.62E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	644.1	TL-208	2.28E-02	9.36E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	644.1	K-40	2.05E+00	2.88E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	644.1	PB-212	2.48E-02	1.43E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	644.1	BI-214	5.07E-02	2.34E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	644.1	RA-226	3.56E-01	1.92E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	644.1	TH-234	2.55E-01	2.82E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	644.1	PB-214	2.95E-02	2.17E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	844.1	RA-226	2.68E-01	1.72E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	844.1	TH-234	3.75E-01	2.03E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	844.1	PB-214	1.94E-02	1.76E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	844.1	BI-214	2.58E-02	1.67E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	844.1	PB-212	2.60E-02	1.03E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	844.1	TL-208	1.11E-02	6.68E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	9/11/2012	844.1	K-40	2.25E+00	2.62E-01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Media: TOMATOES

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	874.8	PB-212	1.97E-02	1.14E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	874.8	TH-234	2.66E-01	2.36E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	874.8	TL-208	1.20E-02	5.90E-03
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	874.8	BI-214	5.34E-02	1.94E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	874.8	PB-214	2.76E-02	1.67E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	874.8	RA-226	2.34E-01	1.71E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	874.8	K-40	3.29E+00	3.54E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	907.3	PB-212	3.70E-02	1.79E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	907.3	BI-214	3.82E-02	1.79E-02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	907.3	RA-226	1.66E-01	1.50E-01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/14/2012	907.3	K-40	2.87E+00	3.20E-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	5/1/2012	661.1	RA-226	5.84E-01	4.76E-01
44	SITE VARIES WITHIN HARRIS LAKE	5/1/2012	661.1	BI-214	4.79E-02	4.23E-02
44	SITE VARIES WITHIN HARRIS LAKE	5/1/2012	661.1	K-40	3.82E+00	6.38E-01
44	SITE VARIES WITHIN HARRIS LAKE	11/13/2012	722.7	PB-214	7.69E-02	3.96E-02
44	SITE VARIES WITHIN HARRIS LAKE	11/13/2012	722.7	BI-214	7.95E-02	4.17E-02
44	SITE VARIES WITHIN HARRIS LAKE	11/13/2012	722.7	K-40	3.98E+00	6.60E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/1/2012	804.6	BI-214	4.55E-02	3.16E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/1/2012	804.6	K-40	4.01E+00	6.08E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/12/2012	672.5	PB-214	9.31E-02	3.98E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/12/2012	672.5	BI-214	3.76E-02	3.13E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/12/2012	672.5	K-40	3.77E+00	6.52E-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	5/1/2012	653.7	K-40	3.46E+00	6.07E-01
44	SITE VARIES WITHIN HARRIS LAKE	5/1/2012	653.7	RA-226	3.74E-01	3.47E-01
44	SITE VARIES WITHIN HARRIS LAKE	5/1/2012	653.7	BI-214	5.26E-02	2.85E-02
44	SITE VARIES WITHIN HARRIS LAKE	11/13/2012	698.1	BI-214	5.21E-02	3.67E-02
44	SITE VARIES WITHIN HARRIS LAKE	11/13/2012	698.1	K-40	3.41E+00	6.01E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/1/2012	674.2	BI-214	1.20E-01	5.47E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	5/1/2012	674.2	K-40	3.90E+00	6.64E-01
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/12/2012	621.1	PB-214	6.44E-02	3.65E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/12/2012	621.1	BI-214	8.33E-02	4.32E-02
45	SITE VARIES ABOVE BUCKHORN DAM - CONTROL	11/12/2012	621.1	K-40	4.17E+00	6.86E-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
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	2/22/2012	1	TH-234	2.85E+02	1.10E+02
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	2/22/2012	1	RA-226	1.92E+02	7.52E+01
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	2/22/2012	1	PB-214	1.48E+01	6.94E+00
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	2/22/2012	1	BI-214	2.13E+01	7.98E+00
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	2/22/2012	1	PB-212	1.00E+01	5.89E+00
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	2/22/2012	1	K-40	2.58E+02	5.98E+01
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	2/22/2012	1	TL-208	5.68E+00	3.44E+00
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	5/30/2012	1	PB-212	1.22E+01	5.54E+00
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	5/30/2012	1	RA-226	1.70E+02	6.78E+01
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	5/30/2012	1	PB-214	2.51E+01	8.52E+00
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	5/30/2012	1	BI-214	2.80E+01	8.15E+00
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	5/30/2012	1	TH-234	3.35E+02	1.44E+02
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	5/30/2012	1	K-40	2.65E+02	6.21E+01
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	8/15/2012	1	RA-226	2.01E+02	7.38E+01
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	8/15/2012	1	TH-234	1.72E+02	1.19E+02
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	8/15/2012	1	BI-214	1.35E+01	7.13E+00
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	8/15/2012	1	K-40	2.21E+02	5.74E+01
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	8/15/2012	1	PB-214	2.20E+01	7.43E+00
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	8/15/2012	1	PB-212	1.78E+01	7.59E+00
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	11/7/2012	1	K-40	2.51E+02	4.87E+01
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	11/7/2012	1	BI-214	1.07E+01	6.38E+00
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	11/7/2012	1	RA-226	2.01E+02	5.98E+01
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	11/7/2012	1	TH-234	2.50E+02	9.63E+01
57	0.4 MI SSW - N SIDE AUX RES INTAKE CANAL	11/7/2012	1	PB-212	7.45E+00	4.80E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	2/23/2012	1	K-40	2.88E+02	5.55E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	2/23/2012	1	PB-214	1.42E+01	6.64E+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*
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	2/23/2012	1	PB-212	8.51E+00	7.29E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	2/23/2012	1	RA-226	1.57E+02	8.42E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	2/23/2012	1	TH-234	3.34E+02	1.29E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	2/23/2012	1	BI-214	1.04E+01	7.00E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	5/30/2012	1	BI-214	3.13E+01	9.39E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	5/30/2012	1	PB-214	2.30E+01	9.37E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	5/30/2012	1	RA-226	1.92E+02	7.18E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	5/30/2012	1	TH-234	2.28E+02	1.38E+02
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	5/30/2012	1	PB-212	1.18E+01	5.14E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	5/30/2012	1	TL-208	5.19E+00	3.34E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	5/30/2012	1	K-40	2.02E+02	5.07E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	8/15/2012	1	K-40	5.25E+02	7.32E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	8/15/2012	1	PB-214	1.09E+01	7.26E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	8/15/2012	1	PB-212	8.33E+00	5.45E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	8/15/2012	1	BI-214	1.67E+01	6.64E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	8/15/2012	1	RA-226	1.43E+02	9.00E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	11/8/2012	1	PB-212	7.78E+00	5.13E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	11/8/2012	1	TL-208	2.88E+00	2.62E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	11/8/2012	1	RA-226	2.36E+02	6.42E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	11/8/2012	1	PB-214	1.28E+01	5.34E+00
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	11/8/2012	1	TH-234	1.47E+02	8.56E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	11/8/2012	1	K-40	2.44E+02	4.73E+01
59	0.5 MI NNE (N SIDE OLD CONSTRUCTION RD)	11/8/2012	1	BI-214	1.48E+01	6.63E+00
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	2/23/2012	1	RA-226	2.58E+02	8.89E+01
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	2/23/2012	1	K-40	6.04E+02	7.98E+01
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	2/23/2012	1	PB-212	7.75E+00	5.07E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	2/23/2012	1	BI-214	7.72E+01	1.23E+01
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	2/23/2012	1	PB-214	6.90E+01	1.13E+01
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	5/31/2012	1	RA-226	1.19E+02	9.63E+01
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	5/31/2012	1	PB-214	4.02E+01	1.09E+01
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	5/31/2012	1	TH-234	2.59E+02	1.16E+02
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	5/31/2012	1	BI-214	3.82E+01	9.36E+00
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	5/31/2012	1	K-40	5.77E+02	8.29E+01
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	5/31/2012	1	PB-212	1.20E+01	6.81E+00
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	8/15/2012	1	TH-234	1.91E+02	1.08E+02
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	8/15/2012	1	PB-214	2.20E+01	9.81E+00
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	8/15/2012	1	K-40	2.67E+02	4.94E+01
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	8/15/2012	1	TL-208	4.79E+00	2.93E+00
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	8/15/2012	1	RA-226	2.08E+02	7.58E+01
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	8/15/2012	1	PB-212	6.27E+00	5.68E+00
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	8/15/2012	1	BI-214	2.27E+01	8.17E+00
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	11/8/2012	1	K-40	4.60E+02	6.42E+01
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	11/8/2012	1	TH-234	1.59E+02	1.02E+02
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	11/8/2012	1	PB-212	1.23E+01	5.87E+00
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	11/8/2012	1	BI-214	1.67E+01	7.09E+00
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	11/8/2012	1	RA-226	2.77E+02	7.88E+01
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	11/8/2012	1	TL-208	6.67E+00	3.09E+00
60	0.5 MI ESE (W BANK HARRIS LK SE OF CT)	11/8/2012	1	PB-214	1.40E+01	6.33E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	2/23/2012	1	PB-212	1.17E+01	5.64E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	2/23/2012	1	TL-208	6.43E+00	3.63E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	2/23/2012	1	BI-214	3.14E+01	8.20E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	2/23/2012	1	K-40	2.75E+02	5.85E+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.)	2/23/2012	1	PB-214	2.47E+01	7.93E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	2/23/2012	1	TH-234	1.95E+02	1.15E+02
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	2/23/2012	1	RA-226	2.58E+02	8.87E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	5/31/2012	1	BI-214	3.61E+01	8.24E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	5/31/2012	1	PB-212	1.89E+01	5.78E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	5/31/2012	1	TH-234	2.95E+02	1.43E+02
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	5/31/2012	1	PB-214	3.00E+01	9.15E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	5/31/2012	1	TL-208	5.37E+00	3.63E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	5/31/2012	1	K-40	4.61E+02	6.27E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	5/31/2012	1	RA-226	2.05E+02	1.03E+02
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	8/15/2012	1	K-40	4.17E+02	6.94E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	8/15/2012	1	PB-214	1.69E+01	7.83E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	8/15/2012	1	PB-212	1.22E+01	5.77E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	8/15/2012	1	RA-226	1.71E+02	9.49E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	8/15/2012	1	TH-234	2.25E+02	9.43E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	8/15/2012	1	BI-214	2.11E+01	8.16E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	11/8/2012	1	K-40	5.75E+02	7.47E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	11/8/2012	1	TL-208	5.86E+00	3.30E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	11/8/2012	1	RA-226	8.36E+01	7.83E+01
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	11/8/2012	1	PB-214	2.06E+01	7.31E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	11/8/2012	1	BI-214	1.28E+01	6.29E+00
68	0.2 MI W (N OF OLD STEAM GEN. STORAGE BLD.)	11/8/2012	1	PB-212	5.76E+00	5.73E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	2/23/2012	1	BI-214	2.30E+01	9.41E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	2/23/2012	1	RA-226	1.48E+02	8.46E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	2/23/2012	1	TH-234	2.89E+02	1.23E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	2/23/2012	1	PB-212	1.30E+01	6.41E+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
69	0.2 MI NNE (S SIDE OF WRHSE 9)	2/23/2012	1	K-40	4.78E+02	6.73E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	2/23/2012	1	TL-208	8.18E+00	3.33E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	2/23/2012	1	PB-214	1.49E+01	9.93E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	5/30/2012	1	PB-212	1.93E+01	6.45E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	5/30/2012	1	RA-226	2.50E+02	8.26E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	5/30/2012	1	TL-208	8.86E+00	3.07E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	5/30/2012	1	BI-214	2.46E+01	7.97E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	5/30/2012	1	K-40	4.59E+02	7.17E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	5/30/2012	1	PB-214	2.24E+01	8.56E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	5/30/2012	1	TH-234	2.52E+02	1.38E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	8/15/2012	1	TL-208	4.65E+00	4.42E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	8/15/2012	1	BI-214	3.00E+01	9.11E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	8/15/2012	1	PB-214	2.85E+01	9.73E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	8/15/2012	1	RA-226	1.85E+02	7.07E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	8/15/2012	1	TH-234	2.70E+02	1.27E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	8/15/2012	1	K-40	2.67E+02	5.45E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	8/15/2012	1	PB-212	9.20E+00	5.61E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	11/8/2012	1	TH-234	2.05E+02	1.22E+02
69	0.2 MI NNE (S SIDE OF WRHSE 9)	11/8/2012	1	PB-214	1.32E+01	7.47E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	11/8/2012	1	K-40	5.81E+02	7.51E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	11/8/2012	1	RA-226	1.28E+02	8.47E+01
69	0.2 MI NNE (S SIDE OF WRHSE 9)	11/8/2012	1	BI-214	2.21E+01	7.06E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	11/8/2012	1	PB-212	1.08E+01	5.95E+00
69	0.2 MI NNE (S SIDE OF WRHSE 9)	11/8/2012	1	TL-208	5.51E+00	3.40E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	2/23/2012	1	TL-208	4.29E+00	4.16E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	2/23/2012	1	RA-226	2.14E+02	7.93E+01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		Sample Date	Quantity	Isotope	Activity	2 Sigma Error
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	2/23/2012	1	TH-234	2.96E+02	1.39E+02
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	2/23/2012	1	PB-212	1.24E+01	6.93E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	2/23/2012	1	K-40	2.73E+02	5.34E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	2/23/2012	1	BI-214	1.53E+01	8.14E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	2/23/2012	1	PB-214	1.23E+01	7.17E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	5/31/2012	1	PB-214	2.57E+01	9.46E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	5/31/2012	1	K-40	2.45E+02	5.10E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	5/31/2012	1	TL-208	6.61E+00	3.70E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	5/31/2012	1	TH-234	1.91E+02	1.16E+02
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	5/31/2012	1	BI-214	2.86E+01	7.72E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	5/31/2012	1	RA-226	1.99E+02	7.35E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	5/31/2012	1	PB-212	1.35E+01	5.71E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	8/20/2012	1	K-40	2.85E+02	4.94E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	8/20/2012	1	RA-226	1.87E+02	8.02E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	8/20/2012	1	PB-214	1.85E+01	1.05E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	8/20/2012	1	BI-214	2.15E+01	9.14E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	8/20/2012	1	PB-212	1.24E+01	5.52E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	8/20/2012	1	TH-234	2.76E+02	1.48E+02
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	8/20/2012	1	TL-208	5.62E+00	3.70E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	11/8/2012	1	RA-226	1.95E+02	6.66E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	11/8/2012	1	TH-234	2.59E+02	9.82E+01
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	11/8/2012	1	TL-208	5.66E+00	3.03E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	11/8/2012	1	PB-212	9.44E+00	4.75E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	11/8/2012	1	BI-214	3.06E+01	7.61E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	11/8/2012	1	PB-214	2.46E+01	7.03E+00
70	0.4 MI E (N SIDE OF PLANT ENTRANCE RD)	11/8/2012	1	K-40	2.21E+02	4.51E+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*
71	0.3 MI SE (S OF SWITCH YARD)	2/23/2012	1	TH-234	2.91E+02	1.43E+01
71	0.3 MI SE (S OF SWITCH YARD)	2/23/2012	1	BI-214	1.05E+01	8.39E+00
71	0.3 MI SE (S OF SWITCH YARD)	2/23/2012	1	PB-212	1.18E+01	8.31E+00
71	0.3 MI SE (S OF SWITCH YARD)	2/23/2012	1	K-40	4.42E+02	7.43E+01
71	0.3 MI SE (S OF SWITCH YARD)	5/31/2012	1	PB-214	2.14E+01	8.05E+00
71	0.3 MI SE (S OF SWITCH YARD)	5/31/2012	1	TH-234	2.80E+02	1.64E+02
71	0.3 MI SE (S OF SWITCH YARD)	5/31/2012	1	RA-226	1.61E+01	8.58E+00
71	0.3 MI SE (S OF SWITCH YARD)	5/31/2012	1	K-40	4.33E+02	6.89E+01
71	0.3 MI SE (S OF SWITCH YARD)	5/31/2012	1	PB-212	1.62E+01	5.73E+00
71	0.3 MI SE (S OF SWITCH YARD)	5/31/2012	1	BI-214	2.73E+01	9.00E+00
71	0.3 MI SE (S OF SWITCH YARD)	8/16/2012	1	PB-214	3.54E+01	8.70E+00
71	0.3 MI SE (S OF SWITCH YARD)	8/16/2012	1	BI-214	4.81E+01	9.36E+00
71	0.3 MI SE (S OF SWITCH YARD)	8/16/2012	1	K-40	2.59E+02	5.55E+01
71	0.3 MI SE (S OF SWITCH YARD)	8/16/2012	1	PB-212	6.40E+00	5.91E+00
71	0.3 MI SE (S OF SWITCH YARD)	8/16/2012	1	RA-226	1.59E+02	8.21E+01
71	0.3 MI SE (S OF SWITCH YARD)	8/16/2012	1	TH-234	1.62E+02	1.17E+02
71	0.3 MI SE (S OF SWITCH YARD)	11/8/2012	1	PB-214	2.28E+01	6.43E+00
71	0.3 MI SE (S OF SWITCH YARD)	11/8/2012	1	PB-212	1.39E+01	5.86E+00
71	0.3 MI SE (S OF SWITCH YARD)	11/8/2012	1	BI-214	2.23E+01	6.91E+00
71	0.3 MI SE (S OF SWITCH YARD)	11/8/2012	1	TH-234	2.07E+02	9.90E+01
71	0.3 MI SE (S OF SWITCH YARD)	11/8/2012	1	RA-226	1.64E+02	7.85E+01
71	0.3 MI SE (S OF SWITCH YARD)	11/8/2012	1	TL-208	5.40E+00	3.15E+00
71	0.3 MI SE (S OF SWITCH YARD)	11/8/2012	1	K-40	5.19E+02	6.87E+01
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	2/23/2012	1	BI-214	3.18E+02	3.33E+01
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	2/23/2012	1	TH-234	3.37E+02	1.75E+02
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	2/23/2012	1	PB-214	3.51E+02	3.30E+01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	2/23/2012	1	K-40	2.01E+02	6.78E+01
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	2/23/2012	1	RA-226	2.26E+02	9.73E+01
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	2/23/2012	1	PB-212	1.19E+01	3.64E+00
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	5/31/2012	1	RA-226	1.74E+02	8.95E+01
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	5/31/2012	1	PB-214	2.24E+02	1.91E+01
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	5/31/2012	1	K-40	2.80E+02	6.17E+01
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	5/31/2012	1	BI-214	2.13E+02	2.02E+01
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	5/31/2012	1	TH-234	2.19E+02	1.76E+02
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	8/15/2012	1	BI-214	7.24E+02	5.18E+01
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	8/15/2012	1	K-40	5.94E+02	9.27E+01
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	8/15/2012	1	PB-214	7.40E+02	4.91E+01
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	11/8/2012	1	K-40	2.39E+02	5.63E+01
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	11/8/2012	1	PB-212	1.31E+01	4.32E+00
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	11/8/2012	1	PB-214	6.48E+02	4.01E+01
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	11/8/2012	1	BI-214	6.21E+02	4.56E+01
72	0.2 MI SE (N CTMAKEUP WATER INTAKE STRUCTURE)	11/8/2012	1	RA-226	1.73E+02	1.07E+02
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	2/22/2012	1	PB-212	9.70E+00	6.78E+00
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	2/22/2012	1	BI-214	1.65E+01	1.17E+01
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	2/22/2012	1	RA-226	1.34E+02	9.49E+01
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	2/22/2012	1	K-40	5.53E+02	7.76E+01
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	2/22/2012	1	PB-214	1.31E+01	8.28E+00
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	5/28/2012	1	PB-212	7.60E+00	6.34E+00
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	5/28/2012	1	RA-226	1.70E+02	9.34E+01
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	5/28/2012	1	PB-214	2.64E+01	1.06E+01
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	5/28/2012	1	BI-214	2.36E+01	8.13E+00
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	5/28/2012	1	K-40	6.13E+02	7.85E+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*
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	8/15/2012	1	K-40	2.35E+02	4.40E+01
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	8/15/2012	1	PB-212	1.27E+01	5.06E+00
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	8/15/2012	1	BI-214	6.58E+01	1.21E+01
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	8/15/2012	1	PB-214	6.37E+01	1.09E+01
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	8/15/2012	1	RA-226	1.74E+02	7.84E+01
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	8/15/2012	1	TH-234	2.36E+02	1.28E+02
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	11/8/2012	1	BI-214	3.29E+01	7.53E+00
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	11/8/2012	1	PB-214	3.69E+01	8.30E+00
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	11/8/2012	1	K-40	5.98E+02	7.46E+01
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	11/8/2012	1	RA-226	1.07E+02	8.46E+01
73	0.2 MI S (N OF EMERG SRV WATER SCREENING STRUCT	11/8/2012	1	TH-234	1.22E+02	1.18E+02
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	2/23/2012	1	K-40	4.46E+02	6.34E+01
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	2/23/2012	1	PB-212	2.24E+01	6.26E+00
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	2/23/2012	1	TL-208	1.20E+01	4.04E+00
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	2/23/2012	1	PB-214	1.85E+01	8.98E+00
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	2/23/2012	1	TH-234	2.31E+02	1.21E+02
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	2/23/2012	1	RA-226	2.21E+02	1.00E+02
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	2/23/2012	1	BI-214	2.69E+01	7.38E+00
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	5/31/2012	1	PB-214	3.28E+01	8.84E+00
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	5/31/2012	1	K-40	5.64E+02	7.77E+01
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	5/31/2012	1	TL-208	5.79E+00	3.18E+00
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	5/31/2012	1	RA-226	1.11E+02	9.68E+01
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	5/31/2012	1	BI-214	3.28E+01	1.10E+01
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	5/31/2012	1	PB-212	1.32E+01	6.21E+00
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	8/15/2012	1	BI-214	2.39E+01	1.12E+01
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	8/15/2012	1	PB-214	2.05E+01	1.03E+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*
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	8/15/2012	1	PB-212	1.34E+01	6.60E+00
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	8/15/2012	1	TH-234	1.99E+02	1.15E+02
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	8/15/2012	1	K-40	4.69E+02	6.77E+01
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	8/15/2012	1	TL-208	7.38E+00	4.11E+00
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	8/15/2012	1	RA-226	2.03E+02	7.91E+01
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	8/15/2012	1	AC-228	2.45E+01	1.26E+01
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	11/8/2012	1	RA-226	1.85E+02	6.95E+01
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	11/8/2012	1	BI-214	2.65E+01	7.18E+00
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	11/8/2012	1	K-40	2.59E+02	4.97E+01
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	11/8/2012	1	PB-214	3.11E+01	7.75E+00
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	11/8/2012	1	PB-212	8.80E+00	5.17E+00
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	11/8/2012	1	TL-208	4.05E+00	3.03E+00
74	0.2 MI SSE (N HELICOPTER LANDING PAD)	11/8/2012	1	TH-234	1.84E+02	9.50E+01
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	2/23/2012	1	RA-226	2.02E+02	7.94E+01
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	2/23/2012	1	K-40	2.59E+02	5.53E+01
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	2/23/2012	1	PB-212	6.73E+00	4.88E+00
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	2/23/2012	1	PB-214	1.14E+01	7.37E+00
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	2/23/2012	1	TL-208	3.54E+00	3.45E+00
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	2/23/2012	1	BI-214	1.40E+01	8.75E+00
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	5/31/2012	1	BI-214	2.07E+01	9.60E+00
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	5/31/2012	1	PB-212	8.94E+00	4.11E+00
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	5/31/2012	1	TH-234	2.35E+02	1.29E+02
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	5/31/2012	1	PB-214	2.23E+01	7.95E+00
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	5/31/2012	1	TL-208	4.92E+00	3.73E+00
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	5/31/2012	1	K-40	2.83E+02	5.34E+01
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	5/31/2012	1	RA-226	2.22E+02	6.96E+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*
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	8/16/2012	1	RA-226	1.22E+02	8.01E+01
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	8/16/2012	1	BI-214	1.30E+01	8.50E+00
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	8/16/2012	1	PB-212	7.77E+00	4.73E+00
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	8/16/2012	1	K-40	4.72E+02	7.23E+01
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	11/8/2012	1	K-40	4.86E+02	6.51E+01
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	11/8/2012	1	TL-208	8.52E+00	3.17E+00
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	11/8/2012	1	BI-214	2.36E+01	7.45E+00
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	11/8/2012	1	PB-214	2.09E+01	7.12E+00
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	11/8/2012	1	PB-212	1.77E+01	6.29E+00
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	11/8/2012	1	RA-226	2.08E+02	7.18E+01
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	11/8/2012	1	AC-228	1.41E+01	1.08E+01
75	0.1 MI ESE (W OF SECURITY BLDG ENTRANCE)	11/8/2012	1	TH-234	2.26E+02	1.01E+02
76	0.1 MI S (INSD OCA BETWN SB & WPB)	2/23/2012	1	TH-234	2.23E+02	1.35E+02
76	0.1 MI S (INSD OCA BETWN SB & WPB)	2/23/2012	1	BI-214	4.59E+01	9.48E+00
76	0.1 MI S (INSD OCA BETWN SB & WPB)	2/23/2012	1	K-40	5.42E+02	7.59E+01
76	0.1 MI S (INSD OCA BETWN SB & WPB)	2/23/2012	1	RA-226	1.87E+02	9.28E+01
76	0.1 MI S (INSD OCA BETWN SB & WPB)	2/23/2012	1	PB-214	4.45E+01	1.15E+01
76	0.1 MI S (INSD OCA BETWN SB & WPB)	5/31/2012	1	PB-212	5.34E+00	6.39E+00
76	0.1 MI S (INSD OCA BETWN SB & WPB)	5/31/2012	1	RA-226	8.29E+01	7.82E+01
76	0.1 MI S (INSD OCA BETWN SB & WPB)	5/31/2012	1	BI-214	2.92E+01	9.36E+00
76	0.1 MI S (INSD OCA BETWN SB & WPB)	5/31/2012	1	PB-214	2.89E+01	1.03E+01
76	0.1 MI S (INSD OCA BETWN SB & WPB)	5/31/2012	1	K-40	5.58E+02	7.11E+01
76	0.1 MI S (INSD OCA BETWN SB & WPB)	8/20/2012	1	TH-234	1.53E+02	1.45E+02
76	0.1 MI S (INSD OCA BETWN SB & WPB)	8/20/2012	1	PB-214	4.96E+01	1.04E+01
76	0.1 MI S (INSD OCA BETWN SB & WPB)	8/20/2012	1	PB-212	5.53E+00	4.81E+00
76	0.1 MI S (INSD OCA BETWN SB & WPB)	8/20/2012	1	BI-214	5.83E+01	9.71E+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
76	0.1 MI S (INSD OCA BETWN SB & WPB)	8/20/2012	1	K-40	5.69E+02	7.84E+01
76	0.1 MI S (INSD OCA BETWN SB & WPB)	8/20/2012	1	RA-226	1.03E+02	9.53E+01
76	0.1 MI S (INSD OCA BETWN SB & WPB)	11/8/2012	1	PB-212	1.21E+01	7.53E+00
76	0.1 MI S (INSD OCA BETWN SB & WPB)	11/8/2012	1	RA-226	2.33E+02	6.41E+01
76	0.1 MI S (INSD OCA BETWN SB & WPB)	11/8/2012	1	K-40	2.16E+02	4.92E+01
76	0.1 MI S (INSD OCA BETWN SB & WPB)	11/8/2012	1	BI-214	5.99E+01	8.81E+00
76	0.1 MI S (INSD OCA BETWN SB & WPB)	11/8/2012	1	TH-234	2.69E+02	1.06E+02
76	0.1 MI S (INSD OCA BETWN SB & WPB)	11/8/2012	1	PB-214	5.57E+01	9.18E+00
77	0.4 MI S - BD-MW 1	2/23/2012	1	PB-212	1.26E+01	5.25E+00
77	0.4 MI S - BD-MW 1	2/23/2012	1	BI-214	2.67E+01	7.88E+00
77	0.4 MI S - BD-MW 1	2/23/2012	1	PB-214	2.92E+01	8.31E+00
77	0.4 MI S - BD-MW 1	2/23/2012	1	RA-226	2.40E+02	8.59E+01
77	0.4 MI S - BD-MW 1	2/23/2012	1	TH-234	3.26E+02	1.25E+02
77	0.4 MI S - BD-MW 1	2/23/2012	1	TL-208	4.11E+00	3.70E+00
77	0.4 MI S - BD-MW 1	2/23/2012	1	K-40	2.43E+02	5.73E+01
77	0.4 MI S - BD-MW 1	5/31/2012	1	PB-212	1.60E+01	4.86E+00
77	0.4 MI S - BD-MW 1	5/31/2012	1	BI-214	3.72E+01	1.02E+01
77	0.4 MI S - BD-MW 1	5/31/2012	1	PB-214	2.20E+01	7.79E+00
77	0.4 MI S - BD-MW 1	5/31/2012	1	K-40	2.78E+02	5.30E+01
77	0.4 MI S - BD-MW 1	5/31/2012	1	RA-226	2.03E+02	7.14E+01
77	0.4 MI S - BD-MW 1	5/31/2012	1	TH-234	2.04E+02	1.15E+02
77	0.4 MI S - BD-MW 1	8/16/2012	1	TH-234	3.30E+02	1.49E+02
77	0.4 MI S - BD-MW 1	8/16/2012	1	BI-214	1.68E+01	7.50E+00
77	0.4 MI S - BD-MW 1	8/16/2012	1	PB-212	8.76E+00	5.10E+00
77	0.4 MI S - BD-MW 1	8/16/2012	1	K-40	2.19E+02	4.80E+01
77	0.4 MI S - BD-MW 1	8/16/2012	1	PB-214	1.09E+01	7.44E+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*
77	0.4 MI S - BD-MW 1	8/16/2012	1	RA-226	2.05E+02	9.13E+01
77	0.4 MI S - BD-MW 1	11/7/2012	1	PB-212	4.66E+00	4.81E+00
77	0.4 MI S - BD-MW 1	11/7/2012	1	BI-214	1.37E+01	5.66E+00
77	0.4 MI S - BD-MW 1	11/7/2012	1	RA-226	1.13E+02	7.61E+01
77	0.4 MI S - BD-MW 1	11/7/2012	1	TH-234	1.65E+02	1.26E+02
77	0.4 MI S - BD-MW 1	11/7/2012	1	K-40	5.44E+02	7.03E+01
77	0.4 MI S - BD-MW 1	11/7/2012	1	TL-208	2.66E+00	2.32E+00
78	0.5 MI S - BD-MW 2	2/22/2012	1	K-40	2.49E+02	5.85E+01
78	0.5 MI S - BD-MW 2	2/22/2012	1	BI-212	4.39E+01	3.12E+01
78	0.5 MI S - BD-MW 2	2/22/2012	1	TL-208	1.40E+01	5.58E+00
78	0.5 MI S - BD-MW 2	2/22/2012	1	RA-226	2.71E+02	1.35E+02
78	0.5 MI S - BD-MW 2	2/22/2012	1	PB-214	4.33E+02	3.99E+01
78	0.5 MI S - BD-MW 2	2/22/2012	1	BI-214	4.16E+02	4.18E+01
78	0.5 MI S - BD-MW 2	2/22/2012	1	AC-228	2.74E+01	1.34E+01
78	0.5 MI S - BD-MW 2	2/22/2012	1	TH-234	3.59E+02	1.79E+02
78	0.5 MI S - BD-MW 2	2/22/2012	1	PB-212	2.90E+01	7.13E+00
78	0.5 MI S - BD-MW 2	5/28/2012	1	K-40	2.46E+02	5.76E+01
78	0.5 MI S - BD-MW 2	5/28/2012	1	PB-212	1.31E+01	4.49E+00
78	0.5 MI S - BD-MW 2	5/28/2012	1	TH-234	2.32E+02	1.34E+02
78	0.5 MI S - BD-MW 2	5/28/2012	1	PB-214	3.91E+01	8.71E+00
78	0.5 MI S - BD-MW 2	5/28/2012	1	TL-208	8.91E+00	3.88E+00
78	0.5 MI S - BD-MW 2	5/28/2012	1	BI-214	4.26E+01	1.11E+01
78	0.5 MI S - BD-MW 2	5/28/2012	1	RA-226	1.62E+02	7.36E+01
78	0.5 MI S - BD-MW 2	8/16/2012	1	RA-226	2.77E+02	9.72E+01
78	0.5 MI S - BD-MW 2	8/16/2012	1	TH-234	3.03E+02	1.39E+02
78	0.5 MI S - BD-MW 2	8/16/2012	1	K-40	4.09E+02	7.95E+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*
78	0.5 MI S - BD-MW 2	8/16/2012	1	TL-208	9.10E+00	4.62E+00
78	0.5 MI S - BD-MW 2	8/16/2012	1	PB-212	2.63E+01	6.26E+00
78	0.5 MI S - BD-MW 2	8/16/2012	1	BI-214	6.87E+01	1.07E+01
78	0.5 MI S - BD-MW 2	8/16/2012	1	PB-214	6.62E+01	1.05E+01
78	0.5 MI S - BD-MW 2	11/7/2012	1	TL-208	3.01E+00	2.82E+00
78	0.5 MI S - BD-MW 2	11/7/2012	1	RA-226	2.22E+02	6.46E+01
78	0.5 MI S - BD-MW 2	11/7/2012	1	TH-234	1.70E+02	1.00E+02
78	0.5 MI S - BD-MW 2	11/7/2012	1	PB-214	3.36E+01	7.14E+00
78	0.5 MI S - BD-MW 2	11/7/2012	1	BI-214	2.97E+01	7.02E+00
78	0.5 MI S - BD-MW 2	11/7/2012	1	PB-212	1.41E+01	7.75E+00
78	0.5 MI S - BD-MW 2	11/7/2012	1	K-40	2.62E+02	4.94E+01
79	0.5 MI S - BD-MW 3	2/22/2012	1	K-40	4.38E+02	6.72E+01
79	0.5 MI S - BD-MW 3	2/22/2012	1	TH-234	2.27E+02	1.18E+02
79	0.5 MI S - BD-MW 3	2/22/2012	1	RA-226	2.47E+02	8.61E+01
79	0.5 MI S - BD-MW 3	2/22/2012	1	PB-214	2.32E+01	8.48E+00
79	0.5 MI S - BD-MW 3	2/22/2012	1	BI-214	2.90E+01	7.72E+00
79	0.5 MI S - BD-MW 3	2/22/2012	1	PB-212	1.35E+01	5.70E+00
79	0.5 MI S - BD-MW 3	5/28/2012	1	RA-226	2.51E+02	9.03E+01
79	0.5 MI S - BD-MW 3	5/28/2012	1	PB-214	1.19E+01	5.83E+00
79	0.5 MI S - BD-MW 3	5/28/2012	1	PB-212	8.82E+00	4.98E+00
79	0.5 MI S - BD-MW 3	5/28/2012	1	TH-234	3.18E+02	1.21E+02
79	0.5 MI S - BD-MW 3	5/28/2012	1	BI-214	1.32E+01	6.13E+00
79	0.5 MI S - BD-MW 3	5/28/2012	1	K-40	2.42E+02	4.77E+01
79	0.5 MI S - BD-MW 3	8/16/2012	1	PB-214	3.18E+01	9.74E+00
79	0.5 MI S - BD-MW 3	8/16/2012	1	TH-234	2.51E+02	1.28E+02
79	0.5 MI S - BD-MW 3	8/16/2012	1	PB-212	8.81E+00	4.67E+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
79	0.5 MI S - BD-MW 3	8/16/2012	1	RA-226	2.29E+02	8.73E+01
79	0.5 MI S - BD-MW 3	8/16/2012	1	BI-214	3.99E+01	9.07E+00
79	0.5 MI S - BD-MW 3	8/16/2012	1	K-40	2.35E+02	5.53E+01
79	0.5 MI S - BD-MW 3	11/7/2012	1	TH-234	1.93E+02	1.01E+02
79	0.5 MI S - BD-MW 3	11/7/2012	1	AC-228	1.56E+01	1.06E+01
79	0.5 MI S - BD-MW 3	11/7/2012	1	RA-226	1.70E+02	7.56E+01
79	0.5 MI S - BD-MW 3	11/7/2012	1	PB-214	1.31E+01	6.73E+00
79	0.5 MI S - BD-MW 3	11/7/2012	1	BI-214	2.17E+01	6.91E+00
79	0.5 MI S - BD-MW 3	11/7/2012	1	PB-212	1.17E+01	5.66E+00
79	0.5 MI S - BD-MW 3	11/7/2012	1	K-40	3.96E+02	5.75E+01
79	0.5 MI S - BD-MW 3	11/7/2012	1	TL-208	2.92E+00	2.79E+00
80	0.6 MI S - BD-MW 5	2/22/2012	1	TL-208	7.17E+00	4.05E+00
80	0.6 MI S - BD-MW 5	2/22/2012	1	TH-234	2.16E+02	1.33E+02
80	0.6 MI S - BD-MW 5	2/22/2012	1	BI-214	3.54E+01	9.16E+00
80	0.6 MI S - BD-MW 5	2/22/2012	1	K-40	2.39E+02	5.26E+01
80	0.6 MI S - BD-MW 5	2/22/2012	1	PB-212	1.82E+01	5.30E+00
80	0.6 MI S - BD-MW 5	2/22/2012	1	RA-226	1.93E+02	8.06E+01
80	0.6 MI S - BD-MW 5	2/22/2012	1	PB-214	2.72E+01	8.83E+00
80	0.6 MI S - BD-MW 5	5/28/2012	1	PB-214	4.42E+01	9.98E+00
80	0.6 MI S - BD-MW 5	5/28/2012	1	RA-226	1.74E+02	8.10E+01
80	0.6 MI S - BD-MW 5	5/28/2012	1	BI-214	5.32E+01	1.00E+01
80	0.6 MI S - BD-MW 5	5/28/2012	1	PB-212	1.76E+01	6.31E+00
80	0.6 MI S - BD-MW 5	5/28/2012	1	K-40	2.65E+02	5.33E+01
80	0.6 MI S - BD-MW 5	5/28/2012	1	TH-234	2.70E+02	1.42E+02
80	0.6 MI S - BD-MW 5	8/16/2012	1	PB-212	6.34E+00	6.13E+00
80	0.6 MI S - BD-MW 5	8/16/2012	1	BI-214	2.58E+01	9.65E+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
80	0.6 MI S - BD-MW 5	8/16/2012	1	RA-226	1.87E+02	9.07E+01
80	0.6 MI S - BD-MW 5	8/16/2012	1	K-40	4.93E+02	6.95E+01
80	0.6 MI S - BD-MW 5	11/7/2012	1	PB-214	2.10E+01	6.78E+00
80	0.6 MI S - BD-MW 5	11/7/2012	1	K-40	2.58E+02	5.08E+01
80	0.6 MI S - BD-MW 5	11/7/2012	1	RA-226	1.72E+02	6.51E+01
80	0.6 MI S - BD-MW 5	11/7/2012	1	TH-234	1.40E+02	1.00E+02
80	0.6 MI S - BD-MW 5	11/7/2012	1	BI-214	1.59E+01	6.11E+00
81	0.6 MI S - BD-MW 7	2/22/2012	1	TH-234	1.31E+02	1.29E+02
81	0.6 MI S - BD-MW 7	2/22/2012	1	PB-212	1.29E+01	5.64E+00
81	0.6 MI S - BD-MW 7	2/22/2012	1	K-40	5.18E+02	8.13E+01
81	0.6 MI S - BD-MW 7	2/22/2012	1	RA-226	1.41E+02	8.78E+01
81	0.6 MI S - BD-MW 7	2/22/2012	1	BI-214	2.01E+01	8.17E+00
81	0.6 MI S - BD-MW 7	2/22/2012	1	PB-214	2.63E+01	1.01E+01
81	0.6 MI S - BD-MW 7	5/28/2012	1	TL-208	9.12E+00	3.40E+00
81	0.6 MI S - BD-MW 7	5/28/2012	1	TH-234	1.90E+02	1.22E+02
81	0.6 MI S - BD-MW 7	5/28/2012	1	AC-228	1.99E+01	1.43E+01
81	0.6 MI S - BD-MW 7	5/28/2012	1	RA-226	2.49E+02	1.16E+02
81	0.6 MI S - BD-MW 7	5/28/2012	1	PB-214	1.96E+01	9.40E+00
81	0.6 MI S - BD-MW 7	5/28/2012	1	PB-212	1.93E+01	6.20E+00
81	0.6 MI S - BD-MW 7	5/28/2012	1	BI-214	2.76E+01	8.63E+00
81	0.6 MI S - BD-MW 7	5/28/2012	1	K-40	5.38E+02	7.67E+01
81	0.6 MI S - BD-MW 7	8/16/2012	1	TH-234	3.36E+02	1.60E+02
81	0.6 MI S - BD-MW 7	8/16/2012	1	PB-212	8.21E+00	5.23E+00
81	0.6 MI S - BD-MW 7	8/16/2012	1	K-40	2.26E+02	4.47E+01
81	0.6 MI S - BD-MW 7	8/16/2012	1	RA-226	1.86E+02	7.45E+01
81	0.6 MI S - BD-MW 7	8/16/2012	1	PB-214	4.99E+01	1.08E+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*
81	0.6 MI S - BD-MW 7	8/16/2012	1	BI-214	5.68E+01	1.14E+01
81	0.6 MI S - BD-MW 7	8/16/2012	1	TL-208	6.14E+00	2.68E+00
81	0.6 MI S - BD-MW 7	11/7/2012	1	BI-214	1.79E+01	6.85E+00
81	0.6 MI S - BD-MW 7	11/7/2012	1	PB-214	1.62E+01	7.92E+00
81	0.6 MI S - BD-MW 7	11/7/2012	1	RA-226	1.86E+02	8.35E+01
81	0.6 MI S - BD-MW 7	11/7/2012	1	K-40	5.11E+02	6.78E+01
82	0.6 MI S - BD-MW 8	2/22/2012	1	RA-226	2.02E+02	7.12E+01
82	0.6 MI S - BD-MW 8	2/22/2012	1	PB-214	1.07E+02	1.50E+01
82	0.6 MI S - BD-MW 8	2/22/2012	1	TH-234	3.28E+02	1.44E+02
82	0.6 MI S - BD-MW 8	2/22/2012	1	K-40	2.49E+02	5.95E+01
82	0.6 MI S - BD-MW 8	2/22/2012	1	BI-214	1.22E+02	1.56E+01
82	0.6 MI S - BD-MW 8	2/22/2012	1	PB-212	1.72E+01	5.59E+00
82	0.6 MI S - BD-MW 8	5/28/2012	1	BI-214	3.16E+01	9.09E+00
82	0.6 MI S - BD-MW 8	5/28/2012	1	RA-226	1.32E+02	7.48E+01
82	0.6 MI S - BD-MW 8	5/28/2012	1	PB-212	6.73E+00	5.59E+00
82	0.6 MI S - BD-MW 8	5/28/2012	1	PB-214	1.27E+01	8.62E+00
82	0.6 MI S - BD-MW 8	5/28/2012	1	K-40	6.21E+02	7.77E+01
82	0.6 MI S - BD-MW 8	8/16/2012	1	K-40	4.07E+02	6.38E+01
82	0.6 MI S - BD-MW 8	8/16/2012	1	RA-226	1.94E+02	9.29E+01
82	0.6 MI S - BD-MW 8	8/16/2012	1	PB-214	4.27E+01	1.15E+01
82	0.6 MI S - BD-MW 8	8/16/2012	1	PB-212	1.23E+01	7.93E+00
82	0.6 MI S - BD-MW 8	8/16/2012	1	BI-214	5.96E+01	9.83E+00
82	0.6 MI S - BD-MW 8	8/16/2012	1	TH-234	1.68E+02	1.46E+02
82	0.6 MI S - BD-MW 8	11/7/2012	1	PB-214	2.53E+01	6.82E+00
82	0.6 MI S - BD-MW 8	11/7/2012	1	TH-234	1.34E+02	9.92E+01
82	0.6 MI S - BD-MW 8	11/7/2012	1	PB-212	7.16E+00	4.66E+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*
82	0.6 MI S - BD-MW 8	11/7/2012	1	K-40	2.08E+02	4.89E+01
82	0.6 MI S - BD-MW 8	11/7/2012	1	RA-226	1.93E+02	6.34E+01
82	0.6 MI S - BD-MW 8	11/7/2012	1	BI-214	2.28E+01	6.98E+00
83	1.6 MI SSW - BD-MW 16	2/22/2012	1	K-40	5.44E+02	6.82E+01
83	1.6 MI SSW - BD-MW 16	2/22/2012	1	RA-226	2.06E+02	1.04E+02
83	1.6 MI SSW - BD-MW 16	2/22/2012	1	TH-234	3.93E+02	1.52E+02
83	1.6 MI SSW - BD-MW 16	2/22/2012	1	BI-214	1.43E+02	1.55E+01
83	1.6 MI SSW - BD-MW 16	2/22/2012	1	PB-212	1.63E+01	6.83E+00
83	1.6 MI SSW - BD-MW 16	2/22/2012	1	TL-208	5.22E+00	4.00E+00
83	1.6 MI SSW - BD-MW 16	2/22/2012	1	PB-214	1.48E+02	1.58E+01
83	1.6 MI SSW - BD-MW 16	5/28/2012	1	BI-214	5.85E+01	1.05E+01
83	1.6 MI SSW - BD-MW 16	5/28/2012	1	PB-212	9.71E+00	4.96E+00
83	1.6 MI SSW - BD-MW 16	5/28/2012	1	PB-214	6.42E+01	1.11E+01
83	1.6 MI SSW - BD-MW 16	5/28/2012	1	RA-226	1.61E+02	6.71E+01
83	1.6 MI SSW - BD-MW 16	5/28/2012	1	TH-234	1.45E+02	1.23E+02
83	1.6 MI SSW - BD-MW 16	5/28/2012	1	K-40	2.39E+02	6.00E+01
83	1.6 MI SSW - BD-MW 16	8/16/2012	1	K-40	4.96E+02	7.14E+01
83	1.6 MI SSW - BD-MW 16	8/16/2012	1	BI-214	1.45E+02	1.69E+01
83	1.6 MI SSW - BD-MW 16	8/16/2012	1	PB-214	1.53E+02	1.66E+01
83	1.6 MI SSW - BD-MW 16	11/7/2012	1	TL-208	3.65E+00	2.79E+00
83	1.6 MI SSW - BD-MW 16	11/7/2012	1	TH-234	1.98E+02	1.14E+02
83	1.6 MI SSW - BD-MW 16	11/7/2012	1	RA-226	1.96E+02	8.88E+01
83	1.6 MI SSW - BD-MW 16	11/7/2012	1	PB-214	1.43E+02	1.39E+01
83	1.6 MI SSW - BD-MW 16	11/7/2012	1	PB-212	1.24E+01	3.22E+00
83	1.6 MI SSW - BD-MW 16	11/7/2012	1	K-40	4.09E+02	5.91E+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	1/3/2012	1	TH-234	1.75E+02	1.55E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	1/3/2012	1	K-40	1.81E+03	1.62E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	1/3/2012	1	BI-214	2.23E+01	9.26E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	1/3/2012	1	PB-212	1.24E+01	6.86E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	1/3/2012	1	RA-226	2.27E+02	7.73E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	1/3/2012	1	TL-208	4.51E+00	3.39E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	1/3/2012	1	PB-214	1.41E+01	8.82E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	2/6/2012	1	RA-226	1.96E+02	7.68E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	2/6/2012	1	PB-214	2.17E+01	8.36E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	2/6/2012	1	BI-214	2.51E+01	8.45E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	2/6/2012	1	PB-212	7.37E+00	5.08E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	2/6/2012	1	K-40	1.69E+03	1.57E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	3/5/2012	1	RA-226	2.26E+02	8.78E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	3/5/2012	1	PB-212	1.71E+01	7.66E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	3/5/2012	1	TH-234	3.02E+02	1.60E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	3/5/2012	1	TL-208	6.87E+00	4.06E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	3/5/2012	1	K-40	1.85E+03	1.65E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	3/5/2012	1	PB-214	1.76E+01	7.63E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	3/5/2012	1	BI-214	1.83E+01	9.00E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	4/2/2012	1	PB-212	9.19E+00	5.91E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	4/2/2012	1	PB-214	2.90E+01	9.49E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	4/2/2012	1	RA-226	1.84E+02	8.73E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	4/2/2012	1	TH-234	1.58E+02	1.24E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	4/2/2012	1	K-40	1.78E+03	1.66E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	4/2/2012	1	BI-214	2.11E+01	1.07E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/7/2012	1	RA-226	2.59E+02	9.02E+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	5/7/2012	1	TH-234	2.38E+02	1.62E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/7/2012	1	K-40	1.61E+03	1.48E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/7/2012	1	BI-214	8.51E+00	7.71E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	5/7/2012	1	PB-214	1.86E+01	8.98E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	5/21/2012	1	RA-226	2.22E+02	9.93E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/21/2012	1	K-40	1.74E+03	1.53E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/21/2012	1	BI-214	2.00E+01	1.02E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	5/21/2012	1	TH-234	2.69E+02	1.47E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	5/21/2012	1	PB-212	1.16E+01	6.44E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	5/21/2012	1	TL-208	4.81E+00	3.79E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	6/4/2012	1	BI-214	3.03E+01	9.65E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	6/4/2012	1	PB-212	1.13E+01	1.04E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/4/2012	1	RA-226	2.43E+02	7.90E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/4/2012	1	TH-234	1.90E+02	1.20E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/4/2012	1	PB-214	1.64E+01	9.01E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	6/4/2012	1	K-40	1.86E+03	1.59E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/18/2012	1	BI-214	1.94E+01	1.05E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/18/2012	1	RA-226	1.67E+02	1.06E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	6/18/2012	1	PB-214	1.88E+01	1.01E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	6/18/2012	1	K-40	2.01E+03	1.82E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/2/2012	1	PB-212	1.37E+01	8.38E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	7/2/2012	1	RA-226	2.07E+02	8.00E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/2/2012	1	BI-214	1.88E+01	9.98E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	7/2/2012	1	PB-214	2.27E+01	9.34E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	7/2/2012	1	TH-234	2.47E+02	1.21E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/2/2012	1	K-40	1.60E+03	1.77E+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	7/16/2012	1	K-40	1.83E+03	1.68E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/16/2012	1	BI-214	2.27E+01	1.05E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/30/2012	1	PB-214	1.57E+01	9.39E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	7/30/2012	1	K-40	1.73E+03	1.66E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	7/30/2012	1	PB-212	1.50E+01	6.48E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	7/30/2012	1	RA-226	2.20E+02	8.40E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/30/2012	1	BI-214	2.48E+01	1.03E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	7/30/2012	1	TH-234	2.69E+02	1.24E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/13/2012	1	RA-226	1.96E+02	9.31E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/13/2012	1	BI-214	3.40E+01	1.13E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/13/2012	1	TH-234	3.23E+02	1.67E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/13/2012	1	K-40	1.66E+03	1.52E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/13/2012	1	PB-214	2.87E+01	1.21E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/13/2012	1	PB-212	1.07E+01	6.06E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	8/27/2012	1	K-40	1.67E+03	1.78E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/27/2012	1	RA-226	1.76E+02	9.76E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	8/27/2012	1	BI-214	2.33E+01	7.05E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	8/27/2012	1	TH-234	3.14E+02	1.67E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	8/27/2012	1	PB-214	2.21E+01	9.69E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	9/10/2012	1	RA-226	2.66E+02	1.09E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/10/2012	1	TH-234	2.94E+02	1.68E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/10/2012	1	PB-212	8.36E+00	6.28E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	9/10/2012	1	PB-214	3.60E+01	9.83E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	9/10/2012	1	BI-214	4.86E+01	1.15E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/10/2012	1	K-40	1.72E+03	1.58E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/24/2012	1	BI-214	3.57E+01	9.87E+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	9/24/2012	1	TH-234	2.15E+02	1.48E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	9/24/2012	1	PB-212	1.25E+01	5.95E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	9/24/2012	1	RA-226	1.70E+02	9.40E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/24/2012	1	PB-214	2.77E+01	1.04E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	9/24/2012	1	K-40	1.71E+03	1.53E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/8/2012	1	K-40	1.53E+03	1.69E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/8/2012	1	TH-234	2.39E+02	1.20E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/8/2012	1	RA-226	1.97E+02	8.98E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/8/2012	1	BI-214	1.13E+01	9.63E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	10/8/2012	1	PB-212	9.29E+00	5.83E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	10/22/2012	1	BI-214	4.55E+01	1.24E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	10/22/2012	1	K-40	1.72E+03	1.53E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/22/2012	1	TH-234	2.22E+02	1.43E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	10/22/2012	1	PB-214	2.97E+01	9.10E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	10/22/2012	1	RA-226	1.35E+02	8.57E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	11/5/2012	1	RA-226	1.92E+02	7.71E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	11/5/2012	1	BI-214	2.63E+01	8.53E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	11/5/2012	1	K-40	1.69E+03	1.33E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	12/3/2012	1	RA-226	1.69E+02	8.58E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	12/3/2012	1	BI-214	5.98E+01	1.09E+01
5	>12 MILES WNW - PITTSBORO - CONTROL	12/3/2012	1	PB-214	3.86E+01	8.44E+00
5	>12 MILES WNW - PITTSBORO - CONTROL	12/3/2012	1	TH-234	1.76E+02	1.36E+02
5	>12 MILES WNW - PITTSBORO - CONTROL	12/3/2012	1	K-40	1.95E+03	1.69E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	5/21/2012	1	K-40	2.43E+03	2.13E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	5/21/2012	1	RA-226	1.17E+02	9.90E+01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	6/4/2012	1	BI-214	1.88E+01	8.41E+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*
96	4.6 MI ESE HUMBUG FARM ON SR 1127	6/4/2012	1	RA-226	1.52E+02	1.17E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	6/4/2012	1	K-40	2.46E+03	2.09E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	6/4/2012	1	PB-214	1.18E+01	9.78E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	6/18/2012	1	TL-208	8.32E+00	4.02E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	6/18/2012	1	PB-212	1.50E+01	7.39E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	6/18/2012	1	K-40	2.11E+03	1.78E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	6/18/2012	1	TH-234	2.79E+02	1.35E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	6/18/2012	1	RA-226	2.91E+02	1.07E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	6/18/2012	1	PB-214	3.12E+01	1.08E+01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	6/18/2012	1	BI-214	2.13E+01	1.12E+01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/2/2012	1	PB-214	2.18E+01	1.22E+01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/2/2012	1	BI-214	2.55E+01	1.05E+01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/2/2012	1	PB-212	8.00E+00	6.58E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/2/2012	1	K-40	2.49E+03	2.17E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/16/2012	1	TL-208	9.41E+00	5.76E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/16/2012	1	K-40	2.35E+03	2.07E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/16/2012	1	RA-226	1.45E+02	1.14E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/16/2012	1	PB-214	1.61E+01	8.34E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/16/2012	1	BI-214	9.58E+00	8.13E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/30/2012	1	BI-214	3.23E+01	8.95E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/30/2012	1	PB-214	2.88E+01	1.14E+01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/30/2012	1	TH-234	1.64E+02	1.38E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/30/2012	1	K-40	1.98E+03	1.69E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/30/2012	1	TL-208	5.68E+00	5.06E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	7/30/2012	1	RA-226	1.61E+02	9.51E+01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	8/13/2012	1	PB-214	3.83E+01	1.15E+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*
96	4.6 MI ESE HUMBUG FARM ON SR 1127	8/13/2012	1	K-40	2.28E+03	1.97E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	8/13/2012	1	BI-214	2.06E+01	1.18E+01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	8/27/2012	1	RA-226	1.66E+02	1.08E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	8/27/2012	1	TH-234	1.89E+02	1.62E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	8/27/2012	1	PB-214	1.56E+01	9.20E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	8/27/2012	1	K-40	2.11E+03	1.79E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	8/27/2012	1	BI-214	2.81E+01	8.18E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	8/27/2012	1	TL-208	7.30E+00	4.09E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	8/27/2012	1	PB-212	1.16E+01	9.39E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	9/24/2012	1	PB-212	1.20E+01	6.82E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	9/24/2012	1	TL-208	7.74E+00	4.16E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	9/24/2012	1	BI-214	2.08E+01	1.05E+01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	9/24/2012	1	K-40	2.23E+03	1.97E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	10/8/2012	1	BI-214	2.76E+01	1.09E+01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	10/8/2012	1	TH-234	2.22E+02	1.26E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	10/8/2012	1	RA-226	1.82E+02	9.80E+01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	10/8/2012	1	K-40	2.03E+03	1.74E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	10/8/2012	1	PB-212	8.13E+00	7.51E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	10/8/2012	1	TL-208	5.71E+00	4.56E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	10/22/2012	1	TH-234	2.17E+02	1.34E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	10/22/2012	1	K-40	1.76E+03	1.83E+02
96	4.6 MI ESE HUMBUG FARM ON SR 1127	10/22/2012	1	BI-214	2.72E+01	7.53E+00
96	4.6 MI ESE HUMBUG FARM ON SR 1127	10/22/2012	1	PB-214	3.32E+01	1.14E+01
96	4.6 MI ESE HUMBUG FARM ON SR 1127	10/22/2012	1	RA-226	2.23E+02	8.54E+01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/10/2012	841.5	SB-125	1.64E-01	8.60E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/10/2012	841.5	BI-212	6.99E-01	3.19E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/10/2012	841.5	TL-208	3.75E-01	5.75E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/10/2012	841.5	CS-137	1.86E-01	4.66E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/10/2012	841.5	CO-60	2.91E+00	2.19E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/10/2012	841.5	K-40	1.00E+01	9.84E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/10/2012	841.5	BI-214	6.02E-01	1.16E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/10/2012	841.5	PB-212	1.10E+00	9.54E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/10/2012	841.5	PB-214	5.46E-01	1.03E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/10/2012	841.5	AC-228	1.27E+00	2.22E+00
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/10/2012	841.5	RA-226	2.24E+00	7.49E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	1/10/2012	841.5	BE-7	4.61E-01	4.31E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/12/2012	787.6	BI-212	7.51E-01	3.39E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/12/2012	787.6	CO-60	6.63E-01	8.83E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/12/2012	787.6	K-40	1.03E+01	1.13E+00
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/12/2012	787.6	TL-208	2.46E-01	6.78E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/12/2012	787.6	BE-7	4.75E-01	3.12E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/12/2012	787.6	PB-212	8.51E-01	9.35E-02
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/12/2012	787.6	BI-214	6.77E-01	1.32E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/12/2012	787.6	RA-226	1.78E+00	1.20E+00
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/12/2012	787.6	AC-228	9.56E-01	2.21E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/12/2012	787.6	PB-214	8.46E-01	1.17E-01
52	HARRIS LAKE COOLING TOWER MIXING ZONE	7/12/2012	787.6	CS-137	2.52E-01	5.18E-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	1/10/2012	1462.4	PB-214	1.72E-01	5.49E-02
26	4.7 MILES S	1/10/2012	1462.4	BI-214	1.49E-01	4.98E-02
26	4.7 MILES S	1/10/2012	1462.4	RA-226	8.49E-01	5.88E-01
26	4.7 MILES S	1/10/2012	1462.4	TL-208	7.59E-02	2.76E-02
26	4.7 MILES S	1/10/2012	1462.4	AC-228	2.37E-01	8.36E-02
26	4.7 MILES S	1/10/2012	1462.4	PB-212	2.31E-01	5.20E-02
26	4.7 MILES S	1/10/2012	1462.4	K-40	9.72E+00	1.08E+00
26	4.7 MILES S	7/12/2012	1561.1	K-40	2.84E+01	2.16E+00
26	4.7 MILES S	7/12/2012	1561.1	PB-212	8.37E-01	1.04E-01
26	4.7 MILES S	7/12/2012	1561.1	BI-212	7.29E-01	3.32E-01
26	4.7 MILES S	7/12/2012	1561.1	BI-214	7.24E-01	1.18E-01
26	4.7 MILES S	7/12/2012	1561.1	RA-226	1.51E+00	8.53E-01
26	4.7 MILES S	7/12/2012	1561.1	AC-228	1.06E+00	1.98E-01
26	4.7 MILES S	7/12/2012	1561.1	TL-208	2.62E-01	5.53E-02
26	4.7 MILES S	7/12/2012	1561.1	PB-214	7.47E-01	1.07E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/10/2012	2080.5	PB-214	1.89E-01	5.95E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/10/2012	2080.5	K-40	1.18E+01	1.04E+00
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/10/2012	2080.5	TL-208	7.68E-02	2.43E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/10/2012	2080.5	RA-226	8.53E-01	4.42E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/10/2012	2080.5	BI-214	1.81E-01	4.77E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/10/2012	2080.5	PB-212	2.35E-01	4.56E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	1/10/2012	2080.5	AC-228	2.63E-01	7.64E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/12/2012	1851.4	BE-7	3.01E-01	2.22E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/12/2012	1851.4	PB-212	2.70E-01	4.56E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/12/2012	1851.4	TL-208	7.76E-02	2.14E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/12/2012	1851.4	K-40	1.15E+01	1.25E+00

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	7/12/2012	1851.4	AC-228	3.43E-01	9.29E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/12/2012	1851.4	RA-226	8.47E-01	4.89E-01
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/12/2012	1851.4	PB-214	2.28E-01	6.43E-02
41	SHORELINE OF COOLING TOWER MIXING ZONE	7/12/2012	1851.4	BI-214	1.98E-01	5.67E-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	1/13/2012	1	TH-234	2.06E+02	5.61E+01
26	4.7 MILES S	1/13/2012	1	AC-228	1.32E+01	5.57E+00
26	4.7 MILES S	1/13/2012	1	K-40	2.67E+02	2.86E+01
26	4.7 MILES S	1/13/2012	1	TL-208	5.33E+00	1.79E+00
26	4.7 MILES S	1/13/2012	1	RA-226	2.18E+02	3.99E+01
26	4.7 MILES S	1/13/2012	1	PB-214	1.29E+01	3.60E+00
26	4.7 MILES S	1/13/2012	1	PB-212	1.16E+01	2.68E+00
26	4.7 MILES S	1/13/2012	1	BI-214	1.46E+01	3.39E+00
26	4.7 MILES S	2/13/2012	1	PB-214	1.50E+01	3.88E+00
26	4.7 MILES S	2/13/2012	1	TL-208	2.17E+00	1.50E+00
26	4.7 MILES S	2/13/2012	1	BI-214	1.35E+01	3.67E+00
26	4.7 MILES S	2/13/2012	1	TH-234	1.79E+02	6.00E+01
26	4.7 MILES S	2/13/2012	1	AC-228	1.16E+01	6.45E+00
26	4.7 MILES S	2/13/2012	1	K-40	2.53E+02	3.04E+01
26	4.7 MILES S	2/13/2012	1	PB-212	7.14E+00	2.62E+00
26	4.7 MILES S	2/13/2012	1	RA-226	2.02E+02	4.18E+01
26	4.7 MILES S	3/12/2012	1	RA-226	1.94E+02	3.42E+01
26	4.7 MILES S	3/12/2012	1	K-40	2.78E+02	3.18E+01
26	4.7 MILES S	3/12/2012	1	PB-212	8.82E+00	2.80E+00
26	4.7 MILES S	3/12/2012	1	PB-214	1.15E+01	3.37E+00
26	4.7 MILES S	3/12/2012	1	TH-234	2.16E+02	6.02E+01
26	4.7 MILES S	3/12/2012	1	TL-208	3.59E+00	1.76E+00
26	4.7 MILES S	3/12/2012	1	BI-214	1.33E+01	4.24E+00
26	4.7 MILES S	4/12/2012	1	BI-214	1.26E+01	3.38E+00
26	4.7 MILES S	4/12/2012	1	K-40	5.30E+02	4.72E+01
26	4.7 MILES S	4/12/2012	1	AC-228	1.22E+01	6.51E+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	4/12/2012	1	RA-226	1.12E+02	4.29E+01
26	4.7 MILES S	4/12/2012	1	PB-214	9.84E+00	3.87E+00
26	4.7 MILES S	4/12/2012	1	TL-208	5.43E+00	2.35E+00
26	4.7 MILES S	4/12/2012	1	TH-234	1.48E+02	6.39E+01
26	4.7 MILES S	4/12/2012	1	PB-212	4.74E+00	3.17E+00
26	4.7 MILES S	5/14/2012	1	BI-214	1.30E+01	3.25E+00
26	4.7 MILES S	5/14/2012	1	K-40	2.34E+02	3.08E+01
26	4.7 MILES S	5/14/2012	1	TL-208	2.85E+00	1.94E+00
26	4.7 MILES S	5/14/2012	1	PB-212	6.65E+00	2.58E+00
26	4.7 MILES S	5/14/2012	1	TH-234	1.75E+02	5.51E+01
26	4.7 MILES S	5/14/2012	1	RA-226	1.99E+02	3.68E+01
26	4.7 MILES S	5/14/2012	1	PB-214	1.14E+01	3.54E+00
26	4.7 MILES S	6/11/2012	1	K-40	2.21E+02	2.90E+01
26	4.7 MILES S	6/11/2012	1	PB-212	1.07E+01	2.54E+00
26	4.7 MILES S	6/11/2012	1	RA-226	1.90E+02	3.91E+01
26	4.7 MILES S	6/11/2012	1	TL-208	2.60E+00	1.73E+00
26	4.7 MILES S	6/11/2012	1	PB-214	1.91E+01	3.74E+00
26	4.7 MILES S	6/11/2012	1	TH-234	2.12E+02	5.05E+01
26	4.7 MILES S	6/11/2012	1	BI-214	2.06E+01	4.45E+00
26	4.7 MILES S	7/12/2012	1	TH-234	1.03E+02	6.36E+01
26	4.7 MILES S	7/12/2012	1	AC-228	1.59E+01	5.84E+00
26	4.7 MILES S	7/12/2012	1	RA-226	1.55E+02	4.35E+01
26	4.7 MILES S	7/12/2012	1	PB-214	1.12E+01	4.15E+00
26	4.7 MILES S	7/12/2012	1	BI-214	9.78E+00	3.16E+00
26	4.7 MILES S	7/12/2012	1	PB-212	4.03E+00	2.98E+00
26	4.7 MILES S	7/12/2012	1	TL-208	2.97E+00	2.09E+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	7/12/2012	1	K-40	5.18E+02	4.57E+01
26	4.7 MILES S	8/13/2012	1	AC-228	9.15E+00	5.20E+00
26	4.7 MILES S	8/13/2012	1	RA-226	1.85E+02	3.72E+01
26	4.7 MILES S	8/13/2012	1	PB-212	8.06E+00	2.13E+00
26	4.7 MILES S	8/13/2012	1	TL-208	2.98E+00	1.51E+00
26	4.7 MILES S	8/13/2012	1	BI-214	1.75E+01	4.84E+00
26	4.7 MILES S	8/13/2012	1	PB-214	9.74E+00	2.99E+00
26	4.7 MILES S	8/13/2012	1	TH-234	2.03E+02	5.10E+01
26	4.7 MILES S	8/13/2012	1	K-40	2.33E+02	3.22E+01
26	4.7 MILES S	9/10/2012	1	TL-208	3.51E+00	1.62E+00
26	4.7 MILES S	9/10/2012	1	TH-234	2.00E+02	5.58E+01
26	4.7 MILES S	9/10/2012	1	BI-214	2.56E+01	4.18E+00
26	4.7 MILES S	9/10/2012	1	PB-214	1.42E+01	3.77E+00
26	4.7 MILES S	9/10/2012	1	RA-226	2.25E+02	3.97E+01
26	4.7 MILES S	9/10/2012	1	PB-212	6.90E+00	2.41E+00
26	4.7 MILES S	9/10/2012	1	K-40	2.47E+02	2.77E+01
26	4.7 MILES S	10/11/2012	1	RA-226	1.12E+02	4.09E+01
26	4.7 MILES S	10/11/2012	1	PB-214	9.87E+00	4.10E+00
26	4.7 MILES S	10/11/2012	1	BI-214	1.21E+01	3.48E+00
26	4.7 MILES S	10/11/2012	1	PB-212	8.93E+00	4.20E+00
26	4.7 MILES S	10/11/2012	1	TL-208	2.76E+00	1.76E+00
26	4.7 MILES S	10/11/2012	1	K-40	5.50E+02	5.00E+01
26	4.7 MILES S	10/11/2012	1	TH-234	1.23E+02	5.74E+01
26	4.7 MILES S	10/11/2012	1	AC-228	1.42E+01	5.82E+00
26	4.7 MILES S	11/12/2012	1	K-40	5.03E+02	4.31E+01
26	4.7 MILES S	11/12/2012	1	BI-214	1.78E+01	3.37E+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	11/12/2012	1	TH-234	1.17E+02	5.35E+01
26	4.7 MILES S	11/12/2012	1	PB-214	1.36E+01	3.56E+00
26	4.7 MILES S	11/12/2012	1	PB-212	4.55E+00	2.45E+00
26	4.7 MILES S	11/12/2012	1	BI-212	1.10E+01	9.64E+00
26	4.7 MILES S	11/12/2012	1	TL-208	3.08E+00	1.20E+00
26	4.7 MILES S	11/12/2012	1	RA-226	1.13E+02	3.63E+01
26	4.7 MILES S	12/13/2012	1	BI-214	1.80E+01	3.32E+00
26	4.7 MILES S	12/13/2012	1	TL-208	5.31E+00	1.49E+00
26	4.7 MILES S	12/13/2012	1	PB-212	1.43E+01	4.00E+00
26	4.7 MILES S	12/13/2012	1	PB-214	1.60E+01	3.26E+00
26	4.7 MILES S	12/13/2012	1	RA-226	1.95E+02	3.04E+01
26	4.7 MILES S	12/13/2012	1	TH-234	1.78E+02	4.73E+01
26	4.7 MILES S	12/13/2012	1	K-40	2.30E+02	2.65E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/13/2012	1	TH-234	1.24E+02	5.69E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/13/2012	1	AC-228	1.25E+01	6.43E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	1/13/2012	1	K-40	5.12E+02	4.63E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	1/13/2012	1	TL-208	4.59E+00	1.76E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	1/13/2012	1	PB-212	1.14E+01	3.23E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	1/13/2012	1	BI-214	1.04E+01	3.77E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	1/13/2012	1	RA-226	1.03E+02	4.35E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	1	AC-228	1.39E+01	6.30E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	1	TL-208	5.74E+00	1.80E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	1	PB-212	9.10E+00	2.90E-01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	1	BI-214	9.87E+00	4.28E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	1	K-40	5.02E+02	4.66E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	1	TH-234	1.29E+02	6.28E+01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		Sample Date	Quantity	Isotope	Activity	2 Sigma Error
38	CAPE FEAR PLANT INTAKE - CONTROL	2/13/2012	1	RA-226	1.15E+02	4.39E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1	BI-214	9.37E+00	3.71E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1	K-40	5.57E+02	4.89E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1	TL-208	3.55E+00	1.74E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1	TH-234	1.42E+02	6.29E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1	PB-212	7.59E+00	2.88E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1	PB-214	5.78E+00	3.50E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1	RA-226	1.26E+02	5.19E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	3/12/2012	1	AC-228	1.24E+01	5.95E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1	K-40	2.52E+02	3.06E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1	TH-234	1.61E+02	4.98E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1	AC-228	9.41E+00	5.06E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1	RA-226	1.70E+02	3.08E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1	BI-214	1.07E+01	3.34E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1	PB-212	7.88E+00	2.36E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1	TL-208	3.69E+00	1.73E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	4/12/2012	1	PB-214	1.12E+01	4.36E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1	PB-212	5.35E+00	2.82E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1	TL-208	3.69E+00	1.74E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1	AC-228	1.64E+01	6.53E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1	K-40	5.19E+02	4.70E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1	BI-214	1.20E+01	3.41E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1	RA-226	1.17E+02	4.01E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1	PB-214	8.15E+00	3.18E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	5/14/2012	1	TH-234	1.61E+02	6.93E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	1	TH-234	2.27E+02	5.50E+01

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	1	PB-214	1.69E+01	4.19E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	1	BI-214	1.81E+01	4.05E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	1	RA-226	1.93E+02	3.74E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	1	PB-212	8.61E+00	2.44E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	1	TL-208	3.90E+00	1.86E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	6/11/2012	1	K-40	2.53E+02	3.41E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1	AC-228	1.41E+01	5.24E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1	RA-226	2.22E+02	4.35E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1	BI-214	1.71E+01	4.05E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1	PB-214	1.60E+01	4.83E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1	TL-208	5.91E+00	1.67E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1	TH-234	2.38E+02	6.05E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1	K-40	4.02E+02	3.82E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	7/12/2012	1	PB-212	1.12E+01	2.75E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1	PB-212	5.86E+00	2.84E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1	BI-214	1.01E+01	3.47E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1	TL-208	1.41E+02	6.93E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1	TL-208	4.53E+00	1.98E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1	AC-228	1.42E+01	6.65E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1	K-40	5.14E+02	4.78E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1	PB-212	7.99E+00	3.84E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	8/13/2012	1	RA-226	1.28E+02	4.42E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1	TH-234	1.45E+02	6.89E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1	AC-228	1.89E+01	7.07E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1	TL-208	4.13E+00	1.76E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1	PB-212	6.85E+00	3.15E+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*
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1	K-40	5.67E+02	4.88E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1	PB-214	9.35E+00	3.31E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1	RA-226	9.45E+01	4.01E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	9/10/2012	1	BI-214	1.48E+01	4.28E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	1	TL-208	3.38E+00	1.72E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	1	BI-214	1.12E+01	3.98E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	1	RA-226	1.32E+02	4.45E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	1	PB-214	9.44E+00	4.44E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	1	PB-212	7.40E+00	3.19E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	1	K-40	5.75E+02	4.89E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	10/11/2012	1	TH-234	1.20E+02	7.20E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	1	K-40	2.30E+02	2.84E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	1	PB-212	1.09E+01	5.51E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	1	PB-214	2.42E+01	3.80E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	1	RA-226	1.70E+02	3.12E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	1	TH-234	1.97E+02	4.77E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	1	BI-214	2.69E+01	3.95E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	11/12/2012	1	TL-208	4.03E+00	1.43E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1	PB-214	1.44E+01	3.15E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1	TH-234	2.22E+02	4.85E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1	RA-226	1.85E+02	3.48E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1	BI-214	1.69E+01	3.41E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1	TL-208	6.34E+00	1.56E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1	K-40	4.66E+02	3.93E+01
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1	PB-212	1.64E+01	2.88E+00
38	CAPE FEAR PLANT INTAKE - CONTROL	12/13/2012	1	AC-228	1.69E+01	5.66E+00

HNP Radiological Environmental Monitoring Gamma Isotopic Report

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

Sample Point		*Sample Date*	*Quantity*	*Isotope*	*Activity*	*2 Sigma Error*
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	1	RA-226	1.73E+02	3.89E+01
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	1	TL-208	5.34E+00	1.68E+00
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	1	TH-234	2.28E+02	5.96E+01
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	1	PB-214	1.09E+01	3.47E+00
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	1	PB-212	1.33E+01	2.60E+00
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	1	K-40	2.07E+02	3.19E+01
40	LILLINGTON - CAPE FEAR RIVER	1/13/2012	1	BI-214	1.57E+01	4.21E+00
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1	BI-212	1.12E+01	1.02E+01
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1	K-40	2.01E+02	3.05E+01
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1	AC-228	1.35E+01	5.91E+00
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1	RA-226	1.84E+02	4.18E+01
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1	PB-214	1.22E+01	3.19E+00
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1	TH-234	2.46E+02	6.02E+01
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1	PB-212	9.71E+00	2.91E+00
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1	BI-214	1.32E+01	3.97E+00
40	LILLINGTON - CAPE FEAR RIVER	2/13/2012	1	TL-208	3.00E+00	1.65E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	1	PB-212	9.09E+00	2.43E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	1	K-40	2.60E+02	3.15E+01
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	1	TH-234	2.64E+02	6.45E+01
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	1	RA-226	2.10E+02	3.97E+01
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	1	PB-214	1.33E+01	4.13E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	1	BI-214	1.27E+01	3.29E+00
40	LILLINGTON - CAPE FEAR RIVER	3/12/2012	1	TL-208	4.78E+00	1.89E+00
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1	RA-226	1.84E+02	3.99E+01
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1	AC-228	8.27E+00	4.89E+00
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1	TH-234	2.18E+02	5.45E+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	4/12/2012	1	TL-208	5.12E+00	1.67E+00
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1	PB-212	8.85E+00	2.44E+00
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1	K-40	2.11E+02	2.74E+01
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1	BI-214	1.65E+01	4.64E+00
40	LILLINGTON - CAPE FEAR RIVER	4/12/2012	1	PB-214	1.33E+01	3.26E+00
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	1	PB-214	1.27E+01	3.78E+00
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	1	BI-214	1.50E+01	3.44E+00
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	1	TL-208	3.71E+00	1.45E+00
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	1	TH-234	2.01E+02	5.53E+01
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	1	RA-226	1.71E+02	3.88E+01
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	1	K-40	2.28E+02	3.07E+01
40	LILLINGTON - CAPE FEAR RIVER	5/14/2012	1	PB-212	9.37E+00	2.25E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1	BI-214	1.69E+01	3.70E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1	TH-234	1.85E+02	6.08E+01
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1	AC-228	1.65E+01	5.92E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1	RA-226	2.04E+02	4.02E+01
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1	TL-208	5.75E+00	1.82E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1	PB-214	1.26E+01	3.65E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1	PB-212	9.78E+00	3.27E+00
40	LILLINGTON - CAPE FEAR RIVER	6/11/2012	1	K-40	4.15E+02	3.73E+01
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1	RA-226	1.27E+02	4.36E+01
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1	TL-208	5.20E+00	1.87E+00
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1	PB-214	7.97E+00	3.59E+00
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1	PB-212	8.30E+00	3.20E+00
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1	BI-214	9.30E+00	3.81E+00
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1	K-40	5.54E+02	4.79E+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	7/12/2012	1	TH-234	1.19E+02	6.29E+01
40	LILLINGTON - CAPE FEAR RIVER	7/12/2012	1	AC-228	1.12E+01	6.38E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	1	TL-208	4.16E+00	1.83E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	1	PB-212	1.03E+01	2.23E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	1	BI-214	1.59E+01	3.61E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	1	RA-226	1.71E+02	4.24E+01
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	1	K-40	2.23E+02	3.04E+01
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	1	PB-214	1.53E+01	4.03E+00
40	LILLINGTON - CAPE FEAR RIVER	8/13/2012	1	TH-234	2.43E+02	6.04E+01
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	1	TL-208	4.83E+00	1.59E+00
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	1	BI-214	1.79E+01	4.65E+00
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	1	K-40	2.22E+02	2.99E+01
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	1	PB-212	9.08E+00	2.24E+00
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	1	PB-214	1.77E+01	3.85E+00
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	1	RA-226	1.95E+02	3.74E+01
40	LILLINGTON - CAPE FEAR RIVER	9/10/2012	1	TH-234	2.21E+02	5.51E+01
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	1	BI-214	1.81E+01	4.18E+00
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	1	RA-226	2.12E+02	3.74E+01
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	1	PB-212	7.85E+00	2.40E+00
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	1	TL-208	3.59E+01	1.60E+00
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	1	K-40	2.29E+02	3.09E+01
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	1	TH-234	2.24E+02	5.56E+01
40	LILLINGTON - CAPE FEAR RIVER	10/11/2012	1	PB-214	1.85E+01	4.06E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1	PB-212	1.05E+01	2.73E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1	BI-214	1.92E+01	3.42E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1	PB-214	1.33E+01	3.36E+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	11/12/2012	1	TL-208	5.02E+00	1.54E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1	K-40	4.18E+02	3.59E+01
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1	TH-234	1.63E+02	4.70E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1	AC-228	1.60E+01	5.60E+00
40	LILLINGTON - CAPE FEAR RIVER	11/12/2012	1	RA-226	2.03E+02	3.68E+01
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1	TL-208	6.98E+00	1.65E+00
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1	TH-234	1.91E+02	4.80E+01
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1	PB-212	1.18E+01	2.50E+00
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1	BI-214	1.69E+01	3.35E+00
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1	K-40	2.13E+02	2.67E+01
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1	RA-226	1.52E+02	3.09E+01
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1	PB-214	1.53E+01	3.34E+00
40	LILLINGTON - CAPE FEAR RIVER	12/13/2012	1	AC-228	5.89E+00	3.95E+00