



# Progress Energy

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U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2  
Renewed Facility Operating License Nos. DPR-71 and DPR-62  
Docket Nos. 50-325 and 50-324  
Radiological Environmental Operating Report for 2009

Ladies and Gentlemen:

In accordance with Technical Specification (TS) 5.6.2 for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2, Carolina Power & Light Company, now doing business as Progress Energy Carolinas, Inc., is submitting the enclosed Radiological Environmental Operating Report for 2009.

No regulatory commitments are contained in this submittal. Please refer any questions regarding this submittal to Ms. Annette Pope, Supervisor - Licensing/Regulatory Programs, at (910) 457-2184.

Sincerely,

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MAT/mat

Enclosure:

Radiological Environmental Operating Report for 2009

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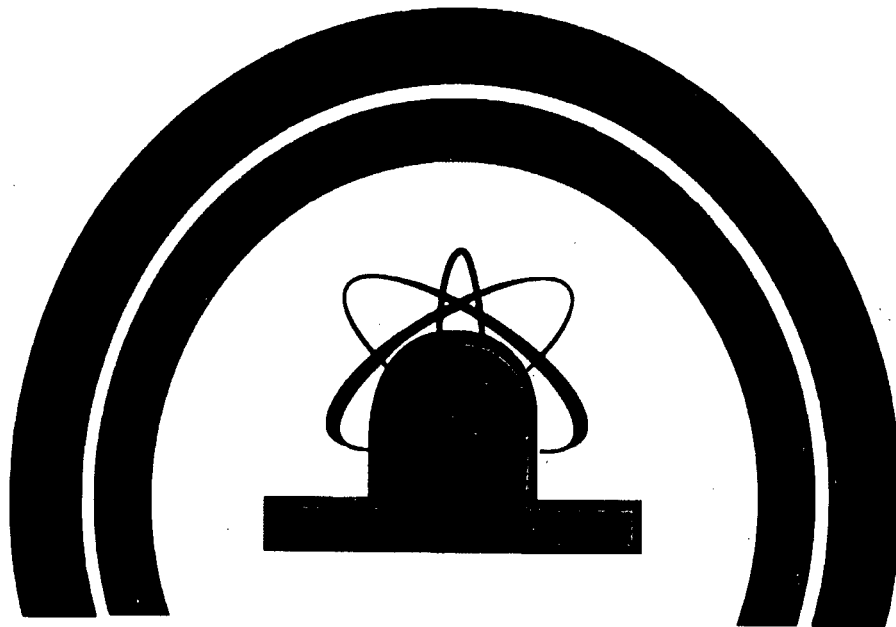
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**Radiological Environmental Operating Report for 2009**

**RADIOLOGICAL  
ENVIRONMENTAL OPERATING  
REPORT  
2009**

**BRUNSWICK STEAM ELECTRIC PLANT**



**CAROLINA POWER & LIGHT COMPANY**

**Now Doing Business as**

**PROGRESS ENERGY CAROLINAS, INC.**



**SHEARON HARRIS ENERGY &  
ENVIRONMENTAL CENTER  
CAROLINA POWER & LIGHT COMPANY  
NOW DOING BUSINESS AS  
PROGRESS ENERGY CAROLINAS, INC.  
NEW HILL, NORTH CAROLINA**

**RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT  
FOR  
BRUNSWICK STEAM ELECTRIC PLANT  
JANUARY 1 THROUGH DECEMBER 31, 2009**

# **TABLE OF CONTENTS**

<b><u>Title</u></b>	<b><u>Page</u></b>
<b>Table of Contents</b>	<b>i</b>
<b>List of Figures</b>	<b>ii</b>
<b>List of Tables</b>	<b>iii</b>
<b>Executive Summary</b>	<b>1</b>
<b>Radiological Environmental Monitoring Program</b>	<b>3</b>
<b>Purpose and Requirements for the Radiological Monitoring Program</b>	<b>3</b>
<b>General Site Description</b>	<b>4</b>
<b>Radiological Monitoring Program Quality Assurance</b>	<b>5</b>
<b>Radiological Monitoring Program General Description</b>	<b>6</b>
<b>Summary of Radiological Monitoring Program</b>	<b>18</b>
<b>Interpretations and Conclusions</b>	<b>22</b>
<b>Missed Surveillances</b>	<b>27</b>
<b>Analytical Procedures</b>	<b>28</b>
<b>Land Use Census</b>	<b>36</b>
<b>Purpose of the Land Use Census</b>	<b>36</b>
<b>Methodology</b>	<b>37</b>
<b>2009 Land Use Census Results</b>	<b>37</b>
<b>Appendix</b>	
<b>GEL Laboratories, LLC's 2009 Interlaboratory Comparison Program Report</b>	<b>48</b>
<b>Data Reports</b>	

## LIST OF FIGURES

<b>Figure</b>		<b>Page</b>
1	Location of Brunswick Steam Electric Plant	4
2	Radiological Sampling Locations (Distant from Plant)	7
3	Radiological Sampling Locations (Nearest Plant)	8
4	BSEP Environmental Sampling Locations	9
5	BSEP Environmental Sampling Locations (Continued)	10
6	BSEP Environmental Sampling Locations (Continued)	11
7	BSEP Environmental Sampling Locations – Wells	12
8	BSEP Environmental Sampling Locations – Wells (Continued)	13
9	BSEP Environmental Sampling Locations – Wells (Continued)	14
10	Plot of Air Particulate Gross Beta Activity (Locations 200 and 204)	40
11	Plot of Air Particulate Gross Beta Activity (Locations 201 and 204)	41
12	Plot of Air Particulate Gross Beta Activity (Locations 202 and 204)	42
13	Plot of Air Particulate Gross Beta Activity (Locations 203 and 204)	43
14	Plot of Air Particulate Gross Beta Activity (Locations 205 and 204)	44
15	Plot of Air Particulate Gross Beta Activity (Locations 206 and 204)	45
16	Plot of Surface Water Tritium Activity (Locations 400 and 401)	46
17	Plot of TLD Averages for Inner and Outer Rings	47

## **LIST OF TABLES**

<b>Table</b>		<b>Page</b>
1	Media Used to Assess Exposure Pathways to Man	6
2	Radiological Monitoring Sampling Locations	15
3	Radiological Environmental Monitoring Program Data Summary	19
4	Gross Beta Air Particulate Activity Averages	25
5	Historical TLD Results (1972-2009)	26
6	Typical Lower Limits of Detection (a priori) Gamma Spectrometry	35
7	Land Use Census Comparisons (2008-2009) Nearest Pathway (miles)	38
8	Garden Census (2009)	39

# EXECUTIVE SUMMARY

The Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2, is operated by Carolina Power & Light Company, now doing business as Progress Energy Carolinas, Inc., under licenses granted by the Nuclear Regulatory Commission (NRC). BSEP Technical Specification 5.6.2 and the BSEP Offsite Dose Calculation Manual (ODCM) establish the requirements of the Radiological Environmental Monitoring Program (REMP). This report provides the results of the REMP from January 1, 2009 through December 31, 2009.

The REMP was established in 1973. Radiation and radioactivity in various environmental media have been monitored for more than 35 years, including monitoring in excess of a year prior to commencing operation. Monitoring is also provided for control locations which would not be impacted by operations of BSEP. Using the data from the control locations and the historical data collected prior to operation, analyses of data from locations which could potentially be impacted by the operations of BSEP were performed. Radiation levels show no measurable change from pre-operational radiation levels.

Monitoring results for environmental media are summarized as follows:

- Air-monitoring results are similar or less than the concentrations of radioactivity from pre-operation monitoring. These observations are also consistent with past operational data.
- Milk was unavailable due to no milk (milch) animals (goat or cow) currently identified within the environs of the plant; therefore, no exposure pathway exists.
- Terrestrial vegetation includes broadleaf vegetation from indicator and control locations. Results indicate that Cobalt (Co)-60 and Cesium (Cs)-137 activity was detected in indicator and control samples respectively, but no other gamma activity was detected in any sample except for K-40 (potassium-40) and other naturally occurring gamma activity.
- Aquatic organism monitoring includes fish (free swimmers and bottom feeders), invertebrates (shellfish (SH)), and Benthic organisms (organisms that live on the bottom of the ocean (BO)). Results indicated no detectable plant - related activity.
- Surface water results indicate that some surface water samples detect the presence of tritium, which is attributed to plant operations. Refer to the Interpretations and Conclusions Section / Surface Water and Figure 16.
- Shoreline Sediment results indicate that some shoreline sediment indicator and background samples detected the presence of Cs-137 activity. No other gamma activity was detected in any sample (indicator or background) except for K-40 (potassium-40) and other naturally occurring gamma activity. Therefore, results indicated no detectable plant-related activity.

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

The continued operation of BSEP has not significantly contributed radiation or the presence of radioactivity in the environmental media monitored. The measured concentrations of radioactivity and radiation are well within applicable regulatory limits.

# **RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM**

## **PURPOSE AND REQUIREMENTS FOR THE RADIOLOGICAL MONITORING PROGRAM**

Although the operation of a nuclear generating station results in the raising of background radiation only a small amount, it is important to measure these emissions of radioactivity and radiation to assess their impact on the surrounding populations. The purpose of the REMP is to measure accumulation of radioactivity in the environments, to determine whether this radioactivity is the result of operations of BSEP 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 containment and radiological controls of nuclear generating stations.

The REMP was established in 1973 and continues to collect samples and evaluate them.

Requirements are established for the radiological monitoring program as follows:

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

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

- NRC Regulatory Guide 1.109, "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I"
- NRC Regulatory Guide 4.13, "Performance, Testing, and Procedural Specifications for Thermoluminescence Dosimetry: Environmental Applications"
- NRC Regulatory Guide 4.15, "Quality Assurance for Radiological Monitoring Programs (Normal Operations) - Effluent Streams and the Environment"

## General Site Description

BSEP consists of two boiling water reactors with a design rating of 2923 megawatts thermal. Commercial production was initiated by Unit 2 on November 3, 1975 and by Unit 1 on March 18, 1977. BSEP is located in Brunswick County, North Carolina. The site is along state route 87 approximately two and a half miles north of Southport and is displayed on the map of southeastern North Carolina (Figure 1). The community of Boiling Spring Lakes is about three miles northwest of the site. The towns of Caswell Beach and Oak Island are on a barrier island south of the plant. The site is also approximately 16 miles south of Wilmington, North Carolina.

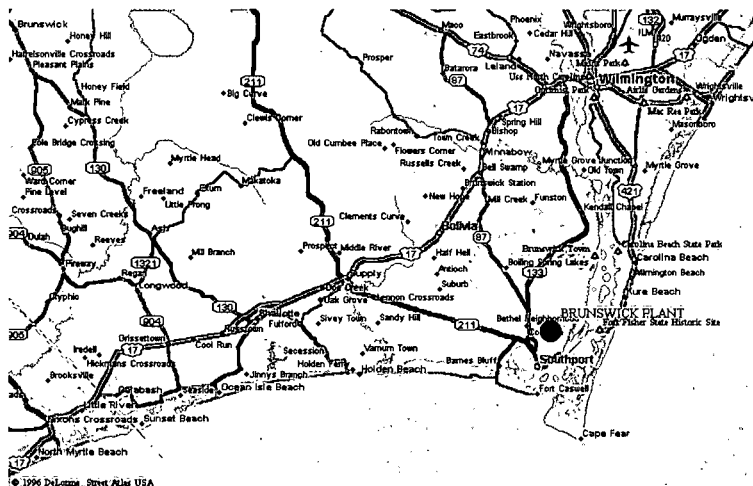


Figure 1: Location of Brunswick Steam Electric Plant

The Cape Fear River is east of the plant, and cooling water is drawn from the river through a canal. The cooling water is discharged to the Atlantic Ocean through a canal, pumping station, and piping. The discharge point is south of the town of Caswell Beach.

The plant site varies in elevation from sea level to 30 feet above mean sea level (MSL). It is surrounded by extensive marshes. The lower Cape Fear River is an important nursery area for shellfish, and other marine species.

The local economy supports significant recreational, industrial, agricultural, and government contributions. There is well-developed recreational use of the barrier islands south and east of the site. Fishing and boating are popular activities. Commercial fishing is also an important industry in the community. Agriculture utilizes some of the land within 50 miles of the site; such as small truck farms, cattle, poultry, and row crops including corn, soybeans and tobacco. Industrial activity includes the Archer-Daniels-Midland Chemical (ADM) Company, a manufacturer of citric acid, located one and a half miles southeast of the plant. In conjunction with the citric acid plant is a small electrical generating station operated by Primary Energy. This coal-fired station is composed of two units rated at 55 MWe each.



Transportation is a significant industry in the local economy, with the Port of Wilmington north of the site. The shipping channel is just east of the site in the Cape Fear River. Also, the Sunny Point Military Ocean Terminal (MOT) is located approximately three miles north of the plant site on the Cape Fear River.

## **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 NRC Regulatory Guide (R.G.) 4.15, "Quality Assurance for Radiological Monitoring Programs." According to R.G. 4.15, 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." 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,
- BSEP participates in the Eckert & Ziegler Analytics Radiochemistry Cross-Check Program,
- GEL Laboratories, LLC (GEL) participates in an Intercomparison sample program from Eckert & Ziegler Analytics of Atlanta, Environmental Resource Associates of Arvada, Colorado; and the Mixed Analyte Performance Evaluation Program (MAPEP), and
- 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, now doing business as Progress Energy Carolinas, Inc. has established this program to measure the exposure pathways to man. An exposure pathway describes the source of the radiological exposure. The primary forms of potential 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. Table 1 provides a list of the media used to assess each of these pathways.

**Table 1**  
**Media Used to Assess Exposure Pathways to Man**

<b>Pathway of Exposure to Man</b>	<b>Media Sampled</b>
<b>External Dose</b>	Thermoluminescent Dosimetry (TLD) Shoreline Sediment
<b>Ingestion</b>	Broadleaf Vegetation Fish and Invertebrates Surface Water
<b>Inhalation</b>	Air Samples (Particulate and 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 very unlikely to be affected by operation of the plant. Sample locations may be seen in Figures 2 thru 9. A description of each sample location may be found in Table 2.

## Radiological Sampling Locations



Figure 2: Radiological Sampling Locations (Distant from Plant)

Stations not illustrated:

204 (Sutton Plant in Wilmington) (Control Air Station), 206 (not ODCM required)

703, 704, 705 (Location not Specified in the Atlantic Ocean)(Control Fish Station)

802 (Location not specified) (Control Vegetation)



## Radiological Sampling Locations

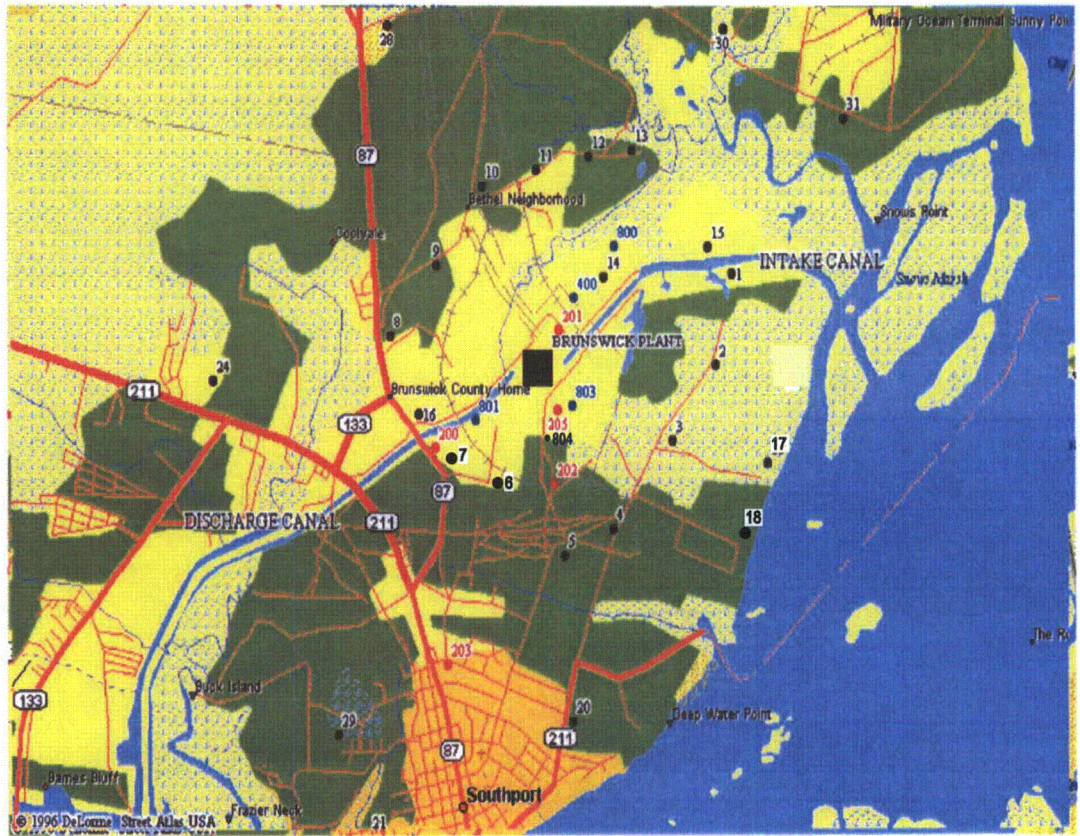
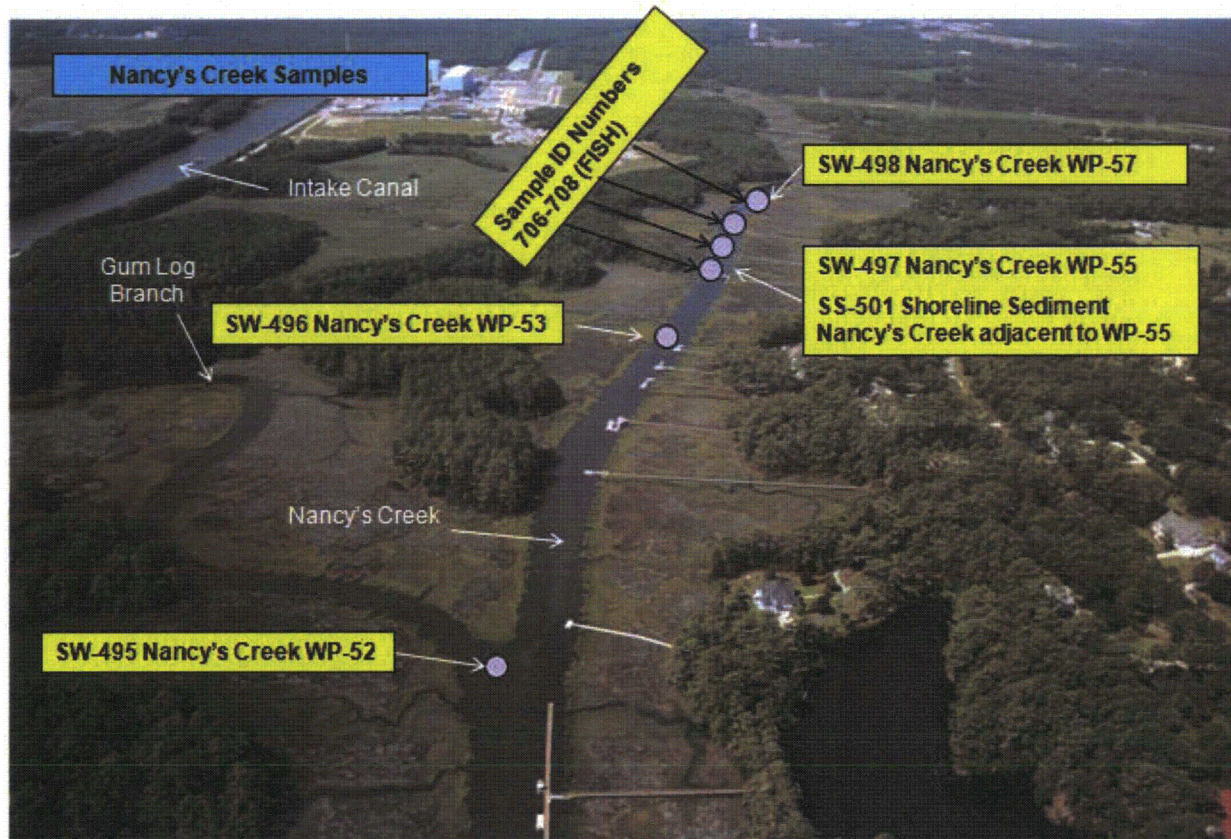


Figure 3 (nearest Plant) is an expanded view of the previous figure (Figure 2 page 7).



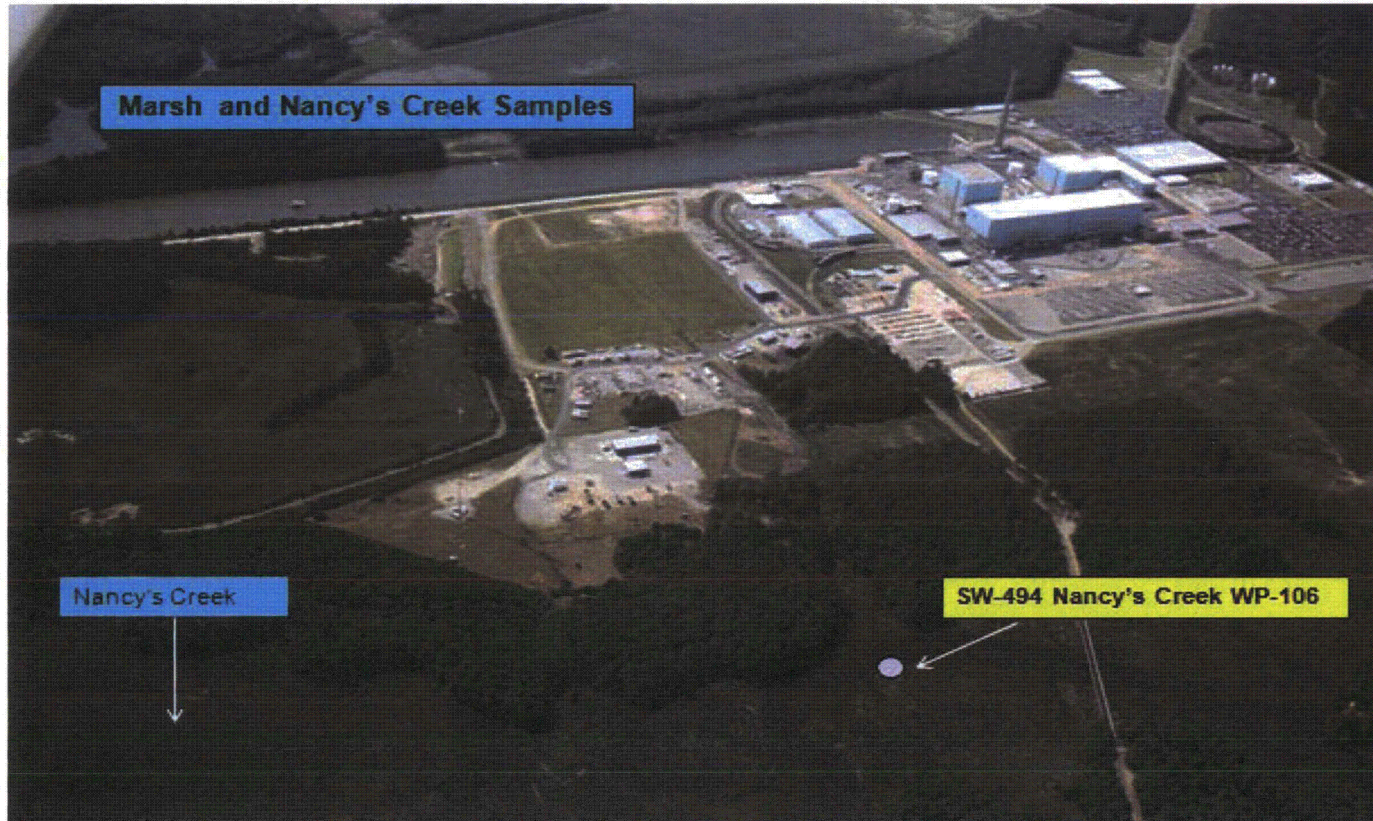
**Figure 4 BSEP Environmental Sampling Locations**



BSEP Environmental Sample Locations

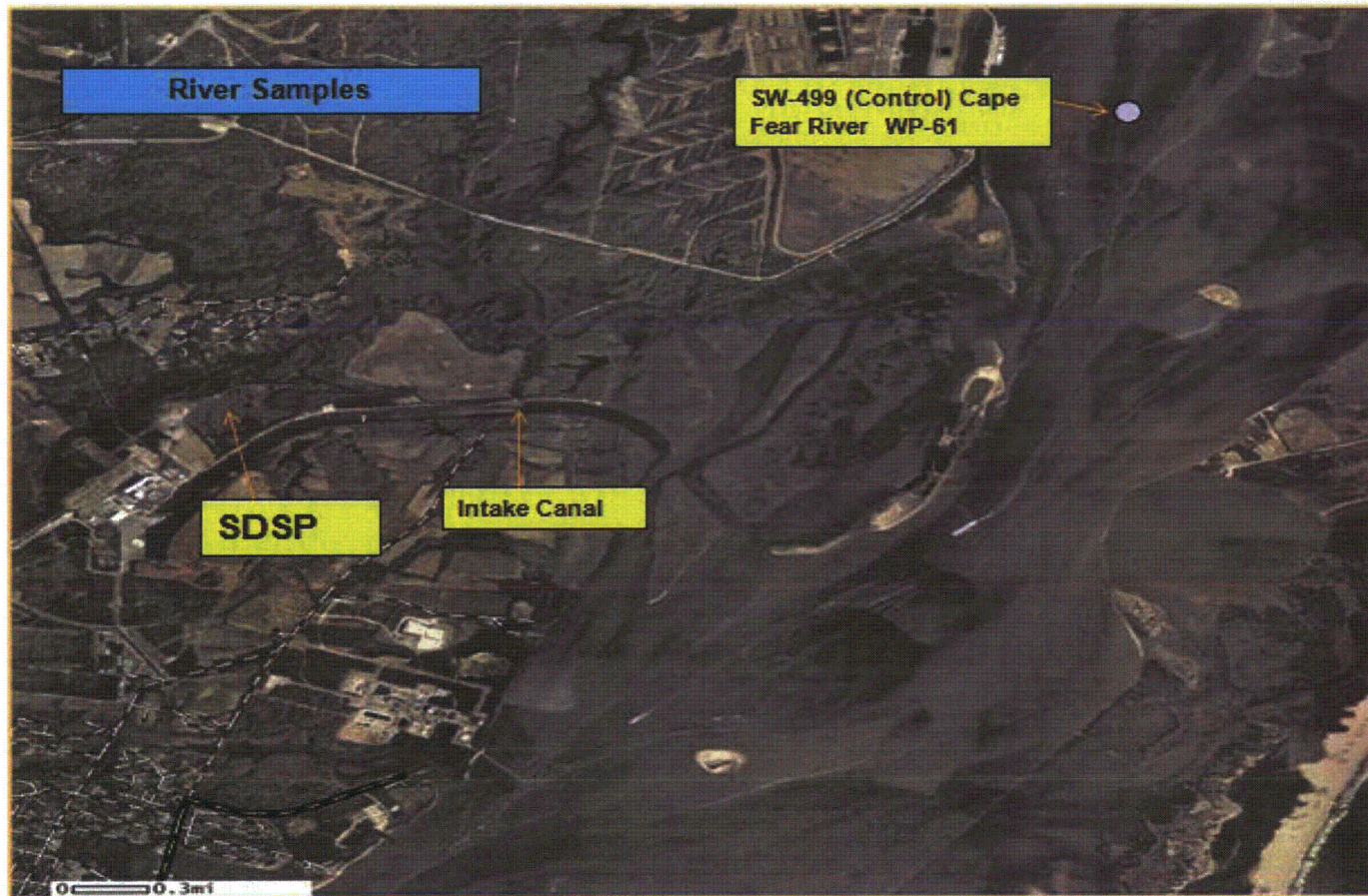


**Figure 5 BSEP Environmental Sampling Locations (continued)**





**Figure 6 BSEP Environmental Sampling Locations (continued)**



**SDSP: Storm Drain Stabilization Pond**



**Figure 7 BSEP Environmental Sampling Locations – Wells**

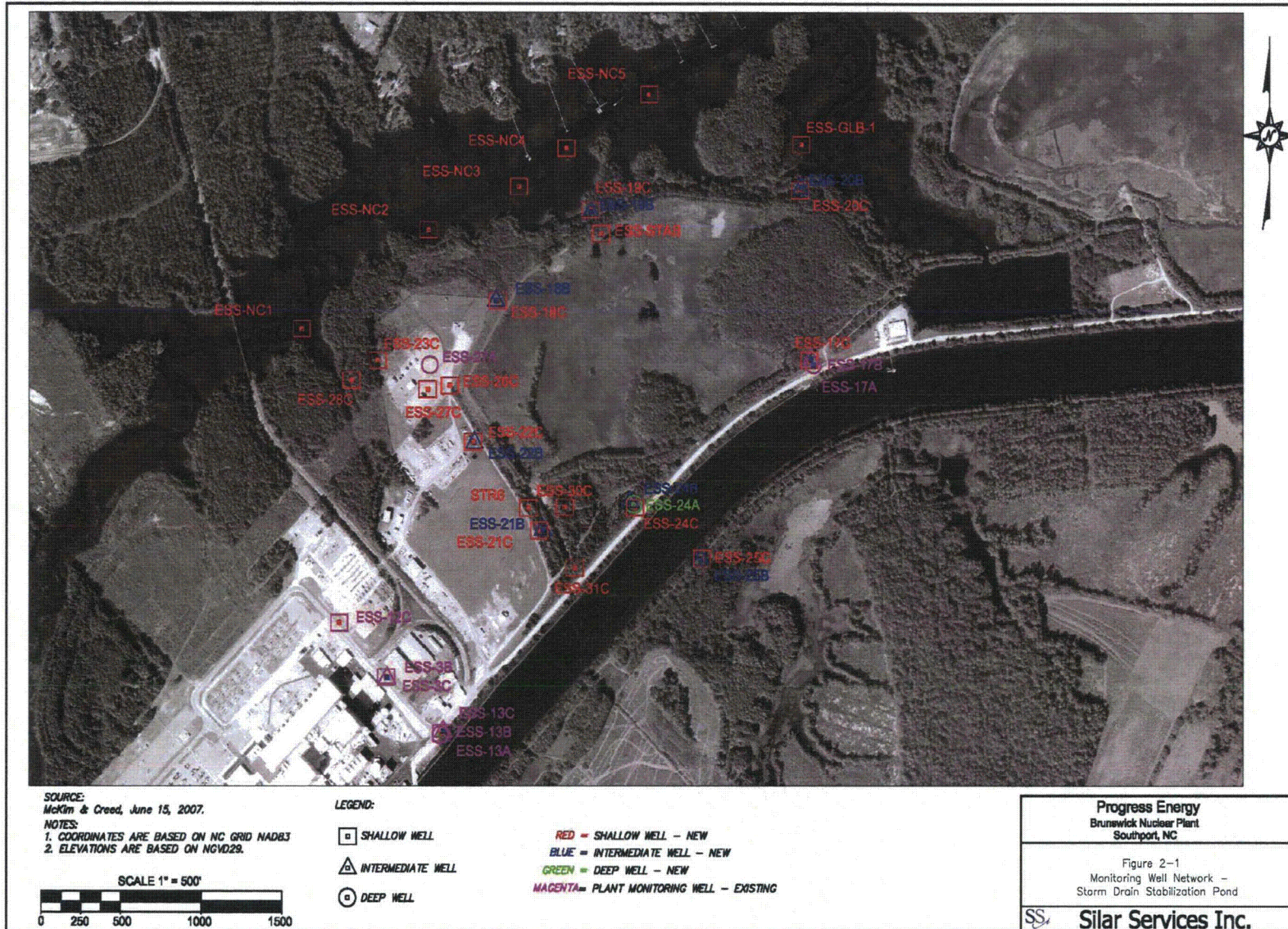




Figure 8 BSEP Environmental Sampling Locations - Wells

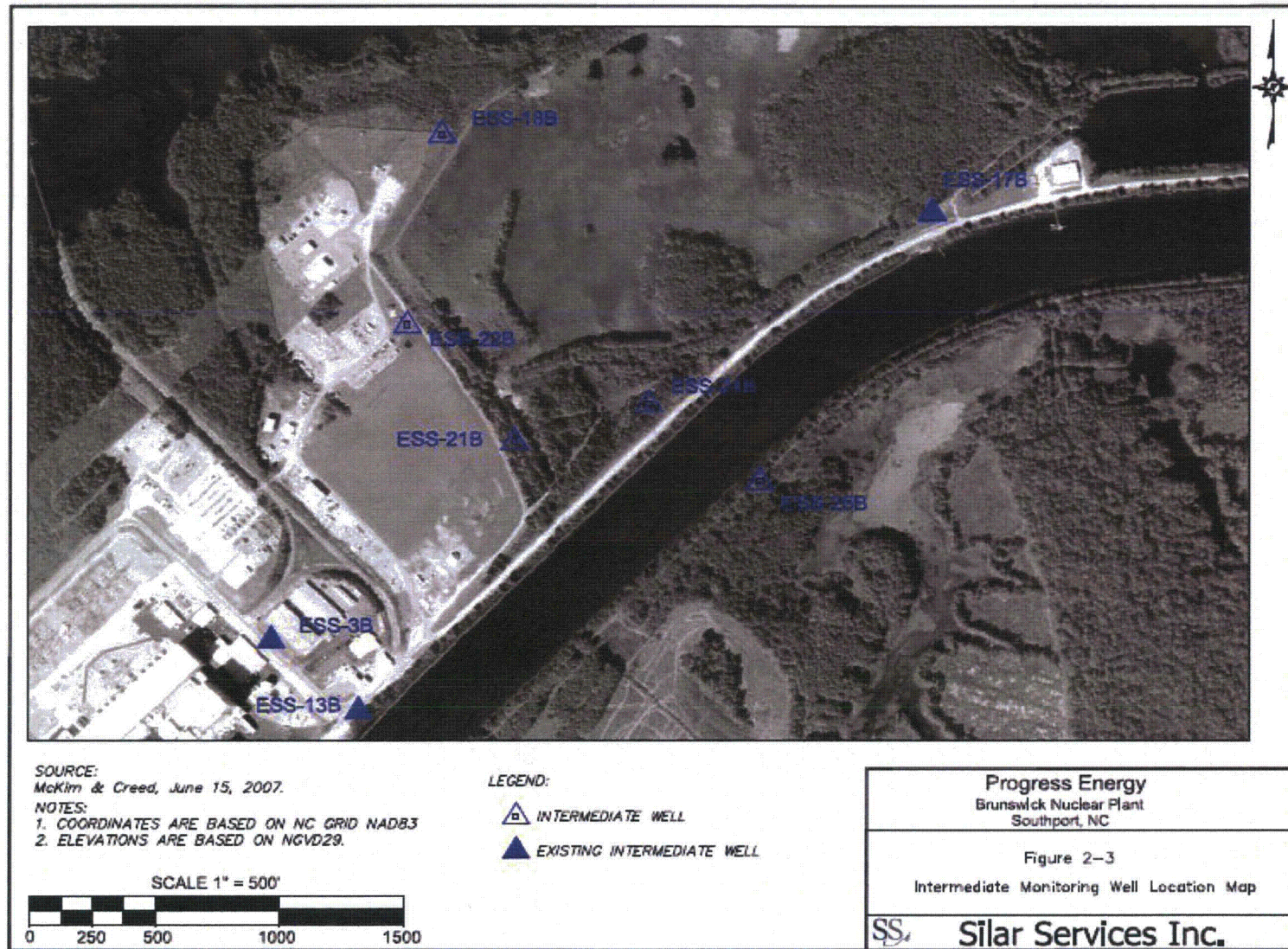
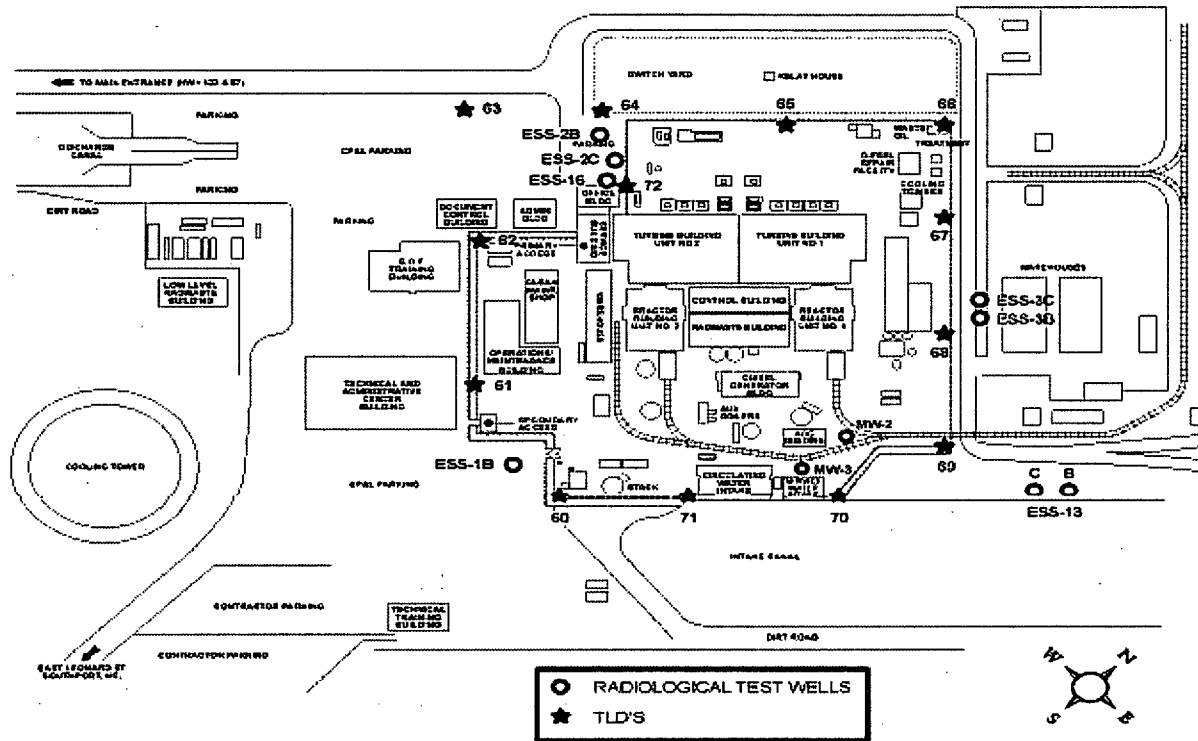


Figure 9 BSEP Environmental Sampling Locations – Wells (continued)



**NOTE:** Well ESS-17 is located near the Biology Lab.

**Table 2**  
**Brunswick Steam Electric Plant**  
**Radiological Monitoring Sampling Locations**

Sample Type	Location & Description	Frequency	Sample Size	Analysis
Air Cartridge (AC)	200--1.0 miles WSW Visitors Center 201--0.5 miles NE PMAC 202--1.0 miles S Substation on Construction Rd. 203--2.0 miles SSW Southport substation 204--22.4 miles NNE Sutton Plant* 205--0.6 miles SSE Spoil Pond 206--11.3 miles NW from Plant @ Brunswick County Government Complex	Weekly (Continuous Sampling)	(270 m <sup>3</sup> )	Iodine-131
Air Particulate (AP)	200--1.0 miles WSW Visitors Center 201--0.5 miles NE PMAC 202--1.0 miles S Substation on Construction Rd. 203--2.0 miles SSW Southport substation 204--22.4 miles NNE Sutton Plant* 205--0.6 miles SSE Spoil Pond 206--11.3 miles NW from Plant @ Brunswick County Government Complex	Weekly (Continuous Sampling)  Quarterly	(270 m <sup>3</sup> )	Gross Beta (Weekly)  Composite Gamma (Quarterly)
Fish (FI) and Invertebrates	700--5.5 miles SSW Atlantic Ocean @ discharge (free swimmers) 701--5.5 miles SSW Atlantic Ocean @ discharge (bottom feeders) 702--5.5 miles SSW Atlantic Ocean @ discharge (invertebrates) 703--Atlantic Ocean; location not specified* (free swimmers) 704--Atlantic Ocean; location not specified* (bottom feeders) 705--Atlantic Ocean; location not specified* (invertebrates) 706--Nancy's Creek; location not specified (free swimmers) 707--Nancy's Creek; location not specified (bottom feeders) 708--Nancy's Creek; location not specified (invertebrates)	Semiannual (In Season)      Annual	500 grams (wet)	Gamma (Edible portions)      Gamma Tritium (Edible portions)
Broadleaf Vegetation (BL)	800--0.7 miles NE intake canal 801--0.8 miles SW discharge canal 802--10.1 miles; location not specified* 803--0.6 miles SSE Spoil Pond 804--0.7 miles S Leonard Street plant exit adjacent to RR tracks	Monthly (As available)	360 grams (wet)	Gamma Iodine-131
Shoreline Sediment (SS)	500--5.0 miles SSW discharge; beach near OD pumps 501--Nancy's Creek, Adjacent to WP-55, Near Storm Drain Stabilization Pond	Semiannual  Annual	575 grams	Gamma
Surface Water (SW)	400--0.6 miles NE Intake Canal* 401--4.9 miles SSW discharge canal @ OD Pumps	Monthly Composite	4 liters	Gamma Tritium (Quarterly)

\* Control Stations

**Table 2 (Continued)**  
**Brunswick Steam Electric Plant**  
**Radiological Monitoring Sampling Locations**

Sample Type	Location & Description	Frequency	Sample Size	Analysis
Surface Water (SW) (Continues)	494--Nancy's Creek – WP-106 495--Nancy's Creek – WP-52 496--Nancy's Creek – WP-53 497--Nancy's Creek – WP-55 498--Nancy Creek – WP-57 499--Cape Fear River – WP-61*	Grab Sample, Weekly Monthly	N/A	Tritium (Weekly) Gamma (Monthly)
Groundwater (GW)	402--Monitoring Well ESS-2C, 0.17 miles W 403--Monitoring Well ESS-16, 0.16 miles W 404--Monitoring Well ESS-1B, 0.17 miles SW 405--Monitoring Well ESS-2B, 0.17 miles W 406--Monitoring Well ESS-3B, 0.08 miles N 407--Monitoring Well ESS-13B, 0.06 miles ENE 408--Monitoring Well ESS-13C, 0.06 miles ENE 409--Monitoring Well ESS-17A, 0.65 miles NE 410--Monitoring Well ESS-17B, 0.65 miles NE 411--Monitoring Well ESS-17C, 0.65 miles NE 412--Monitoring Well ESS-18B, Near SDSP 413--Monitoring Well ESS-18C, Near SDSP 414--Monitoring Well ESS-19B, Near SDSP 415--Monitoring Well ESS-19C, Near SDSP 416--Monitoring Well ESS-20B, Near SDSP 417--Monitoring Well ESS-20C, Near SDSP 418--Monitoring Well ESS-21B, Near SDSP 419--Monitoring Well ESS-21C, Near SDSP 420--Monitoring Well ESS-22B, Near SDSP 421--Monitoring Well ESS-22C, Near SDSP 422--Monitoring Well ESS-23C, Near SDSP 423--Monitoring Well ESS-24A, Near SDSP 424--Monitoring Well ESS-24B, Near SDSP 425--Monitoring Well ESS-24C, Near SDSP 426--Monitoring Well ESS-25B, Near SDSP 427--Monitoring Well ESS-25C, Near SDSP 428--Monitoring Well ESS-26C, Near SDSP 429--Monitoring Well ESS-27A, Near SDSP 430--Monitoring Well ESS-27C, Near SDSP 431--Monitoring Well ESS-30C, Near SDSP 432--Monitoring Well ESS-31C, Near SDSP 433--Monitoring Well MW-2, 0.02 miles S 434--Monitoring Well MW-3, 0.03 miles S 435--Monitoring Well ESS-Nancy Creek-1, (NC-1) 436--Monitoring Well ESS-Nancy Creek-2, (NC-2) 437--Monitoring Well ESS-Nancy Creek-3, (NC-3) 438--Monitoring Well ESS-Nancy Creek-4, (NC-4) 439--Monitoring Well ESS-Nancy Creek-5, (NC-5) 440--Monitoring Well ESS-Gum Log Branch-1, (GLB-1) 447--Monitoring Well ESS-28C, Near SDSP	Grab Sample, Quarterly, Semiannual	N/A	Tritium (Quarterly) Gamma (Semiannual)

\* Control Stations

**Table 2 (Continued)**  
**Brunswick Steam Electric Plant**  
**Radiological Monitoring Sampling Locations**

Sample Type	Location & Description	Frequency	Sample Sz	Analysis
Thermoluminescent Dosimetry (TLD) (Direct Radiation)	1 1.1 miles E	Quarterly	Not Applicable	TLD Reading (Gamma Dose)
	2 0.9 miles ESE			
	3 0.9 miles SE			
	4 1.1 miles SSE			
	5 1.1 miles S			
	6 1.1 miles SSW			
	7 1.1 miles SW			
	8 1.2 miles W			
	9 1.0 miles WNW			
	10 0.8 miles NW			
	11 0.9 miles NNW			
	12 1.1 miles N			
	13 1.2 miles NNE			
	14 0.5 miles NE			
	15 0.9 miles ENE			
	16 1.0 miles WSW			
	17 1.4 miles ESE			
	18 1.7 miles SE			
	**			
	20 2.1 miles S			
	21 2.9 miles SSW			
	22 5.3 miles SW			
	23 4.6 miles WSW			
	24 3.0 miles W			
	25 8.6 miles WNW			
	26 5.9 miles NW			
	27 5.1 miles NNW			
	28 4.2 miles NW			
	29 2.6 miles SSW			
	30 2.0 miles NE			
	31 2.5 miles ENE			
	32 5.8 miles ENE			
	33 4.1 miles E			
	34 5.4 miles E			
	35 7.3 miles SSE			
	36 8.9 miles NE			
	37 5.5 miles NW			
	38 11.0 miles W			
	39 5.3 miles SW			
	40 6.9 miles WSW			
	**			
75 4.7 miles S				
76 4.8 miles SSW				
77 5.4 miles S				
78 9.9 miles NNE				
79 9.5 miles N				
**				
81 9.9 miles WNW*				

\*Control Station

\*\*TLD sample points 19 and 80 have been retired, while points 41 thru 74 are not ODCM TLD sample points and are not listed.

## **SUMMARY OF RADIOLOGICAL MONITORING PROGRAM**

This report presents the results of the Radiological Environmental Monitoring Program conducted during 2009 for BSEP. The program was conducted in accordance with the ODCM, and applicable procedures.

The 2009 Annual Radiological Environmental Operating Report (REOR) has been prepared and submitted in accordance with Technical Specification 5.6.2 and ODCM 7.4.1. The report applies to both BSEP Unit Nos. 1 and 2 (License Nos. DPR-71 and DPR-62, respectively).

A total of 1921 sample measurements were performed on 1818 collected samples from indicator and control locations from eight environmental media types during the year. No detectable radioactivity (or radioactivity that differed significantly from the corresponding control) was observed in any of the 1700 measurements performed on the 1621 indicator location samples in 2009, except for Co-60 in broadleaf vegetation samples, and tritium in ground water and surface water samples. No gamma activity was detected in any of the ground water or surface water samples, except for K-40 and other naturally occurring gamma activity. All samples analyzed met the Lower Limit of Detection (LLD) requirements as established by ODCM Table 7.3.15-3.

The radiological environmental data indicates that BSEP operations in 2009 had no significant impact on the environment or public health and safety. No measurable radiation exposure is attributed to any off-site member of the public due to the operations of BSEP.

A statistical summary of all the data gathered in 2009 has been compiled in Table 3.

Comparison of the current data with preoperational (1973, 1974) information (Tables 4 and 5) indicates that air particulate filter gross beta activity and ambient gamma radiation levels were lower for gross beta and about the same for gamma in 2009.

**TABLE 3  
BRUNSWICK STEAM ELECTRIC PLANT  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY**

Brunswick Steam Electric Plant  
Brunswick County, North Carolina

Docket Numbers - 50-324 and 325  
Calendar Year 2009

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Lower Limit of Detection (LLD) <sup>(1)</sup>	All Indicator Locations <sup>(2)</sup> Mean Range	Location w/Highest Annual Mean		Control Locations Mean Range <sup>(2)</sup>
				Name, Distance, and Direction	Mean Range <sup>(2)</sup>	
Air Cartridge (pCi/m <sup>3</sup> )	I-131 350	5.0E-2	All less than LLD	----	----	All less than LLD
Air Particulate (pCi/m <sup>3</sup> )	Gross Beta <sup>(8)</sup> 350	5.0E-3	1.89E-2 (298/298) <sup>(7)</sup> 8.33E-3 – 3.25E-2	Brunswick County Government Complex 11.3 miles NW	1.95E-2 (38/38) <sup>(7)</sup> 1.01E-2 – 2.90E-2	1.83E-2 (52/52) <sup>(7)</sup> 7.76E-3 – 2.69E-2
	Gamma <sup>(4) (8)</sup> 27	See Table 6	All less than LLD	----	----	All less than LLD
Broadleaf Vegetation (pCi/g, wet)	Gamma <sup>(4)</sup> 69 <sup>(3)</sup> Co-60	3.9E-2	3.79E-2 (3/54) <sup>(7)</sup> 2.31E-2 – 7.57E-2	Discharge Canal 0.8 miles SW	4.94E-2 (2/13) <sup>(7)</sup> 2.31E-2 – 7.57E-2	All less than LLD
	Cs-137	3.6E-2	All less than LLD	----	----	1.69E-2 (2/15) <sup>(7)</sup> 1.60E-2 – 1.78E-2
Fish and Invertebrates (pCi/g, wet)	Tritium 3	1.00E+1 <sup>(9)</sup>	All less than LLD	----	----	No control
	Gamma <sup>(4)</sup> 15	See Table 6	All less than LLD	----	----	All less than LLD
Sediments--Shoreline (pCi/g, dry)	Gamma <sup>(4)</sup> 5 Cs-137	4.5E-2	1.65E-1 (3/5) <sup>(7)</sup> 1.44E-1 – 2.03E-1	Nancy's Creek adjacent to WP-55 near SDSP	1.65E-1 (3/3) <sup>(7)</sup> 1.44E-1 – 2.03E-1	No control <sup>(10)</sup>
	Hard-to-detects (Fe-55, Sr-89/90) 1	See Table 6	All less than LLD	----	----	No control

**TABLE 3 (cont.)  
BRUNSWICK STEAM ELECTRIC PLANT  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY**

Brunswick Steam Electric Plant  
Brunswick County, North Carolina

Docket Numbers - 50-324 and 325  
Calendar Year 2009

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Lower Limit of Detection (LLD) <sup>(1)</sup>	All Indicator Locations <sup>(2)</sup> Mean Range	Location w/Highest Annual Mean		Control Locations Mean Range <sup>(2)</sup>
				Name, Distance, and Direction	Mean Range <sup>(2)</sup>	
Surface Water (pCi/l)	Tritium 336	2.50E+2 <sup>(6)</sup>	4.07E+2 (48/272) <sup>(7)</sup> 2.45E+2 - 1.10E+3	Discharge Canal @ OD Pumps 4.9 miles SSW	5.75E+2 (1/12) <sup>(7)</sup> Single value	All less than LLD
	Gamma <sup>(4)</sup> 97	See Table 6	All less than LLD	-----	-----	All less than LLD
Ground Water (pCi/l)	Tritium 403	2.50E+2 <sup>(6)</sup>	1.29E+5 (185/403) <sup>(7)</sup> 2.39E+2 - 1.04E+6	Well ESS-22C Near SDSP	6.48E+5 (10/10) <sup>(7)</sup> 2.72E+5 - 8.93E+5	No control
	Gamma <sup>(4)</sup> 84	See Table 6	All less than LLD	-----	-----	No control
TLD (mR per quarter) <sup>(5)</sup>	TLD Readout 179 <sup>(3)</sup>		1.00E+1 (175/176) <sup>(7)</sup> 7.10E+0 - 1.37E+1	6.9 miles WSW	1.20E+1 (4/4) <sup>(7)</sup> 1.12E+1 - 1.29E+1	1.06E+1 (4/4) <sup>(7)</sup> 9.50E+0 - 1.20E+1



### FOOTNOTES TO TABLE 3

1. LLD is calculated based on 4.66 standard deviations above background using typical sample sizes and counting times. Due to counting statistics and varying volumes, occasionally lower LLDs are achieved. See Table 6.
2. Mean and range are based on detectable measurements only. The fractions of detectable measurements at specific locations are indicated in parentheses.
3. Missing samples are discussed in Missed Surveillances.
4. Summary of gamma analysis results in this report does not include the following naturally occurring isotopes since most environmental samples contained some or all of these: Be-7, K-40, Tl-208, Pb-212, Bi-214, Pb-214, and Ra-226.
5. TLD dose is reported in milliroentgen (mR) per 90-day period (quarter) beginning in 1995. This is the exposure standard used to compare data to the NRC.
6. The tritium LLD was approximately  $2.50\text{E}+2$  pCi/L. The LLD was lowered at the request of Carolina Power & Light Company, now doing business as Progress Energy Carolinas, Inc. in order to maintain comparable LLD values with the North Carolina Division of Radiation Protection (NCDRP) laboratory.
7. The numbers in parentheses [e.g., Surface Water Tritium  $4.07\text{E}+2$  (48/272) for Indicator Location Mean (Average)] indicate how many samples that specific value and column apply to in relation to the total number of samples for that column heading.
8. Air Sampler location 206 (APAC-206) was placed in service April 6, 2009, and the first sample was collected April 13, 2009.
9. The tritium reporting limit for Fish is approximately 10.0 pCi/gram as stated in the results from GEL.
10. A Shoreline Sediment background sample was collected December 21, 2009 (19 miles N from the plant at Belville Park). A representative Shoreline Sediment evaluation is being conducted to determine an appropriate control sample. The Shoreline Sediment background sample indicated the presence of Cs-137 activity ( $2.55\text{E}-2$  pCi/gram – dry single value) along with other naturally occurring gamma activity.

## INTERPRETATIONS AND CONCLUSIONS

### Air Monitoring

The average gross beta concentration measured in 298 air particulate (AP) samples collected at indicator stations during 2009 was  $1.89\text{E-}2$  picocuries per cubic meter ( $\text{pCi/m}^3$ ) and the average gross beta concentration measured in 52 AP samples collected at control stations during 2009 was  $1.83\text{E-}2$   $\text{pCi/m}^3$ . The preoperational (1973-1974) average concentration was  $8.2\text{E-}2$   $\text{pCi/m}^3$ , while the average activity in the recent past (2004-2008) was  $1.86\text{E-}2$   $\text{pCi/m}^3$  (Table 4). The airborne concentrations of gross beta activity in 2009 are indicative of natural background and do not indicate any abnormal activities originating from the nuclear operations at BSEP. Figures 10 through 15 depict the monthly variations of these values. In April of 2009, a new air sampler (APAC-206) was placed in service at the Brunswick Government Complex in Bolivia, N.C.; which is approximately 11.3 miles NW of the plant site. This air sampler is not an ODCM required location. The air samplers operated for a total of greater than 99% availability for the 2009 year.

Gamma analyses of the composite air particulate filters indicated that all of the radionuclides indicative of plant effluents were at concentrations less than their respective LLDs. All radionuclides positively identified by the radionuclide analyses were typical of naturally occurring materials.

Analyses of 298 indicator and 52 control air cartridges (AC) for the collection of radioiodines indicated that concentrations of those radionuclides, and particularly I-131, were less than the LLD. No I-131 activity was identified in any indicator or control samples in 2009.

### Milk

No milk (milch) sampling locations are currently identified in BSEP environs; therefore, no sampling of this media was available.

### Vegetation

Food crops were not grown in the vicinity of the plant in 2009, and this media was represented by indigenous vegetation samples consisting primarily of wax myrtle leaves, along with cherry and sweetgum leaves. Fifty-four (54) samples were collected from indicator locations and 15 samples from the control location. No detectable activities relating to plant effluents were detected in this sampling media in 2009, except for three broadleaf (BL) wax myrtle samples sampled February 2, 2009 (BL-803), and May 1, 2009 (BL-801), which indicated Co-60 (cobalt-60) activity ( $2.63\text{E-}2$  -  $7.57\text{E-}2$   $\text{pCi/gram wet}$ ). Broadleaf - 803 (BL-803) was resampled on February 5, 2009, and the results did not indicate any Co-60 activity (NCR # 319178). However, BL - 801 was resampled on May 6, 2009, and indicated Co-60 activity of  $2.31\text{E-}2$   $\text{pCi/gram wet}$

(NCR # 335156). There have been no subsequent environmental vegetation samples which indicated the presence of Co-60. Cesium (Cs)-137 ( $1.60\text{E-}2$  –  $1.78\text{E-}2$  pCi/gram wet) activity was detected in two (wax myrtle broadleaf samples) out of fifteen control samples. No other gamma activity was detected in any sample, except for K-40 (potassium-40) and other naturally occurring gamma activity.

### **Fish and Invertebrates**

Fish (free swimmers and bottom feeders), invertebrate (SH), and benthic organism (BO) samples are collected semiannually from two locations: (1) near the Atlantic Ocean discharge pipe at Caswell Beach and (2) a control location in the Atlantic Ocean not influenced by plant operations and annually from three locations on Nancy's Creek (Figure 4). In all 15 samples (indicator and control), no detectable activities relating to plant effluents were detected in 2009. All radionuclides positively identified by the radionuclide analyses were naturally occurring nuclides. The fish locations on Nancy's Creek sampled in 2009 were also analyzed for tritium, with all the tritium results being less than LLD.

### **Groundwater**

Groundwater is sampled semiannually and quarterly from 40 indicator sample sites. These samples are analyzed for gamma-emitting radionuclides (at least semiannually) and for tritium (at least quarterly). The analyses indicated that no detectable concentrations of gamma emitting radionuclides relating to plant effluents appeared in any of the indicator samples. Analyses indicated detectable concentrations of tritium in 185 out of 403 samples analyzed in 2009. No groundwater samples exceeded reportable concentrations, and there is no indication that the tritium is migrating beyond the Progress Energy owned property through the groundwater.

### **Shoreline Sediments**

Two shoreline sediments in 2009 were drawn from the beach area near the pumping station location at Caswell Beach. In both samples, all of the radionuclides indicative of plant effluents were determined to be less than the respective LLDs for gamma-emitting radionuclides. Three shoreline sediments in 2009 were drawn from Nancy's Creek adjacent to WP-55 near the Storm Drain Stabilization Pond (SDSP), where all three indicator samples contained Cesium (Cs)-137 activity ( $1.44\text{E-}1$  -  $2.03\text{E-}1$  pCi/gm dry). The samples were analyzed for Iron (Fe)-55, Strontium (Sr)-89, and Strontium (Sr)-90 by GEL, all were less than the respective LLDs. A Shoreline Sediment background sample was collected December 21, 2009 (19 miles N from the plant at Belville Park). The Shoreline Sediment background sample indicated the presence of Cs-137 activity ( $2.55\text{E-}2$  pCi/gram - dry single value) along with other naturally occurring gamma activity.

## **Surface Water**

Surface water (SW) is sampled monthly from the intake and discharge canal and Nancy's Creek is sampled weekly. These samples are analyzed for gamma-emitting radionuclides and for tritium. Tritium analysis is performed weekly on the Nancy Creek samples. Sampling and compositing for gamma emitters is weekly and the gamma analysis is performed monthly on the samples composited weekly. The analyses indicated that no detectable concentrations of gamma emitting radionuclides relating to plant effluents appeared in any of the indicator and control samples. None of the control samples indicated the presence of tritium. However, forty-eight (48) out of 272 indicator samples indicated the presence of tritium in 2009. The predominate location(s) indicating tritium were at Nancy's Creek and the discharge canal indicator locations. One (1) of the twelve samples from the historical discharge canal indicated the presence of tritium, while forty-seven (47) out of 260 samples from Nancy's Creek indicated the presence of tritium. The tritium activity detected in SW-401 (the discharge canal composite sample) had a single tritium concentration of  $5.75E+2$  pCi/L, which was expected due to plant operations at the time of sampling. The indicator samples from Nancy's Creek had a maximum concentration of  $1.10E+3$  pCi/L of tritium activity. The reporting limit for tritium in environmental samples is 30,000 pCi/L; therefore, the detected values are well below the reportable limit. Figure 16 depicts the observed tritium concentrations for SW-400 (control) and SW-401 (indicator) in 2009.

## **External Radiation Exposure**

The environmental data on external radiation exposure for 2009 was essentially unchanged from 1989-2008 with an average exposure for all of 2009 indicator locations of 10.0 mR per quarter. The average exposure observed over the preoperational period was 1.02 mR per week observed from the fourth quarter of 1972 through the second quarter of 1975. Table 5 provides a comparison of recent data with the preoperational and historical data.

The highest average exposure occurred at one TLD location at 6.9 miles WSW. The exposure was 12.0 mR per quarter. Figure 17 depicts average inner and outer ring TLD data for each quarter of 2009. This depiction does not indicate a significant higher exposure rate for the inner versus the outer ring. This is interpreted as demonstrating that no discernible off-site exposure has occurred from plant operations.

**TABLE 4**  
**Brunswick Steam Electric Plant**  
**GROSS BETA AIR PARTICULATE ACTIVITY AVERAGES**

<u>Location</u>	<u>Gross Beta Activity (pCi/m<sup>3</sup>)</u>							
	<u>Preoperational</u>		<u>Recent Operational</u>					
	<u>1973</u>	<u>1974</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
AP-200	2.2E-2	1.4E-1	1.7E-2	1.8E-2	1.9E-2	1.9E-2	1.9E-2	1.9E-2
AP-201	3.1E-2	1.4E-1	1.8E-2	1.9E-2	1.9E-2	2.0E-2	1.8E-2	1.9E-2
AP-202	3.4E-2	1.4E-1	1.7E-2	1.7E-2	1.8E-2	1.9E-2	1.9E-2	1.9E-2
AP-203	2.4E-2	1.3E-1	1.8E-2	1.8E-2	1.8E-2	2.0E-2	1.9E-2	1.9E-2
AP-204*	2.5E-2	1.3E-1	1.8E-2	1.9E-2	1.9E-2	2.1E-2	1.8E-2	1.8E-2
AP-205	**	**	1.8E-2	1.8E-2	1.8E-2	1.9E-2	1.9E-2	1.9E-2
AP-206*	**	**	**	**	**	**	**	2.0E-2

\* Control location

\*\* This sample point added post-operational.

**TABLE 5**  
**Brunswick Steam Electric Plant**  
**HISTORICAL TLD RESULTS (1972-2009)**

Year	Average Exposure of All TLD Monitoring Locations (mR per week)
1972 (4th Qtr.)	0.80
1973	1.25
1974	0.97
1975 (1st, 2nd Qtr)	0.80
1976	0.98
1977	1.32
1978	1.24
1979	0.93
1980	0.90
1981	0.96
1982	1.18
1983	1.21
1984	0.98
1985	1.03
1986	0.89
1987	0.92
1988	0.86
1989	0.75
1990	0.76
1991	0.76
1992	0.75
1993	0.78
1994	0.77
1995	10.1 (mR per quarter)*
1996	10.1 (mR per quarter)
1997	10.1 (mR per quarter)
1998	9.7 (mR per quarter)
1999	9.7 (mR per quarter)
2000	9.7 (mR per quarter)
2001	10.0 (mR per quarter)
2002	9.6 (mR per quarter)
2003	9.6 (mR per quarter)
2004	9.7 (mR per quarter)
2005	9.8 (mR per quarter)
2006	10.0 (mR per quarter)
2007	9.8 (mR per quarter)
2008	9.9 (mR per quarter)
2009	10.0 (mR per quarter)

\*TLD exposure in mR per quarter beginning in 1995. The equivalent weekly exposure is 0.78 mR.

## **MISSED SURVEILLANCES**

### **Air Cartridge and Air Particulates**

Any REMP weekly air samples (Air Cartridge – AC or Air Particulate – AP) that exceed 30 hours of down time in a surveillance period will be reported as a “missed surveillance.” However, this sample will still be counted and the data reported; whereas a “missed sample” will have no data reported. The air samplers operated for a total of greater than 99% availability for the 2009 year.

All AP and AC samples were available for counting in 2009.

Missed Surveillances:

- APAC-201; August 12, 2009 – Downtime of 17.3 hours due to an electrical failure of the GFI circuit. An alternate circuit was provided and the sampler repaired and the system returned to service on August 13, 2009 (NCR # 350245).

### **Food Crops / Vegetation**

No food crops were grown in the vicinity of the plant in 2009; therefore, none were collected. The media were represented by indigenous vegetation samples (broadleaf vegetation) consisting primarily of wax myrtle leaves, along with a few cherry and sweetgum leaves.

### **Thermoluminescent Dosimeters (TLDs)**

One out of a possible 180 TLD samples was missing during 2009. The missing TLD occurred:

Fourth Quarter	TLD # 8 was missing in the field due to the power pole it was stationed on being replaced, which resulted in the loss of the TLD. A new TLD and holder were installed on the new power pole in the same location (NCR # 374236).
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## **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  $5.0\text{E}-3$  pCi/m<sup>3</sup>.

AP samples are mounted in two-inch stainless steel planchets and are typically counted directly for 50 minutes.

### **Tritium**

Liquid samples requiring tritium analysis are treated with a small amount of sodium hydroxide, potassium permanganate crystals, and then distilled. The distillate is mixed with a liquid scintillation cocktail and counted for the appropriate time to reach the desired LLD. The desired LLD was approximately  $2.50\text{E}+2$  pCi/L. This lower LLD was established to compare BSEP tritium LLDs and North Carolina Department of Radiation Protection's reportable concentrations, in the Split Sample Program's Annual Report. The fish samples requiring tritium analysis are analyzed by a vendor laboratory. The ground water samples and most of the surface water samples requiring tritium analysis are analyzed by the BSEP laboratory.

### **Iodine-131**

Iodine-131 airborne concentrations are analyzed by the intrinsic germanium (Ge) gamma spectrometry systems. The cartridges are placed on the detector and each charcoal cartridge is typically counted individually for 2,500 seconds with an approximate LLD of  $5.0\text{E}-2$  pCi/m<sup>3</sup>.

### **Gamma Spectrometry**

Gamma spectrum analysis utilizes intrinsic germanium detectors with thin aluminum windows housed in steel and lead shields. The analyzer system is the Canberra APEX Gamma Spectroscopy System. Table 6 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).

AP filter quarterly composites are placed in a Petri dish and analyzed directly for a typical count time of 7,000 seconds.

Liquid samples are transferred to Marinelli beakers and analyzed by gamma counting. One-liter SW samples are gamma scanned directly in a 1-Liter Marinelli beaker for 60,000 seconds.



Shoreline sediments are dried, ground, weighed, and then analyzed in a Marinelli beaker for a typical count time of 1,500 seconds.

Broadleaf vegetation is weighed wet and analyzed in a Marinelli beaker for a typical count time of 7,500 seconds.

Fish samples are prepared by stuffing small raw, edible portions of the fish in a one liter Marinelli beaker and edible portions of invertebrate organisms are cleaned and placed in a one liter Marinelli beaker for analysis for a typical count time of 1,800 seconds.

### **Thermoluminescent Dosimetry**

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

Dosimeters are machine annealed before field placement. Following exposure in the field, each dosimeter is read utilizing a Panasonic TLD reader. This instrument integrates the light photons emitted from traps as the dosimeter is heated. Calibration is calculated using dosimeters irradiated to known doses for each set of dosimeters measured. Prior to the measurement of each dosimeter, the instrument is checked through use of an internal constant light source as a secondary standard. The exposure reported is corrected for exposure received in transit and during storage through the use of control dosimeters.

### **Interlaboratory Comparison Program**

The Radiochemistry Laboratory at the Harris Energy & Environmental Center in New Hill, North Carolina, provides radioanalytical services for Progress Energy Carolinas, Inc.'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.

The Interlaboratory Comparison Program entails measurements on each instrument that is used to determine concentrations of radioactive material in the various media that are analyzed as part of the REMP. During 2009, 94 average analyses were completed on 18 samples representing seven major environmental media (i.e., water, milk, air filters, air filters composite, soil, air cartridges, and simulated vegetation). Data on the known activities, the uncertainties, and the ratios to the known for the 94 average analyses have been received from Eckert & Ziegler Analytics. The results were compared to the criteria established in the NRC Inspection Manual (Procedure 84750) for Radioactive Waste Treatment, Effluent, and Environmental monitoring (see below results).

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

Also, included at the end on the report in the Appendix is a summary of General Engineering Laboratories' (GEL's) Interlaboratory Comparison Program results for 2009. Delineated in the results are: the Sample Number or Study ID; Analysis quarter and year; sample media; specific radionuclide; its unit; its result; the known values supplied by the providers; GEL's ratio to the known value or acceptance criteria provided by the provider; evaluation criteria. BSEP's Interlaboratory Comparison Program results are also listed below. Other BSEP Interlaboratory Cross Check Program Results from 2009 will be supplied upon request.

### HEEC - Interlaboratory Comparison Program Data for 2009

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

#### Gamma Emitters + I-131 in Milk

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

#### Gamma Emitters + I-131 in Water

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

#### Gross Beta (Cs-137) in Water

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

#### Tritium in Water

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

<b>Gamma Emitters in Simulated Vegetation</b>												
4th Quarter 2008				1st Quarter 2009			2nd Quarter 2009			3rd Quarter 2009		
Nuclide	HEEC Value	Known Value	Ratio to	HEEC Value	Known Value	Ratio to	HEEC Value	Known Value	Ratio to	HEEC Value	Known Value	Ratio to
	(pCi/Liter)	(pCi/Liter)	Known	(pCi/gram)	(pCi/gram)	Known	(pCi/gram)	(pCi/gram)	Known	(pCi/gram)	(pCi/gram)	Known
E6528-668												
Ce-141				0.125	0.123	1.02						
Cr-51				0.402	0.395	1.02						
Cs-134				0.113	0.121	0.93						
Cs-137				0.145	0.144	1.01						
Co-58				0.153	0.154	0.99						
Mn-54				0.170	0.165	1.03						
Fe-59				0.143	0.129	1.11						
Zn-65				0.212	0.202	1.05						
Co-60				0.187	0.184	1.02						
<b>Gross Beta Filter</b>												
4th Quarter 2008				1st Quarter 2009			2nd Quarter 2009			3rd Quarter 2009		
Nuclide	HEEC Value	Known Value	Ratio to	HEEC Value	Known Value	Ratio to	HEEC Value	Known Value	Ratio to	HEEC Value	Known Value	Ratio to
	(pCi/Filter)	(pCi/Filter)	Known	(pCi/Filter)	(pCi/Filter)	Known	(pCi/Filter)	(pCi/Filter)	Known	(pCi/Filter)	(pCi/Filter)	Known
E6412-668												
Gross Beta	111	106	1.05				83.5	84.8	0.98			
<b>I-131 on Face Loaded Charcoal Cartridge</b>												
4th Quarter 2008				1st Quarter 2009			2nd Quarter 2009			3rd Quarter 2009		
Nuclide	HEEC Value	Known Value	Ratio to	HEEC Value	Known Value	Ratio to	HEEC Value	Known Value	Ratio to	HEEC Value	Known Value	Ratio to
	(pCi/Unit)	(pCi/Unit)	Known	(pCi/Unit)	(pCi/Unit)	Known	(pCi/Unit)	(pCi/Unit)	Known	(pCi/Unit)	(pCi/Unit)	Known
E6414-668												
I-131	55.4	53.3	1.04				94.1	95.7	0.98			
<b>Gamma Filter</b>												
4th Quarter 2008				1st Quarter 2009			2nd Quarter 2009			3rd Quarter 2009		
Nuclide	HEEC Value	Known Value	Ratio to	HEEC Value	Known Value	Ratio to	HEEC Value	Known Value	Ratio to	HEEC Value	Known Value	Ratio to
	(pCi/Liter)	(pCi/Liter)	Known	(pCi/gram)	(pCi/gram)	Known	(pCi/gram)	(pCi/gram)	Known	(pCi/gram)	(pCi/gram)	Known
E6686-668												
Ce-141				186	188	0.99	181	180	1.01			
Cr-51				249	265	0.94	145	145	1.00			
Cs-134				108	110	0.98	79	80.6	0.98			
Cs-137				127	127	1.00	125	121	1.03			
Co-58				61	60.8	1.00	66	65.1	1.01			
Mn-54				95	90.7	1.05	147	135	1.09			
Fe-59				92	81	1.14	114	96.3	1.18			
Zn-65				137	116	1.18	158	133	1.19			
Co-60				211	206	1.02	104	105	0.99			
<b>Gamma 13 Filter Composite</b>												
4th Quarter 2008				1st Quarter 2009			2nd Quarter 2009			3rd Quarter 2009		
Nuclide	HEEC Value	Known Value	Ratio to	HEEC Value	Known Value	Ratio to	HEEC Value	Known Value	Ratio to	HEEC Value	Known Value	Ratio to
	(pCi/Liter)	(pCi/Liter)	Known	(pCi/gram)	(pCi/gram)	Known	(pCi/gram)	(pCi/gram)	Known	(pCi/gram)	(pCi/gram)	Known
E6687-668												
Ce-141				273	280	0.98						
Cr-51				388	394	0.98						
Cs-134				158	163	0.97						
Cs-137				190	189	1.01						
Co-58				90	90.5	0.99						
Mn-54				143	135	1.06						
Fe-59				134	120	1.12						
Zn-65				202	173	1.17						
Co-60				311	307	1.01						

Gamma Emitters in Soil												
4th Quarter 2008			1st Quarter 2009			2nd Quarter 2009			3rd Quarter 2009			
Nuclide	HEEC Value (pCi/Liter)	Known Value (pCi/Liter)	Ratio to Known	HEEC Value (pCi/gram)	Known Value (pCi/gram)	Ratio to Known	HEEC Value (pCi/gram)	Known Value (pCi/gram)	Ratio to Known	HEEC Value (pCi/gram)	Known Value (pCi/gram)	Ratio to Known
Ce-141										0.643	0.644	1.00
Cr-51										0.594	0.518	1.15
Cs-134										0.274	0.288	0.95
Cs-137										0.534	0.526	1.02
Co-58										0.235	0.233	1.01
Mn-54										0.484	0.483	1.00
Fe-59										0.369	0.345	1.07
Zn-65										0.500	0.477	1.05
Co-60										0.365	0.375	0.97

**BSEP 2009 Interlaboratory Cross Check Performance Summary  
for Environmental Sample Media Types Analyzed**

Sample	Nuclide	Quarter	Units	BSEP Value	EZA Value	BSEP/EZA Ratio	Evaluation
Tritium in Water	H-3	1 <sup>st</sup>	μCi/cc	8.55E-4	9.04E-4	0.95	Agreement
		3 <sup>rd</sup>	μCi/cc	1.04E-3	1.09E-3	0.96	Agreement
Solid	Ce-141	3 <sup>rd</sup>	μCi	6.81E-2	6.86E-2	0.99	Agreement
		4 <sup>th</sup>	μCi	4.13E-2	4.24E-2	0.97	Agreement
	Cr-51	4 <sup>th</sup>	μCi	2.86E-2	2.96E-2	0.97	Agreement
		3 <sup>rd</sup>	μCi	6.21E-2	6.26E-2	0.99	Agreement
	Cs-134	4 <sup>th</sup>	μCi	1.23E-1	1.27E-1	0.97	Agreement
		4 <sup>th</sup>	μCi	8.81E-2	8.85E-2	1.00	Agreement
		3 <sup>rd</sup>	μCi	1.45E-2	1.54E-2	0.94	Agreement
	Cs-137	4 <sup>th</sup>	μCi	2.75E-2	3.05E-2	0.90	Agreement
		4 <sup>th</sup>	μCi	2.19E-2	2.13E-2	1.03	Agreement
		3 <sup>rd</sup>	μCi	2.22E-2	2.24E-2	0.99	Agreement
	Co-58	4 <sup>th</sup>	μCi	2.10E-2	2.11E-2	0.99	Agreement
		4 <sup>th</sup>	μCi	1.52E-2	1.47E-2	1.03	Agreement
		3 <sup>rd</sup>	μCi	1.65E-2	1.68E-2	0.98	Agreement
	Mn-54	4 <sup>th</sup>	μCi	3.13E-2	3.24E-2	0.97	Agreement
		4 <sup>th</sup>	μCi	2.28E-2	2.26E-2	1.01	Agreement
		3 <sup>rd</sup>	μCi	2.78E-2	2.69E-2	1.03	Agreement
	Fe-59	4 <sup>th</sup>	μCi	2.17E-2	2.22E-2	0.98	Agreement
		4 <sup>th</sup>	μCi	1.55E-2	1.55E-2	1.00	Agreement
		3 <sup>rd</sup>	μCi	3.19E-2	3.02E-2	1.06	Agreement
	Zn-65	4 <sup>th</sup>	μCi	3.22E-2	3.19E-2	1.01	Agreement
4 <sup>th</sup>		μCi	2.32E-2	2.22E-2	1.05	Agreement	
3 <sup>rd</sup>		μCi	3.06E-2	2.71E-2	1.13	Agreement	
Co-60	4 <sup>th</sup>	μCi	4.44E-2	4.39E-2	1.01	Agreement	
	4 <sup>th</sup>	μCi	3.14E-2	3.06E-2	1.03	Agreement	
	3 <sup>rd</sup>	μCi	1.96E-2	1.96E-2	1.00	Agreement	
		4 <sup>th</sup>	μCi	2.89E-2	3.03E-2	0.95	Agreement
		4 <sup>th</sup>	μCi	2.10E-2	2.11E-2	1.00	Agreement

**Lower Limits of Detection**

All samples analyzed met the LLD required by the ODCM. Typical "a priori" LLD values for the samples analyzed are listed in Table 6.

**TABLE 6**  
**TYPICAL LOWER LIMITS OF DETECTION (A PRIORI)**  
**GAMMA SPECTROMETRY**

<b>Surface Water Samples (Saline Water)</b>	
<b>Isotope</b>	<b>LLD (pCi/l)</b>
Mn-54	3
Co-58	3
Fe-59	7
Co-60	3
Zn-65	6
Zr-Nb-95	6 / 4
I-131	14
Cs-134	3
Cs-137	3
Ba-La-140	25 / 8
<b>Air Particulates (Quarterly Composite)</b>	
<b>Isotope</b>	<b>LLD (pCi/m<sup>3</sup>)</b>
Cs-134	0.002
Cs-137	0.001
<b>Shoreline Sediment</b>	
<b>Isotope</b>	<b>LLD (pCi/kg, dry)</b>
Cs-134	65
Cs-137	45
Fe-55 (Hard-to-detect [HTD])	20,000
Sr-89/90 (HTD)	2000 / 2000
<b>Fish</b>	
<b>Isotope</b>	<b>LLD (pCi/kg, wet)</b>
Mn-54	38
Co-58	42
Fe-59	106
Co-60	40
Zn-65	79
Cs-134	44
Cs-137	38
<b>Food Products and Vegetation</b>	
<b>Isotope</b>	<b>LLD (pCi/kg, wet)</b>
I-131	52.8
Cs-134	44
Cs-137	36

# 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 both to ensure the monitoring program is current as well as to provide data for the calculation of estimated radiation exposure.

The pathways that are evaluated are:

- Ingestion Pathway - Results from eating food crops that may have radioactive materials deposited on them from the atmosphere or contain radioactive materials from the soil. Another pathway is through drinking milk from local cows or goats if these are present. 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-mile radius of the plant for each of the 16 meteorological sectors (compass direction from which the winds may blow, for example NNE [North North East]):

- The nearest resident
- The nearest garden of greater than 500 square feet, producing broadleaf vegetation
- The nearest milk animal

The following must also be identified (for elevated releases) within the three-mile radius of the plant for each of the 16 meteorological sectors:

- The location of all milk animals
- The location of all gardens of greater than 500 square feet, producing broadleaf vegetation

The primary method is visual inspection from roadside within the five-mile radius, with the exception of the Sunny Point Military Ocean Terminal. This information may be supplemented with data from aerial photographs and a Global Positioning System (GPS) to determine distance and direction from the plant.

## **2009 Land Use Census Results**

The 2008 and 2009 results of the survey for the nearest resident, garden, milk and meat animals in each sector are compared in Table 7.

The resident portion of the census conducted in June of 2009 did not identify changes in the identity of the nearest resident from plant center from 2008. The garden portion of the census identified changes in the distances, locations, and existence of the nearest garden in seven sectors during the 2009 census.

The nearest garden location changed in the North (N) sector from a garden at 1.0 miles to no garden, the South (S) sector from 1.8 miles to 2.0 miles, the South Southwest (SSW) sector from 1.9 miles to 2.0 miles, the Southwest (SW) sector from 3.0 miles to 1.6 miles, the West (W) sector from 1.0 mile to 0.9 miles, the Northwest (NW) sector from 4.9 miles to 1.0 mile, and the North Northwest (NNW) from 0.9 miles to 0.9 miles (different location). No milk animals were located within 5 miles of the plant in 2009.

The 2009 Garden Census was conducted within 3 miles of BSEP and identifies all gardens of greater than 500 square feet that were found in the survey area. Results of the garden census are located in Table 8.

Results of the 2009 Land Use and Garden Census indicate stable use of land, confirming that current control locations are appropriate, and no changes are needed for dose assessment and environmental monitoring.

**TABLE 7**  
**Brunswick Steam Electric Plant**  
**LAND USE CENSUS COMPARISONS (2008- 2009)**  
**NEAREST PATHWAY (MILES)**

SECTOR	RESIDENT		GARDEN		MILK/MEAT ANIMALS	
	2008	2009	2008	2009	2008	2009
N	0.7	0.7	1.0	None*	None	None
NNE	0.8	0.8	0.9	0.9	None	None
NE	None	None	None	None	None	None
ENE	None	None	None	None	None	None
E	None	None	None	None	None	None
ESE	1.4	1.4	1.4	1.4	None	None
SE	None	None	None	None	None	None
SSE	2.1	2.1	None	None	None	None
S	1.1	1.1	1.8	2.0*	None	None
SSW	1.2	1.2	1.9	2.0*	None	None
SW	1.1	1.1	3.0	1.6*	None	None
WSW	1.2	1.2	1.2	1.2	None	None
W	0.9	0.9	1.0	0.9*	None	None
WNW	0.9	0.9	None	None	None	None
NW	0.9	0.9	4.9	1.0*	None	None
NNW	0.8	0.8	0.9	0.9*	None	None

\* Represents a change from the previous year.

**TABLE 8**  
**Brunswick Steam Electric Plant**  
**GARDEN CENSUS (2009)**

SECTOR	DISTANCE (miles)		SECTOR	DISTANCE (miles)
N	None		WSW	2.1
NNE	0.9		WSW	2.9
NE	None		WSW	3.0
ENE	None		WSW	3.0
E	None		W	0.9
ESE	1.4		W	0.9
SE	None		W	1.0
SSE	None		W	2.5
S	2.0		W	2.6
S	2.3		W	2.6
SSW	2.0		W	2.7
SSW	2.1		W	2.7
SSW	2.1		W	2.7
SSW	2.2		W	2.7
SSW	2.2		W	2.7
SSW	2.3		WNW	None
SSW	2.3		NW	1.0
SSW	2.3		NW	4.4
SSW	2.7		NW	4.9
SSW	2.7		NNW	0.9
SSW	2.8		NNW	4.3
SSW	2.8		NNW	4.5
SW	1.6		NNW	4.6
SW	2.2		NNW	4.6
SW	2.9		NNW	4.6
WSW	1.3		NNW	4.7
WSW	1.3		NNW	4.8
WSW	1.6		NNW	4.8
WSW	2.1		NNW	5.0

**Figure 10 For BSEP from 1/1/2009 To 12/31/2009**  
**AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)**

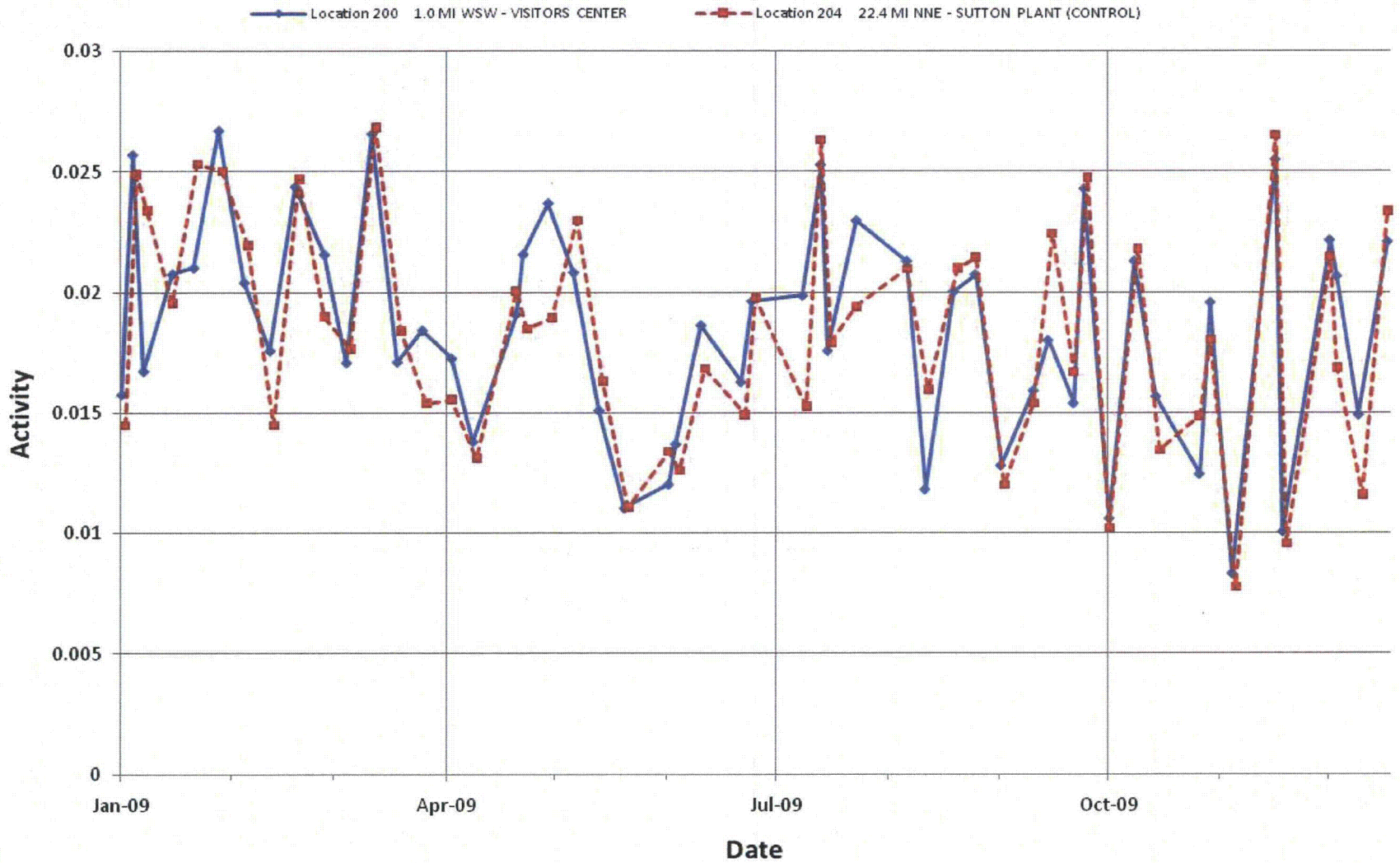
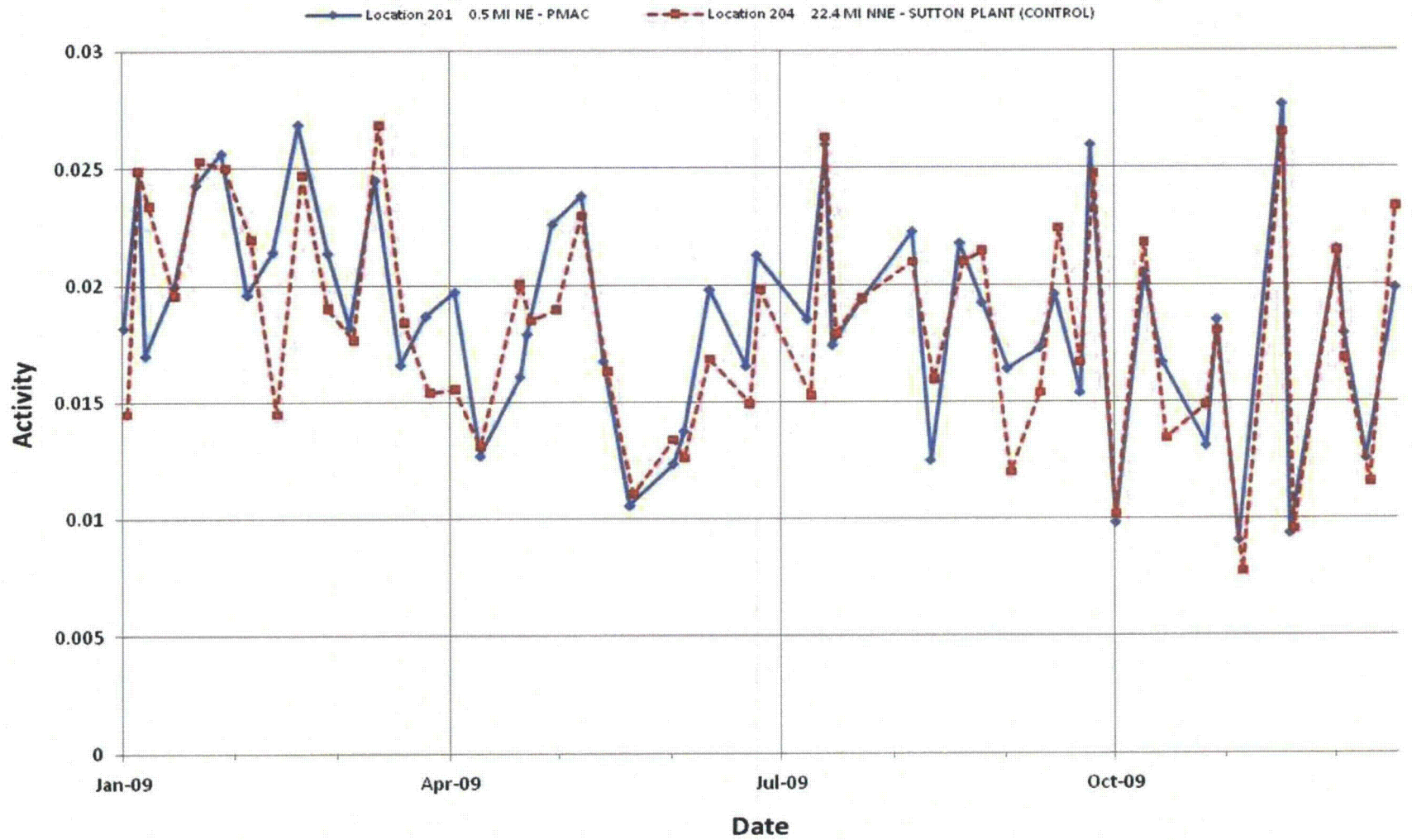
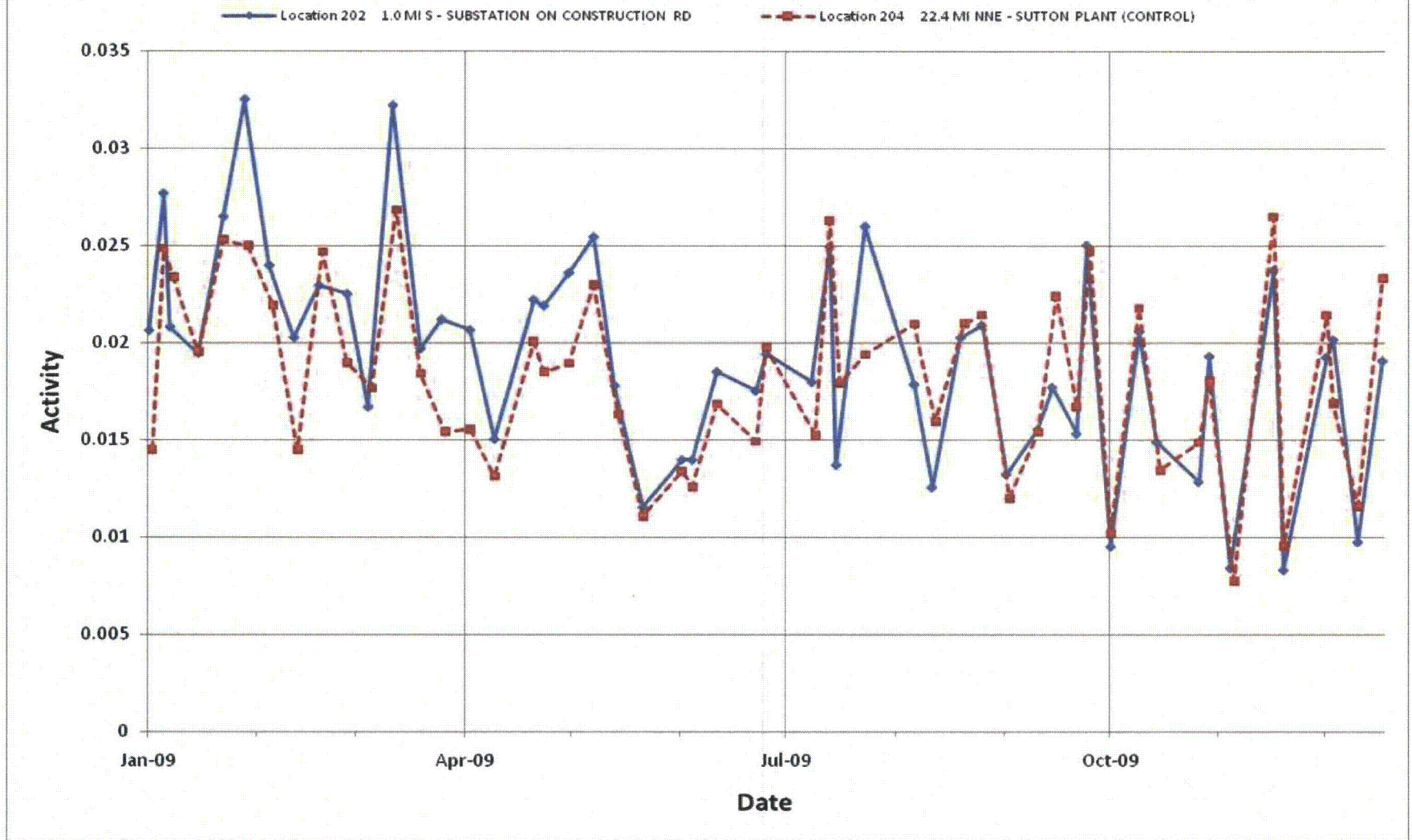


Figure 11 For BSEP from 1/1/2009 To 12/31/2009  
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)





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



**Figure 13 For BSEP from 1/1/2009 To 12/31/2009**  
**AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)**

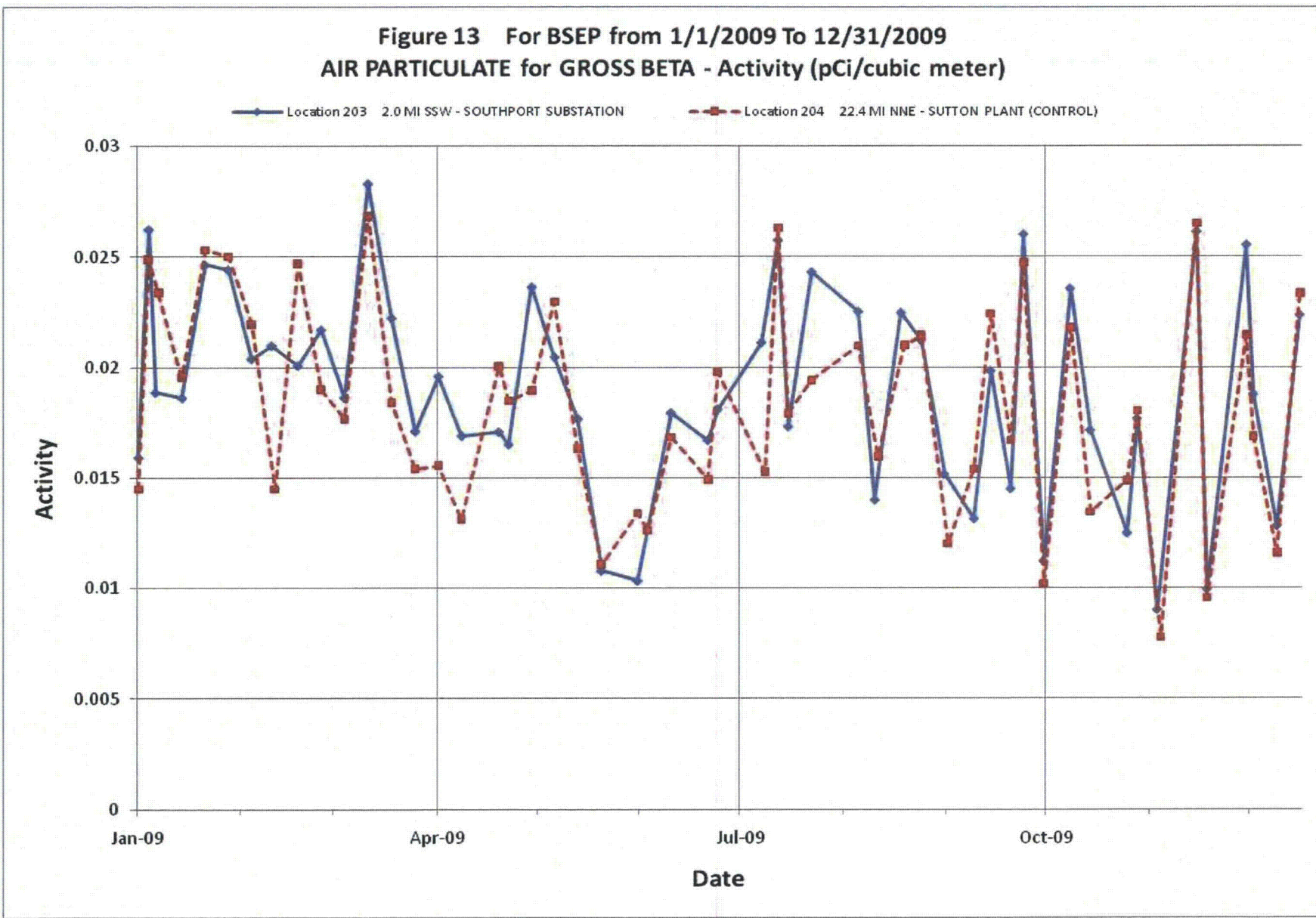
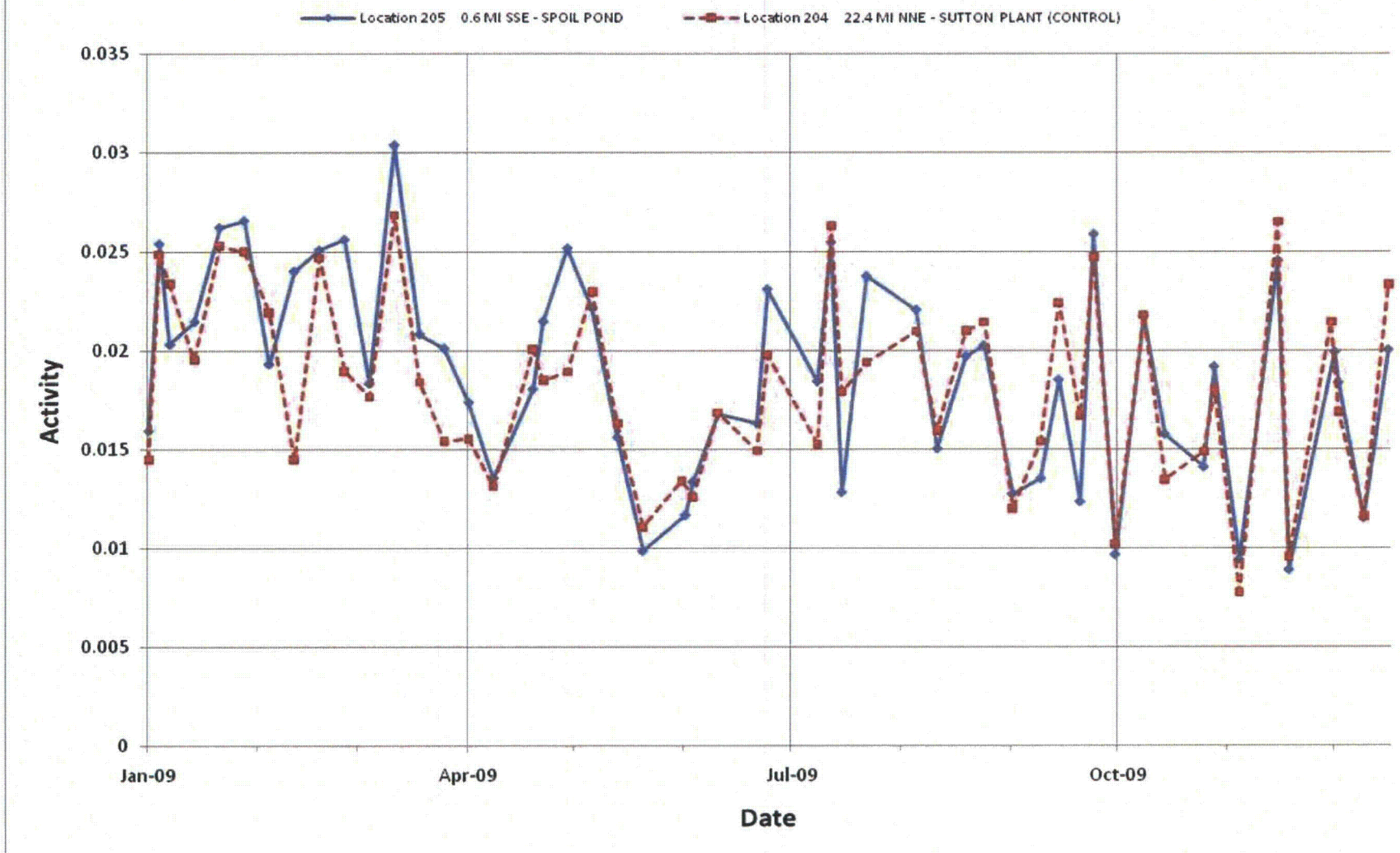


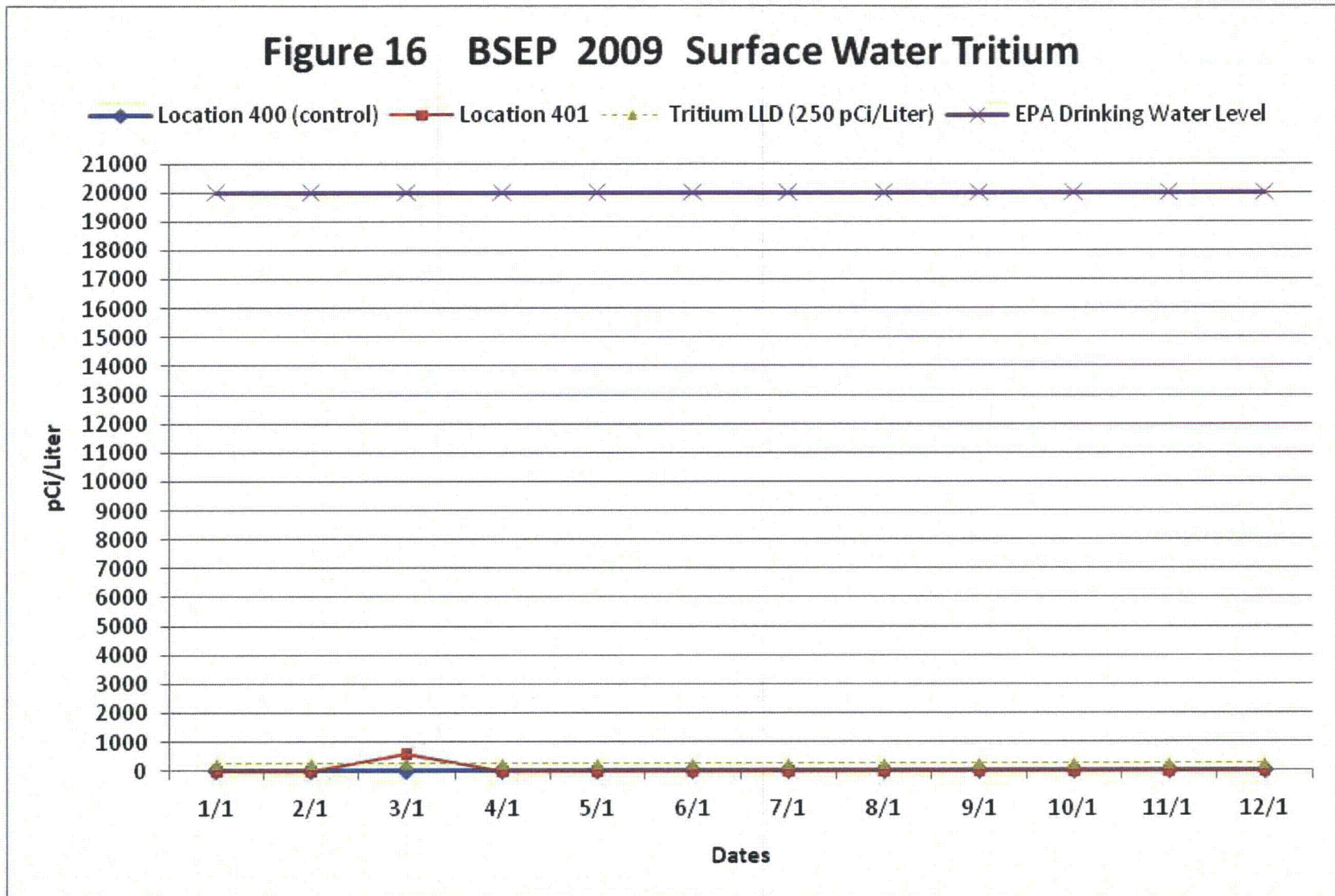
Figure 14 For BSEP from 1/1/2009 To 12/31/2009  
AIR PARTICULATE for GROSS BETA - Activity (pCi/cubic meter)



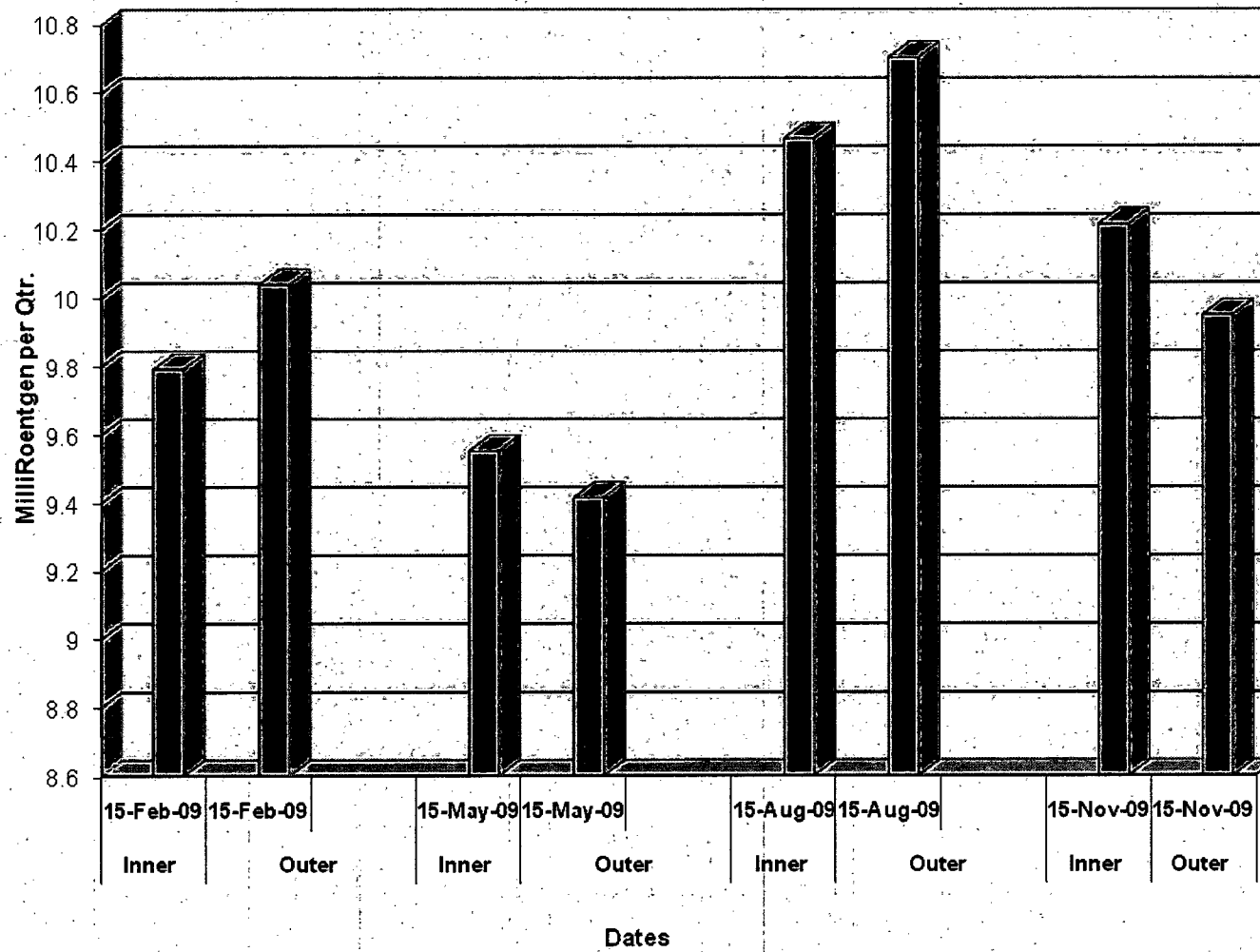




**Figure 16 BSEP 2009 Surface Water Tritium**



**Figure 17 BSEP 2009 TLD Averages for Inner and Outer Ring Locations**



# **APPENDIX**

The attached information contains the 2009 Interlaboratory Comparison Program Report supplied by GEL Laboratories LLC. Any additional information will be supplied upon request.



## 2009 INTERLABORATORY COMPARISON PROGRAM REPORT

In accordance with US Nuclear Regulatory Commission requirements, GEL Laboratories, LLC (GEL) participates in an Interlaboratory Comparison Programs (ICP) that satisfies the requirements of both Regulatory Guide 4.15, Revision 1, "Quality Assurance for Radiological Monitoring Programs (Normal Operations) - Effluent Streams and the Environment", February 1979 and Regulatory Guide 4.15, Revision 2, "Quality Assurance for Radiological Monitoring Programs (Inception through Normal Operations to License Termination) - Effluent Streams and the Environment", July, 2007. Both guides indicate the ICP is to be conducted with the Environmental Protection Agency (EPA) Environmental Radioactivity Laboratory Intercomparison Studies (Cross-check) Program or an equivalent program, and the ICP should include all sample medium/radionuclide combinations that are offered by the EPA and included in the REMF.

Intercomparison samples were obtained from Eckert & Zeigler Analytics of Atlanta, Environmental Resource Associates of Arvada, Colorado and the Mixed Analyte Performance Evaluation Program (MAPEP). Each provider has a documented Quality Assurance (QA) program and the capability to prepare Quality Control (QC) materials traceable to the National Institute of Standards and Technology. The ICP is a third party blind testing program which provides a means to ensure independent checks are performed on the accuracy and precision of the measurements of radioactive materials in environmental sample matrices. The providers supply the crosscheck samples to GEL. Upon receipt, the laboratory performs the analyses in a normal manner. The results are then reported to the provider for evaluation.

The samples offered by ICP providers and included in GEL's analyses are gamma isotopic analyses of an air filter, milk, water, soil and vegetation, Sr-89/90 in Milk and water and I-131 in cartridges. The accuracy of each result reported to Analytics, Inc is measured by the ratio of GEL's result to the known value. Accuracy for all other results is based on statistically derived acceptance ranges calculated by the providers. An investigation is undertaken whenever the ratio or reported result fell outside of the acceptance range.

A summary of GEL's results is provided in the tables below for the required sample matrix types and isotopic distribution. Delineated in the table are: the Sample Number or Study ID; Analysis quarter and year; sample media; specific radionuclide; its unit; its result; the known values supplied by the providers; GEL's ratio to the known value or acceptance criteria provided by the provider; evaluation criteria.

GEL analyzed 31 samples for 151 parameters in 2009. All results except one met the acceptance criteria and are discussed below.

- The root cause of the Sr-90 failures was determined to be a batch quality control issue. The carrier yield for the second separation was greater than 100%. The elevated yield caused the Sr-90 result to be biased low. Even though the yield fell within its acceptance range, if

problem solved

adjusted to reflect recoveries typically observed in this procedure, the sample results would be within the acceptance range.

Sample Number	Quarter / Year	Sample Media	Unit	Analyte / Nuclide	GEL Value	Known value	Acceptance Range/ Ratio	Evaluation
E6582-278	1 <sup>st</sup> / 2009	Cartridge	pCi	I-131	7.77E+01	7.94E+01	0.98	Acceptable
E6584-278	1 <sup>st</sup> / 2009	Milk	pCi/L	Ce-141	9.78E+01	9.49E+01	1.03	Acceptable
E6584-278	1 <sup>st</sup> / 2009	Milk	pCi/L	Co-58	1.23E+02	1.19E+02	1.03	Acceptable
E6584-278	1 <sup>st</sup> / 2009	Milk	pCi/L	Co-60	1.50E+02	1.42E+02	1.05	Acceptable
E6584-278	1 <sup>st</sup> / 2009	Milk	pCi/L	Cr-51	2.97E+02	3.05E+02	0.97	Acceptable
E6584-278	1 <sup>st</sup> / 2009	Milk	pCi/L	Cs-134	9.06E+01	9.37E+01	0.97	Acceptable
E6584-278	1 <sup>st</sup> / 2009	Milk	pCi/L	Cs-137	1.16E+02	1.11E+02	1.04	Acceptable
E6584-278	1 <sup>st</sup> / 2009	Milk	pCi/L	Fe-59	1.16E+02	7.61E+00	1.16	Acceptable
E6584-278	1 <sup>st</sup> / 2009	Milk	pCi/L	I-131	7.97E+01	7.93E+01	1.01	Acceptable
E6584-278	1 <sup>st</sup> / 2009	Milk	pCi/L	Mn-54	1.33E+02	1.28E+02	1.04	Acceptable
E6584-278	1 <sup>st</sup> / 2009	Milk	pCi/L	Zn-65	1.72E+02	1.56E+02	1.1	Acceptable
E6585-278	1 <sup>st</sup> / 2009	Water	pCi/L	Ce-141	1.22E+02	1.20E+02	1.02	Acceptable
E6585-278	1 <sup>st</sup> / 2009	Water	pCi/L	Co-58	1.59E+02	1.51E+02	1.05	Acceptable
E6585-278	1 <sup>st</sup> / 2009	Water	pCi/L	Co-60	1.92E+02	1.80E+02	1.06	Acceptable
E6585-278	1 <sup>st</sup> / 2009	Water	pCi/L	Cr-51	3.92E+02	3.87E+02	1.01	Acceptable
E6585-278	1 <sup>st</sup> / 2009	Water	pCi/L	Cs-134	1.19E+02	1.19E+02	1.00	Acceptable
E6585-278	1 <sup>st</sup> / 2009	Water	pCi/L	Cs-137	1.44E+02	1.41E+02	1.02	Acceptable
E6585-278	1 <sup>st</sup> / 2009	Water	pCi/L	Fe-59	1.28E+02	1.27E+02	1.01	Acceptable
E6585-278	1 <sup>st</sup> / 2009	Water	pCi/L	I-131	7.55E+01	6.90E+01	1.09	Acceptable
E6585-278	1 <sup>st</sup> / 2009	Water	pCi/L	Mn-54	1.80E+02	1.62E+02	1.11	Acceptable
E6585-278	1 <sup>st</sup> / 2009	Water	pCi/L	Zn-65	2.24E+02	1.97E+02	1.13	Acceptable
RAD - 76	1 <sup>st</sup> / 2009	Water	pCi/L	Gross Alpha	51.3	52.3	27.3 - 65.5	Acceptable
RAD - 76	1 <sup>st</sup> / 2009	Water	pCi/L	Gross Beta	41.9	46.1	31.0 - 53.3	Acceptable
RAD - 76	1 <sup>st</sup> / 2009	Water	pCi/L	H-3	3760.0	4230	3610 - 4660	Acceptable
RAD - 76	1 <sup>st</sup> / 2009	Water	pCi/L	I-131	25.1	22.2	18.4 - 26.5	Acceptable
RAD - 76	1 <sup>st</sup> / 2009	Water	pCi/L	Sr-89	72.8	65	52.7 - 73.0	Acceptable
RAD - 76	1 <sup>st</sup> / 2009	Water	pCi/L	Sr-90	36.5	41.9	30.8 - 48.1	Acceptable
E6729-278	2 <sup>nd</sup> / 2009	Cartridge	pCi	I-131	9.27E+01	9.55E+01	0.97	Acceptable
E6730-278	2 <sup>nd</sup> / 2009	Milk	pCi/L	Sr-89	8.51E+01	1.12E+02	0.76	Acceptable
E6730-278	2 <sup>nd</sup> / 2009	Milk	pCi/L	Sr-90	1.09E+01	1.67E+01	0.65	Not Acceptable
E6731-278	2 <sup>nd</sup> / 2009	Milk	pCi/L	Ce-141	2.84E+02	2.84E+02	1	Acceptable
E6731-278	2 <sup>nd</sup> / 2009	Milk	pCi/L	Co-58	9.48E+01	9.19E+01	1.03	Acceptable
E6731-278	2 <sup>nd</sup> / 2009	Milk	pCi/L	Co-60	3.15E+02	3.12E+02	1.01	Acceptable

E6731-278	2 <sup>nd</sup> / 2009	Milk	pCi/L	Cr-51	4.04E+02	4.00E+02	1.01	Acceptable
E6731-278	2 <sup>nd</sup> / 2009	Milk	pCi/L	Cs-134	1.58E+02	1.66E+02	0.95	Acceptable
E6731-278	2 <sup>nd</sup> / 2009	Milk	pCi/L	Cs-137	1.92E+02	1.92E+02	1	Acceptable
E6731-278	2 <sup>nd</sup> / 2009	Milk	pCi/L	Fe-59	1.23E+02	1.22E+02	1.01	Acceptable
E6731-278	2 <sup>nd</sup> / 2009	Milk	pCi/L	I-131	8.98E+01	1.02E+02	0.88	Acceptable
E6731-278	2 <sup>nd</sup> / 2009	Milk	pCi/L	Mn-54	1.42E+02	1.37E+02	1.04	Acceptable
E6731-278	2 <sup>nd</sup> / 2009	Milk	pCi/L	Zn-65	1.79E+02	1.75E+02	1.02	Acceptable
E6732-278	2 <sup>nd</sup> / 2009	Water	pCi/L	Ce-141	2.29E+02	2.16E+02	1.06	Acceptable
E6732-278	2 <sup>nd</sup> / 2009	Water	pCi/L	Co-58	7.21E+01	6.98E+01	1.03	Acceptable
E6732-278	2 <sup>nd</sup> / 2009	Water	pCi/L	Co-60	2.42E+02	2.37E+02	1.02	Acceptable
E6732-278	2 <sup>nd</sup> / 2009	Water	pCi/L	Cr-51	3.11E+02	3.04E+02	1.02	Acceptable
E6732-278	2 <sup>nd</sup> / 2009	Water	pCi/L	Cs-134	1.37E+02	1.26E+02	1.09	Acceptable
E6732-278	2 <sup>nd</sup> / 2009	Water	pCi/L	Cs-137	1.51E+02	1.46E+02	1.04	Acceptable
E6732-278	2 <sup>nd</sup> / 2009	Water	pCi/L	Fe-59	9.04E+01	9.29E+01	0.97	Acceptable
E6732-278	2 <sup>nd</sup> / 2009	Water	pCi/L	I-131	8.52E+01	8.83E+01	0.97	Acceptable
E6732-278	2 <sup>nd</sup> / 2009	Water	pCi/L	Mn-54	1.07E+02	1.04E+02	1.03	Acceptable
E6732-278	2 <sup>nd</sup> / 2009	Water	pCi/L	Zn-65	1.38E+02	1.33E+02	1.04	Acceptable
MAPEP 09-GrF20	2 <sup>nd</sup> / 2009	Filter	Bq	Gross Alpha	0.069	0.35	>0.0 - 0.696	Acceptable
MAPEP 09-GrF20	2 <sup>nd</sup> / 2009	Filter	Bq	Gross Beta	0.297	0.28	0.140 - 0.419	Acceptable
MAPEP 09-GrW20	2 <sup>nd</sup> / 2009	Water	Bq/L	Gross Alpha	0.506	0.64	>0.0 - 1.270	Acceptable
MAPEP 09-GrW20	2 <sup>nd</sup> / 2009	Water	Bq/L	Gross Beta	1.337	1.27	0.64 - 1.91	Acceptable
MAPEP 09-MaS20	2 <sup>nd</sup> / 2009	Soil	Bq/kg	Co-57	-0.30	0.00	-----	Acceptable
MAPEP 09-MaS20	2 <sup>nd</sup> / 2009	Soil	Bq/kg	Co-60	3.6	4.113	-----	Acceptable
MAPEP 09-MaS20	2 <sup>nd</sup> / 2009	Soil	Bq/kg	Cs-134	468	467	327 - 607	Acceptable
MAPEP 09-MaS20	2 <sup>nd</sup> / 2009	Soil	Bq/kg	Cs-137	622	605	424 - 787	Acceptable
MAPEP 09-MaS20	2 <sup>nd</sup> / 2009	Soil	Bq/kg	Fe-55	844.7	983	688 - 1278	Acceptable
MAPEP 09-MaS20	2 <sup>nd</sup> / 2009	Soil	Bq/kg	K-40	608.7	570	399 - 741	Acceptable
MAPEP 09-MaS20	2 <sup>nd</sup> / 2009	Soil	Bq/kg	Mn-54	322.3	307	215 - 399	Acceptable
MAPEP 09-MaS20	2 <sup>nd</sup> / 2009	Soil	Bq/kg	Ni-63	550.3	514.9	360.4 - 669.4	Acceptable
MAPEP 09-MaS20	2 <sup>nd</sup> / 2009	Soil	Bq/kg	Sr-90	262.33	257	180 - 334	Acceptable
MAPEP 09-MaS20	2 <sup>nd</sup> / 2009	Soil	Bq/kg	Zn-65	261	242	169 - 315	Acceptable
MAPEP 09-MaW20	2 <sup>nd</sup> / 2009	Water	Bq/L	Co-57	18.8	18.9	13.2 - 24.6	Acceptable
MAPEP 09-MaW20	2 <sup>nd</sup> / 2009	Water	Bq/L	Co-60	16.8	17.21	12.05 - 22.37	Acceptable
MAPEP 09-MaW20	2 <sup>nd</sup> / 2009	Water	Bq/L	Cs-134	21.9	22.5	15.8 - 29.3	Acceptable
MAPEP 09-MaW20	2 <sup>nd</sup> / 2009	Water	Bq/L	Cs-137	0.0	0	-----	Acceptable
MAPEP 09-MaW20	2 <sup>nd</sup> / 2009	Water	Bq/L	Mn-54	15.1	14.66	10.26 - 19.06	Acceptable
MAPEP 09-MaW20	2 <sup>nd</sup> / 2009	Water	Bq/L	Ni-63	52.7	53.5	37.45 - 69.55	Acceptable
MAPEP 09-MaW20	2 <sup>nd</sup> / 2009	Water	Bq/L	Sr-90	7.43	7.21	5.05 - 9.37	Acceptable
MAPEP 09-MaW20	2 <sup>nd</sup> / 2009	Water	Bq/L	Zn-65	14.6	13.6	9.5 - 17.7	Acceptable
MAPEP 09-RdF20	2 <sup>nd</sup> / 2009	Filter	Bq	Co-57	1.347	1.30	0.91 - 1.69	Acceptable

MAPEP 09-RdF20	2 <sup>nd</sup> / 2009	Filter	Bq	Co-60	1.413	1.22	0.85 - 1.59	Acceptable
MAPEP 09-RdF20	2 <sup>nd</sup> / 2009	Filter	Bq	Cs-134	2.763	2.93	2.05 - 3.81	Acceptable
MAPEP 09-RdF20	2 <sup>nd</sup> / 2009	Filter	Bq	Cs-137	1.487	1.52	1.06 - 1.98	Acceptable
MAPEP 09-RdF20	2 <sup>nd</sup> / 2009	Filter	Bq	Mn-54	2.403	2.27	1.5896 - 2.9522	Acceptable
MAPEP 09-RdF20	2 <sup>nd</sup> / 2009	Filter	Bq	Sr-90	0.692	0.64	0.448 - 0.832	Acceptable
MAPEP 09-RdF20	2 <sup>nd</sup> / 2009	Filter	Bq	Zn-65	1.613	1.36	0.95 - 1.77	Acceptable
MAPEP 09-RdV20	2 <sup>nd</sup> / 2009	Vegetation	ug/sample	Co-57	2.557	2.36	1.65 - 3.07	Acceptable
MAPEP 09-RdV20	2 <sup>nd</sup> / 2009	Vegetation	ug/sample	Co-60	-0.010	0.00	---	Acceptable
MAPEP 09-RdV20	2 <sup>nd</sup> / 2009	Vegetation	ug/sample	Cs-134	3.430	3.40	2.38 - 4.42	Acceptable
MAPEP 09-RdV20	2 <sup>nd</sup> / 2009	Vegetation	ug/sample	Cs-137	0.907	0.93	0.65 - 1.21	Acceptable
MAPEP 09-RdV20	2 <sup>nd</sup> / 2009	Vegetation	ug/sample	Mn-54	2.353	2.30	1.61 - 2.99	Acceptable
MAPEP 09-RdV20	2 <sup>nd</sup> / 2009	Vegetation	ug/sample	Sr-90	1.160	1.26	0.882 - 1.638	Acceptable
MAPEP 09-RdV20	2 <sup>nd</sup> / 2009	Vegetation	ug/sample	Zn-65	1.350	1.35	0.948 - 1.760	Acceptable
E6843-278	3 <sup>rd</sup> / 2009	Cartridge	pCi	I-131	9.54E+01	9.21E+01	1.04	Acceptable
E6844-278	3 <sup>rd</sup> / 2009	Milk	pCi/L	Sr-89	1.19E+02	1.07E+02	1.12	Acceptable
E6844-278	3 <sup>rd</sup> / 2009	Milk	pCi/L	Sr-90	1.68E+01	1.88E+01	0.89	Acceptable
E6845-278	3 <sup>rd</sup> / 2009	Milk	pCi/L	Ce-141	2.83E+02	2.75E+02	1.03	Acceptable
E6845-278	3 <sup>rd</sup> / 2009	Milk	pCi/L	Co-58	1.04E+02	9.94E+01	1.05	Acceptable
E6845-278	3 <sup>rd</sup> / 2009	Milk	pCi/L	Co-60	1.58E+02	1.60E+02	0.99	Acceptable
E6845-278	3 <sup>rd</sup> / 2009	Milk	pCi/L	Cr-51	2.43E+02	2.21E+02	1.1	Acceptable
E6845-278	3 <sup>rd</sup> / 2009	Milk	pCi/L	Cs-134	1.23E+02	1.23E+02	1.00	Acceptable
E6845-278	3 <sup>rd</sup> / 2009	Milk	pCi/L	Cs-137	1.92E+02	1.85E+02	1.04	Acceptable
E6845-278	3 <sup>rd</sup> / 2009	Milk	pCi/L	Fe-59	1.64E+02	1.47E+02	1.11	Acceptable
E6845-278	3 <sup>rd</sup> / 2009	Milk	pCi/L	I-131	1.01E+02	9.86E+01	1.02	Acceptable
E6845-278	3 <sup>rd</sup> / 2009	Milk	pCi/L	Mn-54	2.11E+02	2.06E+02	1.02	Acceptable
E6845-278	3 <sup>rd</sup> / 2009	Milk	pCi/L	Zn-65	2.24E+02	2.04E+02	1.1	Acceptable
E6846-278	3 <sup>rd</sup> / 2009	Water	pCi/L	Ce-141	2.72E+02	2.64E+02	1.03	Acceptable
E6846-278	3 <sup>rd</sup> / 2009	Water	pCi/L	Co-58	9.65E+01	9.54E+01	1.01	Acceptable
E6846-278	3 <sup>rd</sup> / 2009	Water	pCi/L	Co-60	1.56E+02	1.54E+02	1.01	Acceptable
E6846-278	3 <sup>rd</sup> / 2009	Water	pCi/L	Cr-51	2.21E+02	2.12E+02	1.04	Acceptable
E6846-278	3 <sup>rd</sup> / 2009	Water	pCi/L	Cs-134	1.18E+02	1.18E+02	1.00	Acceptable
E6846-278	3 <sup>rd</sup> / 2009	Water	pCi/L	Cs-137	1.86E+02	1.77E+02	1.05	Acceptable
E6846-278	3 <sup>rd</sup> / 2009	Water	pCi/L	Fe-59	1.48E+02	1.41E+02	1.05	Acceptable
E6846-278	3 <sup>rd</sup> / 2009	Water	pCi/L	I-131	1.02E+02	9.84E+01	1.04	Acceptable
E6846-278	3 <sup>rd</sup> / 2009	Water	pCi/L	Mn-54	2.11E+02	1.98E+02	1.07	Acceptable
E6846-278	3 <sup>rd</sup> / 2009	Water	pCi/L	Zn-65	2.19E+02	1.95E+02	1.12	Acceptable
RAD - 78	3 <sup>rd</sup> / 2009	Water	pCi/L	Gross Alpha	43.8	55.3	28.9 - 69.0	Acceptable
RAD - 78	3 <sup>rd</sup> / 2009	Water	pCi/L	Gross Beta	53.6	64.7	44.8 - 71.3	Acceptable
RAD - 78	3 <sup>rd</sup> / 2009	Water	pCi/L	H-3	9440.0	10000	8690 - 11000	Acceptable



RAD - 78	3 <sup>rd</sup> / 2009	Water	pCi/L	I-131	28.4	26.3	21.8 - 31.0	Acceptable
RAD - 78	3 <sup>rd</sup> / 2009	Water	pCi/L	Sr-89	59.6	59.1	47.4 - 66.9	Acceptable
RAD - 78	3 <sup>rd</sup> / 2009	Water	pCi/L	Sr-90	33.7	37.4	27.4 - 43.1	Acceptable
MAPEP 09-GrF21	4 <sup>th</sup> / 2009	Filter	Bq	Gross Alpha	0.069	0.35	>0.0 - 0.696	Acceptable
MAPEP 09-GrF21	4 <sup>th</sup> / 2009	Filter	Bq	Gross Beta	0.297	0.28	0.140 - 0.419	Acceptable
MAPEP 09-GrW21	4 <sup>th</sup> / 2009	Water	Bq/L	Gross Alpha	0.982	1.05	>0.0 - 2.094	Acceptable
MAPEP 09-GrW21	4 <sup>th</sup> / 2009	Water	Bq/L	Gross Beta	7.277	7.53	3.77 - 11.30	Acceptable
MAPEP 09-MaS21	4 <sup>th</sup> / 2009	Soil	Bq/kg	Co-57	572.30	586.00	410 - 762	Acceptable
MAPEP 09-MaS21	4 <sup>th</sup> / 2009	Soil	Bq/kg	Co-60	332.3	327.000	229 - 425	Acceptable
MAPEP 09-MaS21	4 <sup>th</sup> / 2009	Soil	Bq/kg	Cs-134	0	0	-----	Acceptable
MAPEP 09-MaS21	4 <sup>th</sup> / 2009	Soil	Bq/kg	Cs-137	683	669	468 - 870	Acceptable
MAPEP 09-MaS21	4 <sup>th</sup> / 2009	Soil	Bq/kg	Fe-55	810.0	796	557 - 1035	Acceptable
MAPEP 09-MaS21	4 <sup>th</sup> / 2009	Soil	Bq/kg	K-40	401.3	375	263 - 488	Acceptable
MAPEP 09-MaS21	4 <sup>th</sup> / 2009	Soil	Bq/kg	Mn-54	834.7	796	557 - 1035	Acceptable
MAPEP 09-MaS21	4 <sup>th</sup> / 2009	Soil	Bq/kg	Ni-63	640.0	680.0	476 - 884	Acceptable
MAPEP 09-MaS21	4 <sup>th</sup> / 2009	Soil	Bq/kg	Sr-90	423.30	455	319 - 592	Acceptable
MAPEP 09-MaS21	4 <sup>th</sup> / 2009	Soil	Bq/kg	Zn-65	1293	1178	825 - 1531	Acceptable
MAPEP 09-MaW21	4 <sup>th</sup> / 2009	Water	Bq/L	Co-57	35.7	36.6	25.6 - 47.6	Acceptable
MAPEP 09-MaW21	4 <sup>th</sup> / 2009	Water	Bq/L	Co-60	15.3	15.4	10.8 - 20.0	Acceptable
MAPEP 09-MaW21	4 <sup>th</sup> / 2009	Water	Bq/L	Cs-134	31.6	32.2	22.5 - 41.9	Acceptable
MAPEP 09-MaW21	4 <sup>th</sup> / 2009	Water	Bq/L	Cs-137	40.4	41.2	28.8 - 53.6	Acceptable
MAPEP 09-MaW21	4 <sup>th</sup> / 2009	Water	Bq/L	Mn-54	0.07	0.00	-----	Acceptable
MAPEP 09-MaW21	4 <sup>th</sup> / 2009	Water	Bq/L	Ni-63	45.8	44.2	30.9 - 57.5	Acceptable
MAPEP 09-MaW21	4 <sup>th</sup> / 2009	Water	Bq/L	Sr-90	16.40	12.99	9.09 - 16.89	Acceptable
MAPEP 09-MaW21	4 <sup>th</sup> / 2009	Water	Bq/L	Zn-65	28.9	26.9	18.8 - 35.0	Acceptable
MAPEP 09-RdF21	4 <sup>th</sup> / 2009	Filter	Bq	Co-57	6.730	6.48	4.54 - 8.42	Acceptable
MAPEP 09-RdF21	4 <sup>th</sup> / 2009	Filter	Bq	Co-60	1.127	1.03	0.72 - 1.34	Acceptable
MAPEP 09-RdF21	4 <sup>th</sup> / 2009	Filter	Bq	Cs-134	0.034	0.00	-----	Acceptable
MAPEP 09-RdF21	4 <sup>th</sup> / 2009	Filter	Bq	Cs-137	1.397	1.40	0.98 - 1.82	Acceptable
MAPEP 09-RdF21	4 <sup>th</sup> / 2009	Filter	Bq	Mn-54	5.697	5.49	3.84 - 7.14	Acceptable
MAPEP 09-RdF21	4 <sup>th</sup> / 2009	Filter	Bq	Sr-90	0.778	0.84	0.585 - 1.086	Acceptable
MAPEP 09-RdF21	4 <sup>th</sup> / 2009	Filter	Bq	Zn-65	4.350	3.93	2.75 - 5.11	Acceptable
MAPEP 09-RdV21	4 <sup>th</sup> / 2009	Vegetation	ug/sample	Co-57	8.333	8.00	5.6 - 10.4	Acceptable
MAPEP 09-RdV21	4 <sup>th</sup> / 2009	Vegetation	ug/sample	Co-60	2.637	2.57	1.80 - 3.34	Acceptable
MAPEP 09-RdV21	4 <sup>th</sup> / 2009	Vegetation	ug/sample	Cs-134	-0.014	0.00	-----	Acceptable
MAPEP 09-RdV21	4 <sup>th</sup> / 2009	Vegetation	ug/sample	Cs-137	2.443	2.43	1.70 - 3.16	Acceptable
MAPEP 09-RdV21	4 <sup>th</sup> / 2009	Vegetation	ug/sample	Mn-54	8.407	7.90	5.5 - 10.3	Acceptable
MAPEP 09-RdV21	4 <sup>th</sup> / 2009	Vegetation	ug/sample	Sr-90	1.577	1.78	1.25 - 2.31	Acceptable
MAPEP 09-RdV21	4 <sup>th</sup> / 2009	Vegetation	ug/sample	Zn-65	-0.029	0.00	-----	Acceptable

# **2009 BSEP Radiological Environmental Monitoring TLD Report**

## **Comments**

- TLD points 41 thru 74 are not ODCM TLD sample points and are not listed.
- TLD sample points 19 and 80 have been retired and are not used.
- All BSEP Environmental TLDs were present in 2009, except for the following TLDs:
  - TLD # 8 Fourth Quarter of 2009

## *BNP Radiological Environmental Monitoring TLD Report*

*Dose: mR/std. qtr.*

<i>TLD</i>	<i>TLD Location Description</i>	<i>Sample Date</i>	<i>Dose</i>	<i>2 Sigma Error</i>
1	1.1 MI E	2/15/2009	11.1	1.2
1	1.1 MI E	5/15/2009	9.1	1.1
1	1.1 MI E	8/15/2009	12.1	1.2
1	1.1 MI E	11/15/2009	10	1.1
2	0.9 MI ESE	2/15/2009	9.3	1.8
2	0.9 MI ESE	5/15/2009	9.6	1
2	0.9 MI ESE	8/15/2009	10.5	0.8
2	0.9 MI ESE	11/15/2009	10.1	1.1
3	0.9 MI SE	2/15/2009	9.2	1.3
3	0.9 MI SE	5/15/2009	10.5	1.2
3	0.9 MI SE	8/15/2009	10.3	0.9
3	0.9 MI SE	11/15/2009	10.9	1.3
4	1.1 MI SSE	2/15/2009	9	1.1
4	1.1 MI SSE	5/15/2009	9.6	0.8
4	1.1 MI SSE	8/15/2009	9.8	1.5
4	1.1 MI SSE	11/15/2009	10.2	1
5	1.1 MI S	2/15/2009	9.7	0.9
5	1.1 MI S	5/15/2009	9.2	0.8
5	1.1 MI S	8/15/2009	10.7	0.8
5	1.1 MI S	11/15/2009	10.1	0.9
6	1.1 MI SSW	2/15/2009	10.8	1
6	1.1 MI SSW	5/15/2009	8.9	1.1

*Dose: mR/std. qtr.*

<i>TLD</i>	<i>TLD Location Description</i>	<i>Sample Date</i>	<i>Dose</i>	<i>2 Sigma Error</i>
6	1.1 MI SSW	8/15/2009	10.3	1.7
6	1.1 MI SSW	11/15/2009	9.5	1.2
7	1.1 MI SW	2/15/2009	9.4	0.9
7	1.1 MI SW	5/15/2009	9.7	0.8
7	1.1 MI SW	8/15/2009	10.4	1
7	1.1 MI SW	11/15/2009	10.4	0.8
8	1.2 MI W	2/15/2009	9.6	1.1
8	1.2 MI W	5/15/2009	9.1	0.9
8	1.2 MI W	8/15/2009	10.9	1.8
9	1.0 MI WNW	2/15/2009	9.5	1.1
9	1.0 MI WNW	5/15/2009	9.1	1.1
9	1.0 MI WNW	8/15/2009	9.9	1.5
9	1.0 MI WNW	11/15/2009	9.9	1.6
10	0.8 MI NW	2/15/2009	8.5	1
10	0.8 MI NW	5/15/2009	9	1.4
10	0.8 MI NW	8/15/2009	9.2	1.2
10	0.8 MI NW	11/15/2009	9.5	0.7
11	0.9 MI NNW	2/15/2009	8.4	1.2
11	0.9 MI NNW	5/15/2009	10.1	1.2
11	0.9 MI NNW	8/15/2009	9.3	1.4
11	0.9 MI NNW	11/15/2009	10.5	1.2
12	1.1 MI N	2/15/2009	8.8	1.6
12	1.1 MI N	5/15/2009	8.7	0.8
12	1.1 MI N	8/15/2009	9.9	1.9

*Dose: mR/std. qtr.*

<i>TLD</i>	<i>TLD Location Description</i>	<i>Sample Date</i>	<i>Dose</i>	<i>2 Sigma Error</i>
12	1.1 MI N	11/15/2009	9.8	0.7
13	1.2 MI NNE	2/15/2009	9.1	1.4
13	1.2 MI NNE	5/15/2009	8.3	1.2
13	1.2 MI NNE	8/15/2009	10.6	0.9
13	1.2 MI NNE	11/15/2009	9.2	2.3
14	0.5 MI NE	2/15/2009	8.6	1
14	0.5 MI NE	5/15/2009	10.6	1.1
14	0.5 MI NE	8/15/2009	9.1	1
14	0.5 MI NE	11/15/2009	10.7	0.7
15	0.9 MI ENE	2/15/2009	10.6	2.3
15	0.9 MI ENE	5/15/2009	10.7	1.8
15	0.9 MI ENE	8/15/2009	10.7	1.1
15	0.9 MI ENE	11/15/2009	10.8	1.4
16	1.0 MI WSW	2/15/2009	10.5	1.2
16	1.0 MI WSW	5/15/2009	9.1	0.8
16	1.0 MI WSW	8/15/2009	11	0.9
16	1.0 MI WSW	11/15/2009	9.7	0.9
17	1.4 MI ESE	2/15/2009	9.1	0.9
17	1.4 MI ESE	5/15/2009	10	2
17	1.4 MI ESE	8/15/2009	9.3	1.6
17	1.4 MI ESE	11/15/2009	11.1	2.8
18	1.7 MI SE	2/15/2009	11.2	2.4
18	1.7 MI SE	5/15/2009	9.6	1.5
18	1.7 MI SE	8/15/2009	11.8	0.8

*Dose: mR/std. qtr.*

<i>TLD</i>	<i>TLD Location Description</i>	<i>Sample Date</i>	<i>Dose</i>	<i>2 Sigma Error</i>
18	1.7 MI SE	11/15/2009	10.9	1.3
20	2.1 MI S	2/15/2009	12	1.8
20	2.1 MI S	5/15/2009	9.3	1.5
20	2.1 MI S	8/15/2009	12.1	1.7
20	2.1 MI S	11/15/2009	10	0.7
21	2.9 MI SSW	2/15/2009	10.9	1.3
21	2.9 MI SSW	5/15/2009	11.6	0.8
21	2.9 MI SSW	8/15/2009	11.3	1.6
21	2.9 MI SSW	11/15/2009	11.9	0.8
22	5.3 MI SW	2/15/2009	11.4	1.2
22	5.3 MI SW	5/15/2009	9.1	1.2
22	5.3 MI SW	8/15/2009	12.3	1.8
22	5.3 MI SW	11/15/2009	9.9	0.8
23	4.6 MI WSW	2/15/2009	9.4	1
23	4.6 MI WSW	5/15/2009	7.1	1.8
23	4.6 MI WSW	8/15/2009	9.8	1.1
23	4.6 MI WSW	11/15/2009	7.9	0.9
24	3.0 MI W	2/15/2009	9.6	1
24	3.0 MI W	5/15/2009	9.7	1
24	3.0 MI W	8/15/2009	9.7	0.8
24	3.0 MI W	11/15/2009	10.4	1.3
25	8.6 MI WNW	2/15/2009	9.5	1.3
25	8.6 MI WNW	5/15/2009	9.2	1.2
25	8.6 MI WNW	8/15/2009	10.7	1.5

*Dose: mR/std. qtr.*

<i>TLD</i>	<i>TLD Location Description</i>	<i>Sample Date</i>	<i>Dose</i>	<i>2 Sigma Error</i>
25	8.6 MI WNW	11/15/2009	10	0.7
26	5.9 MI NW	2/15/2009	9.5	1.3
26	5.9 MI NW	5/15/2009	10.7	2.1
26	5.9 MI NW	8/15/2009	10.4	1.4
26	5.9 MI NW	11/15/2009	10.7	1.7
27	5.1 MI NNW	2/15/2009	12	1.1
27	5.1 MI NNW	5/15/2009	8.3	1.3
27	5.1 MI NNW	8/15/2009	12.9	1.1
27	5.1 MI NNW	11/15/2009	9.3	1.1
28	4.2 MI NW	2/15/2009	9.5	1.4
28	4.2 MI NW	5/15/2009	9.3	0.9
28	4.2 MI NW	8/15/2009	10.4	1.4
28	4.2 MI NW	11/15/2009	9.7	0.8
29	2.6 MI SSW	2/15/2009	9.7	1.1
29	2.6 MI SSW	5/15/2009	8.2	1.1
29	2.6 MI SSW	8/15/2009	10.5	0.9
29	2.6 MI SSW	11/15/2009	9.1	0.8
30	2.0 MI NE	2/15/2009	8.9	1.2
30	2.0 MI NE	5/15/2009	9.8	1.3
30	2.0 MI NE	8/15/2009	9.5	1
30	2.0 MI NE	11/15/2009	10.1	1.3
31	2.5 MI ENE	2/15/2009	11.8	1.5
31	2.5 MI ENE	5/15/2009	10	0.9
31	2.5 MI ENE	8/15/2009	12.4	0.8



*Dose: mR/std. qtr.*

<i>TLD</i>	<i>TLD Location Description</i>	<i>Sample Date</i>	<i>Dose</i>	<i>2 Sigma Error</i>
31	2.5 MI ENE	11/15/2009	10.7	0.9
32	5.8 MI ENE	2/15/2009	9.2	1.3
32	5.8 MI ENE	5/15/2009	10.6	1.5
32	5.8 MI ENE	8/15/2009	10.4	0.9
32	5.8 MI ENE	11/15/2009	10.9	1.6
33	4.1 MI E	2/15/2009	12	1.1
33	4.1 MI E	5/15/2009	8.3	1.4
33	4.1 MI E	8/15/2009	11.8	1.2
33	4.1 MI E	11/15/2009	8.8	1.5
34	5.4 MI E	2/15/2009	9.4	1.6
34	5.4 MI E	5/15/2009	9	1.8
34	5.4 MI E	8/15/2009	9.6	0.9
34	5.4 MI E	11/15/2009	9.4	1.5
35	7.3 MI SSE	2/15/2009	9.4	1
35	7.3 MI SSE	5/15/2009	8.5	1.5
35	7.3 MI SSE	8/15/2009	9.7	1.6
35	7.3 MI SSE	11/15/2009	8.7	1.3
36	8.9 MI NE	2/15/2009	7.9	1.9
36	8.9 MI NE	5/15/2009	9.6	1
36	8.9 MI NE	8/15/2009	8.3	1.2
36	8.9 MI NE	11/15/2009	10.3	1.3
37	5.5 MI NW	2/15/2009	10.4	1.5
37	5.5 MI NW	5/15/2009	8.1	2.2
37	5.5 MI NW	8/15/2009	10.5	1.4

*Dose: mR/std. qtr.*

<i>TLD</i>	<i>TLD Location Description</i>	<i>Sample Date</i>	<i>Dose</i>	<i>2 Sigma Error</i>
37	5.5 MI NW	11/15/2009	8.5	1
38	11.0 MI W	2/15/2009	8.4	0.9
38	11.0 MI W	5/15/2009	9	0.8
38	11.0 MI W	8/15/2009	9.1	1.3
38	11.0 MI W	11/15/2009	9.9	1.3
39	5.3 MI SW	2/15/2009	9.3	1.9
39	5.3 MI SW	5/15/2009	12.7	1
39	5.3 MI SW	8/15/2009	10.4	1.2
39	5.3 MI SW	11/15/2009	13.7	1.1
40	6.9 MI WSW	2/15/2009	11.2	1.5
40	6.9 MI WSW	5/15/2009	11.9	1.1
40	6.9 MI WSW	8/15/2009	11.8	1.1
40	6.9 MI WSW	11/15/2009	12.9	0.9
75	4.7 MI S	2/15/2009	10	1.5
75	4.7 MI S	5/15/2009	10	2.7
75	4.7 MI S	8/15/2009	10.6	0.8
75	4.7 MI S	11/15/2009	10.3	1.4
76	4.8 MI SSW	2/15/2009	11.6	1.4
76	4.8 MI SSW	5/15/2009	10.4	1.8
76	4.8 MI SSW	8/15/2009	12.8	1.6
76	4.8 MI SSW	11/15/2009	10.7	1.8
77	5.4 MI S	2/15/2009	9.5	1.3
77	5.4 MI S	5/15/2009	7.2	1.5
77	5.4 MI S	8/15/2009	9.5	1

*Dose: mR/std. qtr.*

<i>TLD</i>	<i>TLD Location Description</i>	<i>Sample Date</i>	<i>Dose</i>	<i>2 Sigma Error</i>
77	5.4 MI S	11/15/2009	8.1	1
78	9.9 MI NNE	2/15/2009	8.7	1.5
78	9.9 MI NNE	5/15/2009	9	0.9
78	9.9 MI NNE	8/15/2009	9.4	1.5
78	9.9 MI NNE	11/15/2009	9.4	1
79	9.5 MI N	2/15/2009	11.1	1.4
79	9.5 MI N	5/15/2009	10.1	1.3
79	9.5 MI N	8/15/2009	12.1	1.9
79	9.5 MI N	11/15/2009	9.5	0.7
81	9.9 MI WNW - CONTROL	2/15/2009	10.9	2.3
81	9.9 MI WNW - CONTROL	5/15/2009	9.5	0.8
81	9.9 MI WNW - CONTROL	8/15/2009	12	1.2
81	9.9 MI WNW - CONTROL	11/15/2009	10.1	1.5

# 2009 BSEP

## Radiological Environmental Monitoring Analysis Report

### Comments

- Efficiency values are not included for AC samples requiring radioiodine analysis (I-131), because gamma software does not report these values.
- The Less than LLD (<LLD) represents that no activity was present, but lists the LLD values.
- There are no 2 sigma error values reported when activity is <LLD.
- Tritium samples that exhibit activity will not indicate LLD values for the following samples:
  - Groundwater samples (402 – 440 and 447)
  - Surface Water samples (494 – 499)

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Activity: pCi/cubic meter

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Efficiency</i></b>	<b><i>Activity</i></b>	<b><i>2 Sigma Error</i></b>	<b><i>LLD</i></b>	
200	1.0 MI WSW - VISITORS CENTER	1/5/2009	270.6	3.74E-01	1.67E-02	3.19E-03	3.40E-03
200	1.0 MI WSW - VISITORS CENTER	1/12/2009	266.9	3.74E-01	2.08E-02	3.32E-03	3.09E-03
200	1.0 MI WSW - VISITORS CENTER	1/19/2009	265.9	3.74E-01	2.10E-02	3.43E-03	3.35E-03
200	1.0 MI WSW - VISITORS CENTER	1/26/2009	264.3	3.74E-01	2.67E-02	3.71E-03	3.32E-03
200	1.0 MI WSW - VISITORS CENTER	2/2/2009	267.9	3.74E-01	2.04E-02	3.29E-03	3.08E-03
200	1.0 MI WSW - VISITORS CENTER	2/9/2009	263	3.74E-01	1.76E-02	3.29E-03	3.44E-03
200	1.0 MI WSW - VISITORS CENTER	2/16/2009	266.8	3.74E-01	2.44E-02	3.61E-03	3.39E-03
200	1.0 MI WSW - VISITORS CENTER	2/23/2009	264.7	3.74E-01	2.16E-02	3.55E-03	3.60E-03
200	1.0 MI WSW - VISITORS CENTER	3/2/2009	297.5	3.74E-01	1.71E-02	2.96E-03	2.97E-03
200	1.0 MI WSW - VISITORS CENTER	3/9/2009	293.8	3.74E-01	2.66E-02	3.49E-03	3.08E-03
200	1.0 MI WSW - VISITORS CENTER	3/16/2009	301.3	3.74E-01	1.71E-02	2.88E-03	2.76E-03
200	1.0 MI WSW - VISITORS CENTER	3/23/2009	298	3.74E-01	1.84E-02	3.03E-03	2.97E-03
200	1.0 MI WSW - VISITORS CENTER	3/30/2009	297.2	3.74E-01	1.73E-02	2.95E-03	2.90E-03
200	1.0 MI WSW - VISITORS CENTER	4/6/2009	301.8	3.74E-01	1.38E-02	2.86E-03	3.20E-03
200	1.0 MI WSW - VISITORS CENTER	4/13/2009	297.8	3.74E-01	1.91E-02	3.08E-03	2.99E-03
200	1.0 MI WSW - VISITORS CENTER	4/20/2009	299.3	3.74E-01	2.16E-02	3.24E-03	3.09E-03
200	1.0 MI WSW - VISITORS CENTER	4/27/2009	302.1	3.74E-01	2.37E-02	3.30E-03	3.00E-03
200	1.0 MI WSW - VISITORS CENTER	5/4/2009	303	3.74E-01	2.08E-02	3.13E-03	2.94E-03
200	1.0 MI WSW - VISITORS CENTER	5/11/2009	304.6	3.74E-01	1.51E-02	2.73E-03	2.71E-03
200	1.0 MI WSW - VISITORS CENTER	5/18/2009	301	3.74E-01	1.10E-02	2.60E-03	2.96E-03
200	1.0 MI WSW - VISITORS CENTER	5/25/2009	308.4	3.74E-01	1.20E-02	2.61E-03	2.89E-03
200	1.0 MI WSW - VISITORS CENTER	6/1/2009	281.3	3.74E-01	1.37E-02	2.78E-03	2.88E-03
200	1.0 MI WSW - VISITORS CENTER	6/8/2009	284.4	3.74E-01	1.86E-02	3.14E-03	3.11E-03
200	1.0 MI WSW - VISITORS CENTER	6/15/2009	285.5	3.74E-01	1.63E-02	3.07E-03	3.27E-03
200	1.0 MI WSW - VISITORS CENTER	6/22/2009	288.3	3.74E-01	1.96E-02	3.15E-03	3.02E-03
200	1.0 MI WSW - VISITORS CENTER	6/29/2009	286.2	3.74E-01	1.99E-02	3.20E-03	3.11E-03
200	1.0 MI WSW - VISITORS CENTER	7/6/2009	291.5	3.74E-01	2.53E-02	3.51E-03	3.29E-03

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Activity: pCi/cubic meter

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Efficiency</i></b>	<b><i>Activity</i></b>	<b><i>2 Sigma Error</i></b>	<b><i>LLD</i></b>	
200	1.0 MI WSW - VISITORS CENTER	7/13/2009	285	3.74E-01	1.76E-02	3.13E-03	3.22E-03
200	1.0 MI WSW - VISITORS CENTER	7/20/2009	289.4	3.74E-01	2.30E-02	3.41E-03	3.29E-03
200	1.0 MI WSW - VISITORS CENTER	7/27/2009	284.1	3.68E-01	2.13E-02	3.36E-03	3.26E-03
200	1.0 MI WSW - VISITORS CENTER	8/3/2009	292	3.68E-01	1.18E-02	2.93E-03	3.54E-03
200	1.0 MI WSW - VISITORS CENTER	8/10/2009	281	3.68E-01	2.00E-02	3.34E-03	3.37E-03
200	1.0 MI WSW - VISITORS CENTER	8/17/2009	285.6	3.68E-01	2.07E-02	3.31E-03	3.22E-03
200	1.0 MI WSW - VISITORS CENTER	8/24/2009	284.5	3.68E-01	1.28E-02	2.93E-03	3.35E-03
200	1.0 MI WSW - VISITORS CENTER	8/31/2009	284.4	3.68E-01	1.59E-02	3.04E-03	3.18E-03
200	1.0 MI WSW - VISITORS CENTER	9/7/2009	281.4	3.68E-01	1.80E-02	3.18E-03	3.22E-03
200	1.0 MI WSW - VISITORS CENTER	9/14/2009	284.4	3.68E-01	1.54E-02	3.04E-03	3.26E-03
200	1.0 MI WSW - VISITORS CENTER	9/21/2009	282.2	3.68E-01	2.43E-02	3.51E-03	3.26E-03
200	1.0 MI WSW - VISITORS CENTER	9/28/2009	286	3.68E-01	1.06E-02	2.74E-03	3.24E-03
200	1.0 MI WSW - VISITORS CENTER	10/5/2009	273.6	3.68E-01	2.13E-02	3.38E-03	3.20E-03
200	1.0 MI WSW - VISITORS CENTER	10/12/2009	280.9	3.68E-01	1.57E-02	3.12E-03	3.40E-03
200	1.0 MI WSW - VISITORS CENTER	10/19/2009	273.2	3.68E-01	1.25E-02	3.01E-03	3.54E-03
200	1.0 MI WSW - VISITORS CENTER	10/26/2009	275.1	3.68E-01	1.96E-02	3.40E-03	3.52E-03
200	1.0 MI WSW - VISITORS CENTER	11/2/2009	279.2	3.68E-01	8.33E-03	2.61E-03	3.24E-03
200	1.0 MI WSW - VISITORS CENTER	11/9/2009	273.6	3.68E-01	2.55E-02	3.72E-03	3.56E-03
200	1.0 MI WSW - VISITORS CENTER	11/16/2009	272.1	3.68E-01	1.01E-02	2.80E-03	3.38E-03
200	1.0 MI WSW - VISITORS CENTER	11/23/2009	272.9	3.68E-01	2.22E-02	3.46E-03	3.29E-03
200	1.0 MI WSW - VISITORS CENTER	11/30/2009	271.3	3.68E-01	2.07E-02	3.33E-03	3.15E-03
200	1.0 MI WSW - VISITORS CENTER	12/7/2009	270.8	3.68E-01	1.49E-02	3.14E-03	3.47E-03
200	1.0 MI WSW - VISITORS CENTER	12/14/2009	261.6	3.68E-01	2.21E-02	3.59E-03	3.54E-03
200	1.0 MI WSW - VISITORS CENTER	12/21/2009	270.6	3.68E-01	2.07E-02	3.33E-03	3.13E-03
200	1.0 MI WSW - VISITORS CENTER	12/28/2009	271.4	3.68E-01	2.48E-02	3.60E-03	3.31E-03
201	0.5 MI NE - PMAC	1/5/2009	286	3.74E-01	1.70E-02	3.09E-03	3.21E-03
201	0.5 MI NE - PMAC	1/12/2009	282.4	3.74E-01	2.00E-02	3.15E-03	2.92E-03

# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Beta

Sample Point	Sample Date	Quantity	Efficiency	Activity	2 Sigma Error	LLD	
201	0.5 MI NE - PMAC	1/19/2009	277.5	3.74E-01	2.43E-02	3.50E-03	3.21E-03
201	0.5 MI NE - PMAC	1/26/2009	278	3.74E-01	2.56E-02	3.54E-03	3.15E-03
201	0.5 MI NE - PMAC	2/2/2009	282.6	3.74E-01	1.96E-02	3.13E-03	2.92E-03
201	0.5 MI NE - PMAC	2/9/2009	276.4	3.74E-01	2.14E-02	3.38E-03	3.27E-03
201	0.5 MI NE - PMAC	2/16/2009	289.4	3.74E-01	2.69E-02	3.54E-03	3.13E-03
201	0.5 MI NE - PMAC	2/23/2009	269.2	3.74E-01	2.14E-02	3.50E-03	3.54E-03
201	0.5 MI NE - PMAC	3/2/2009	277.8	3.74E-01	1.82E-02	3.17E-03	3.18E-03
201	0.5 MI NE - PMAC	3/9/2009	278.2	3.74E-01	2.45E-02	3.52E-03	3.25E-03
201	0.5 MI NE - PMAC	3/16/2009	278.3	3.74E-01	1.66E-02	3.01E-03	2.99E-03
201	0.5 MI NE - PMAC	3/23/2009	286	3.74E-01	1.87E-02	3.13E-03	3.09E-03
201	0.5 MI NE - PMAC	3/30/2009	283.3	3.74E-01	1.97E-02	3.18E-03	3.04E-03
201	0.5 MI NE - PMAC	4/6/2009	285.9	3.74E-01	1.27E-02	2.91E-03	3.38E-03
201	0.5 MI NE - PMAC	4/13/2009	282.7	3.74E-01	1.61E-02	3.02E-03	3.15E-03
201	0.5 MI NE - PMAC	4/20/2009	283.6	3.74E-01	1.79E-02	3.16E-03	3.26E-03
201	0.5 MI NE - PMAC	4/27/2009	285.4	3.74E-01	2.26E-02	3.37E-03	3.17E-03
201	0.5 MI NE - PMAC	5/4/2009	287	3.74E-01	2.38E-02	3.40E-03	3.10E-03
201	0.5 MI NE - PMAC	5/11/2009	287.3	3.74E-01	1.68E-02	2.94E-03	2.87E-03
201	0.5 MI NE - PMAC	5/18/2009	289	3.74E-01	1.06E-02	2.65E-03	3.08E-03
201	0.5 MI NE - PMAC	5/25/2009	294	3.74E-01	1.24E-02	2.73E-03	3.03E-03
201	0.5 MI NE - PMAC	6/1/2009	281.8	3.74E-01	1.38E-02	2.78E-03	2.87E-03
201	0.5 MI NE - PMAC	6/8/2009	289.4	3.74E-01	1.98E-02	3.17E-03	3.05E-03
201	0.5 MI NE - PMAC	6/15/2009	288.3	3.74E-01	1.65E-02	3.06E-03	3.23E-03
201	0.5 MI NE - PMAC	6/22/2009	290.8	3.74E-01	2.13E-02	3.22E-03	2.99E-03
201	0.5 MI NE - PMAC	6/29/2009	288.5	3.74E-01	1.85E-02	3.12E-03	3.09E-03
201	0.5 MI NE - PMAC	7/6/2009	292.6	3.74E-01	2.60E-02	3.54E-03	3.28E-03
201	0.5 MI NE - PMAC	7/13/2009	286	3.74E-01	1.74E-02	3.11E-03	3.21E-03
201	0.5 MI NE - PMAC	7/20/2009	291.2	3.74E-01	1.94E-02	3.22E-03	3.27E-03



# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Activity: pCi/cubic meter

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	<i><b>LLD</b></i>	
201	0.5 MI NE - PMAC	7/27/2009	285.5	3.68E-01	2.23E-02	3.40E-03	3.25E-03
201	0.5 MI NE - PMAC	8/3/2009	291.5	3.68E-01	1.25E-02	2.97E-03	3.54E-03
201	0.5 MI NE - PMAC	8/10/2009	284.2	3.68E-01	2.18E-02	3.41E-03	3.33E-03
201	0.5 MI NE - PMAC	8/17/2009	255.8	3.68E-01	1.92E-02	3.48E-03	3.60E-03
201	0.5 MI NE - PMAC	8/24/2009	284.6	3.68E-01	1.64E-02	3.13E-03	3.35E-03
201	0.5 MI NE - PMAC	8/31/2009	284.4	3.68E-01	1.73E-02	3.11E-03	3.18E-03
201	0.5 MI NE - PMAC	9/7/2009	283.5	3.68E-01	1.96E-02	3.24E-03	3.19E-03
201	0.5 MI NE - PMAC	9/14/2009	284.6	3.68E-01	1.54E-02	3.03E-03	3.26E-03
201	0.5 MI NE - PMAC	9/21/2009	282.6	3.68E-01	2.60E-02	3.59E-03	3.25E-03
201	0.5 MI NE - PMAC	9/28/2009	285.9	3.68E-01	9.85E-03	2.69E-03	3.24E-03
201	0.5 MI NE - PMAC	10/5/2009	276.5	3.68E-01	2.05E-02	3.31E-03	3.17E-03
201	0.5 MI NE - PMAC	10/12/2009	274	3.68E-01	1.67E-02	3.23E-03	3.48E-03
201	0.5 MI NE - PMAC	10/19/2009	275.9	3.68E-01	1.31E-02	3.03E-03	3.51E-03
201	0.5 MI NE - PMAC	10/26/2009	276.3	3.68E-01	1.85E-02	3.33E-03	3.50E-03
201	0.5 MI NE - PMAC	11/2/2009	280.3	3.68E-01	9.08E-03	2.65E-03	3.23E-03
201	0.5 MI NE - PMAC	11/9/2009	275.6	3.68E-01	2.77E-02	3.80E-03	3.54E-03
201	0.5 MI NE - PMAC	11/16/2009	276.5	3.68E-01	9.39E-03	2.72E-03	3.33E-03
201	0.5 MI NE - PMAC	11/23/2009	277.4	3.68E-01	2.15E-02	3.39E-03	3.24E-03
201	0.5 MI NE - PMAC	11/30/2009	273	3.68E-01	1.79E-02	3.17E-03	3.13E-03
201	0.5 MI NE - PMAC	12/7/2009	274.2	3.68E-01	1.26E-02	2.97E-03	3.43E-03
201	0.5 MI NE - PMAC	12/14/2009	272.3	3.68E-01	1.99E-02	3.38E-03	3.40E-03
201	0.5 MI NE - PMAC	12/21/2009	271.4	3.68E-01	1.94E-02	3.25E-03	3.12E-03
201	0.5 MI NE - PMAC	12/28/2009	272.4	3.68E-01	2.44E-02	3.57E-03	3.30E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	1/5/2009	274.1	3.74E-01	2.08E-02	3.39E-03	3.35E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	1/12/2009	270.8	3.74E-01	1.95E-02	3.22E-03	3.05E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	1/19/2009	269.9	3.74E-01	2.65E-02	3.67E-03	3.30E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	1/26/2009	268.1	3.74E-01	3.25E-02	3.95E-03	3.27E-03

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Activity: pCi/cubic meter

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	<i><b>LLD</b></i>	
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	2/2/2009	272.1	3.74E-01	2.40E-02	3.45E-03	3.03E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	2/9/2009	267.2	3.74E-01	2.03E-02	3.40E-03	3.39E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	2/16/2009	271.7	3.74E-01	2.30E-02	3.50E-03	3.33E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	2/23/2009	269.5	3.74E-01	2.25E-02	3.56E-03	3.53E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	3/2/2009	271	3.74E-01	1.67E-02	3.14E-03	3.26E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	3/9/2009	266.2	3.74E-01	3.22E-02	3.99E-03	3.40E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	3/16/2009	273.7	3.74E-01	1.97E-02	3.22E-03	3.04E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	3/23/2009	271.3	3.74E-01	2.12E-02	3.38E-03	3.26E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	3/30/2009	272.6	3.74E-01	2.07E-02	3.32E-03	3.16E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	4/6/2009	275.2	3.74E-01	1.51E-02	3.13E-03	3.51E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	4/13/2009	269.8	3.74E-01	2.22E-02	3.46E-03	3.30E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	4/20/2009	271.4	3.74E-01	2.19E-02	3.47E-03	3.41E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	4/27/2009	274.5	3.74E-01	2.36E-02	3.51E-03	3.30E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	5/4/2009	277.2	3.74E-01	2.55E-02	3.56E-03	3.21E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	5/11/2009	277.4	3.74E-01	1.78E-02	3.07E-03	2.97E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	5/18/2009	277.4	3.74E-01	1.15E-02	2.79E-03	3.21E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	5/25/2009	282.3	3.74E-01	1.40E-02	2.91E-03	3.16E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	6/1/2009	277.3	3.74E-01	1.40E-02	2.83E-03	2.92E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	6/8/2009	286.1	3.74E-01	1.85E-02	3.12E-03	3.09E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	6/15/2009	284.4	3.74E-01	1.75E-02	3.15E-03	3.28E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	6/22/2009	286.2	3.74E-01	1.94E-02	3.15E-03	3.04E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	6/29/2009	283.8	3.74E-01	1.80E-02	3.12E-03	3.14E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	7/6/2009	287.5	3.74E-01	2.50E-02	3.53E-03	3.34E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	7/13/2009	280.7	3.74E-01	1.37E-02	2.94E-03	3.27E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	7/20/2009	284.4	3.74E-01	2.60E-02	3.60E-03	3.35E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	7/27/2009	278.1	3.68E-01	1.79E-02	3.22E-03	3.33E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	8/3/2009	280.3	3.68E-01	1.26E-02	3.07E-03	3.69E-03

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Activity: pCi/cubic meter

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	<i><b>LLD</b></i>	
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	8/10/2009	271.5	3.68E-01	2.03E-02	3.44E-03	3.49E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	8/17/2009	274.9	3.68E-01	2.09E-02	3.40E-03	3.35E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	8/24/2009	275.4	3.68E-01	1.32E-02	3.02E-03	3.47E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	8/31/2009	275.2	3.68E-01	1.56E-02	3.09E-03	3.29E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	9/7/2009	273.5	3.68E-01	1.77E-02	3.22E-03	3.31E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	9/14/2009	274.6	3.68E-01	1.53E-02	3.11E-03	3.38E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	9/21/2009	273.8	3.68E-01	2.50E-02	3.62E-03	3.36E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	9/28/2009	277.3	3.68E-01	9.53E-03	2.74E-03	3.34E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	10/5/2009	266.3	3.68E-01	2.06E-02	3.40E-03	3.29E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	10/12/2009	267.7	3.68E-01	1.49E-02	3.18E-03	3.57E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	10/19/2009	266.7	3.68E-01	1.29E-02	3.09E-03	3.63E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	10/26/2009	266	3.68E-01	1.93E-02	3.46E-03	3.64E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	11/2/2009	270.2	3.68E-01	8.43E-03	2.68E-03	3.35E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	11/9/2009	263.9	3.68E-01	2.37E-02	3.72E-03	3.69E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	11/16/2009	264.5	3.68E-01	8.33E-03	2.75E-03	3.48E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	11/23/2009	261.7	3.68E-01	1.93E-02	3.40E-03	3.43E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	11/30/2009	257.3	3.68E-01	2.02E-02	3.43E-03	3.32E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	12/7/2009	250.8	3.68E-01	9.76E-03	3.00E-03	3.75E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	12/14/2009	247.5	3.68E-01	1.91E-02	3.57E-03	3.74E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	12/21/2009	297	3.68E-01	2.18E-02	3.19E-03	2.85E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION R	12/28/2009	296	3.68E-01	2.24E-02	3.29E-03	3.03E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	1/5/2009	285.9	3.74E-01	1.89E-02	3.19E-03	3.21E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	1/12/2009	282.1	3.74E-01	1.86E-02	3.08E-03	2.92E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	1/19/2009	277.5	3.74E-01	2.47E-02	3.52E-03	3.21E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	1/26/2009	277.1	3.74E-01	2.44E-02	3.49E-03	3.16E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	2/2/2009	283.5	3.74E-01	2.04E-02	3.17E-03	2.91E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	2/9/2009	274.2	3.74E-01	2.10E-02	3.38E-03	3.30E-03

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Activity: pCi/cubic meter

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	<i><b>LLD</b></i>	
203	2.0 MI SSW - SOUTHPORT SUBSTATION	2/16/2009	283.1	3.74E-01	2.01E-02	3.26E-03	3.20E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	2/23/2009	278.5	3.74E-01	2.17E-02	3.44E-03	3.42E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	3/2/2009	280.5	3.74E-01	1.86E-02	3.17E-03	3.15E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	3/9/2009	275.7	3.74E-01	2.83E-02	3.72E-03	3.28E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	3/16/2009	285.9	3.74E-01	2.22E-02	3.26E-03	2.91E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	3/23/2009	284.4	3.74E-01	1.71E-02	3.06E-03	3.11E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	3/30/2009	283.9	3.74E-01	1.96E-02	3.17E-03	3.04E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	4/6/2009	287.9	3.74E-01	1.69E-02	3.13E-03	3.35E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	4/13/2009	282	3.74E-01	1.71E-02	3.08E-03	3.16E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	4/20/2009	284.6	3.74E-01	1.65E-02	3.08E-03	3.25E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	4/27/2009	288.3	3.74E-01	2.36E-02	3.40E-03	3.14E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	5/4/2009	289.4	3.74E-01	2.05E-02	3.21E-03	3.08E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	5/11/2009	288.9	3.74E-01	1.77E-02	2.98E-03	2.86E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	5/18/2009	288.3	3.74E-01	1.08E-02	2.67E-03	3.09E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	5/25/2009	293.8	3.74E-01	1.03E-02	2.60E-03	3.03E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	6/1/2009	281.3	3.74E-01	1.28E-02	2.72E-03	2.88E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	6/8/2009	261.8	3.74E-01	1.79E-02	3.29E-03	3.38E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	6/15/2009	276.9	3.74E-01	1.67E-02	3.16E-03	3.37E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	6/22/2009	282.1	3.74E-01	1.81E-02	3.11E-03	3.08E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	6/29/2009	281.6	3.74E-01	2.11E-02	3.30E-03	3.16E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	7/6/2009	288	3.74E-01	2.58E-02	3.56E-03	3.33E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	7/13/2009	283.7	3.74E-01	1.73E-02	3.12E-03	3.24E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	7/20/2009	290.2	3.74E-01	2.43E-02	3.47E-03	3.28E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	7/27/2009	285.8	3.68E-01	2.25E-02	3.40E-03	3.24E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	8/3/2009	293.8	3.68E-01	1.40E-02	3.04E-03	3.52E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	8/10/2009	287.5	3.68E-01	2.25E-02	3.41E-03	3.30E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	8/17/2009	294	3.68E-01	2.12E-02	3.27E-03	3.13E-03

# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Beta

Sample Point	Sample Date	Quantity	Efficiency	Activity	2 Sigma Error	LLD	
203	2.0 MI SSW - SOUTHPORT SUBSTATION	8/24/2009	295.3	3.68E-01	1.52E-02	2.98E-03	3.23E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	8/31/2009	296.1	3.68E-01	1.31E-02	2.79E-03	3.06E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	9/7/2009	294.9	3.68E-01	1.98E-02	3.17E-03	3.07E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	9/14/2009	297	3.68E-01	1.45E-02	2.89E-03	3.12E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	9/21/2009	296.3	3.68E-01	2.60E-02	3.49E-03	3.10E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	9/28/2009	301.2	3.68E-01	1.12E-02	2.67E-03	3.08E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	10/5/2009	287.7	3.68E-01	2.36E-02	3.38E-03	3.05E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	10/12/2009	298.3	3.68E-01	1.72E-02	3.07E-03	3.20E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	10/19/2009	290	3.68E-01	1.25E-02	2.89E-03	3.34E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	10/26/2009	291	3.68E-01	1.77E-02	3.17E-03	3.33E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	11/2/2009	295.8	3.68E-01	9.02E-03	2.54E-03	3.06E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	11/9/2009	291.2	3.68E-01	2.61E-02	3.59E-03	3.35E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	11/16/2009	293	3.68E-01	9.94E-03	2.64E-03	3.14E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	11/23/2009	291.3	3.68E-01	2.55E-02	3.48E-03	3.08E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	11/30/2009	288.1	3.68E-01	1.88E-02	3.10E-03	2.96E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	12/7/2009	288.5	3.68E-01	1.28E-02	2.88E-03	3.26E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	12/14/2009	286.8	3.68E-01	2.24E-02	3.39E-03	3.23E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	12/21/2009	286.7	3.68E-01	1.90E-02	3.12E-03	2.95E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	12/28/2009	286.4	3.68E-01	2.51E-02	3.50E-03	3.14E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	1/5/2009	296.7	3.74E-01	2.34E-02	3.34E-03	3.10E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	1/12/2009	296.9	3.74E-01	1.96E-02	3.03E-03	2.78E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	1/19/2009	290.3	3.74E-01	2.53E-02	3.45E-03	3.07E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	1/26/2009	287	3.74E-01	2.50E-02	3.44E-03	3.05E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	2/2/2009	288.6	3.74E-01	2.20E-02	3.22E-03	2.86E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	2/9/2009	281	3.74E-01	1.45E-02	2.96E-03	3.22E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	2/16/2009	284.7	3.74E-01	2.47E-02	3.48E-03	3.18E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	2/23/2009	280.3	3.74E-01	1.90E-02	3.28E-03	3.40E-03

# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Beta

<b>Sample Point</b>	<b>Sample Date</b>	<b>Quantity</b>	<b>Efficiency</b>	<b>Activity</b>	<b>2 Sigma Error</b>	<b>LLD</b>	
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	3/2/2009	282.2	3.74E-01	1.77E-02	3.11E-03	3.13E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	3/9/2009	279	3.74E-01	2.69E-02	3.63E-03	3.24E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	3/16/2009	285.1	3.74E-01	1.84E-02	3.06E-03	2.92E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	3/23/2009	283	3.74E-01	1.54E-02	2.97E-03	3.12E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	3/30/2009	283.4	3.74E-01	1.56E-02	2.95E-03	3.04E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	4/6/2009	284.6	3.74E-01	1.31E-02	2.95E-03	3.39E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	4/13/2009	281	3.74E-01	2.01E-02	3.25E-03	3.17E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	4/20/2009	280.1	3.74E-01	1.85E-02	3.22E-03	3.30E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	4/27/2009	280.9	3.74E-01	1.90E-02	3.21E-03	3.22E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	5/4/2009	279.9	3.74E-01	2.30E-02	3.41E-03	3.18E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	5/11/2009	281.8	3.74E-01	1.63E-02	2.96E-03	2.93E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	5/18/2009	278.7	3.74E-01	1.11E-02	2.75E-03	3.20E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	5/25/2009	276.9	3.74E-01	1.34E-02	2.91E-03	3.22E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	6/1/2009	287	3.74E-01	1.26E-02	2.68E-03	2.82E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	6/8/2009	284.6	3.74E-01	1.68E-02	3.04E-03	3.11E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	6/15/2009	287.4	3.74E-01	1.49E-02	2.98E-03	3.24E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	6/22/2009	287.4	3.74E-01	1.98E-02	3.16E-03	3.03E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	6/29/2009	287.5	3.74E-01	1.52E-02	2.94E-03	3.10E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	7/6/2009	291.2	3.74E-01	2.63E-02	3.56E-03	3.29E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	7/13/2009	283.8	3.74E-01	1.79E-02	3.15E-03	3.24E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	7/20/2009	286.7	3.74E-01	1.94E-02	3.25E-03	3.32E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	7/27/2009	288.2	3.68E-01	2.10E-02	3.31E-03	3.22E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	8/3/2009	286.8	3.68E-01	1.60E-02	3.20E-03	3.60E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	8/10/2009	288	3.68E-01	2.10E-02	3.34E-03	3.29E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	8/17/2009	286.5	3.68E-01	2.14E-02	3.34E-03	3.21E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	8/24/2009	287.8	3.68E-01	1.20E-02	2.85E-03	3.32E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	8/31/2009	287.8	3.68E-01	1.54E-02	2.98E-03	3.15E-03

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Activity: pCi/cubic meter

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	<i><b>LLD</b></i>	
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	9/7/2009	283.9	3.68E-01	2.24E-02	3.39E-03	3.19E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	9/14/2009	283.1	3.68E-01	1.67E-02	3.12E-03	3.27E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	9/21/2009	286.1	3.68E-01	2.47E-02	3.50E-03	3.21E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	9/28/2009	285.5	3.68E-01	1.02E-02	2.72E-03	3.25E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	10/5/2009	284.1	3.68E-01	2.18E-02	3.32E-03	3.08E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	10/12/2009	284	3.68E-01	1.34E-02	2.97E-03	3.36E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	10/19/2009	281.6	3.68E-01	1.49E-02	3.09E-03	3.44E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	10/26/2009	278.2	3.68E-01	1.80E-02	3.29E-03	3.48E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	11/2/2009	283.9	3.68E-01	7.76E-03	2.53E-03	3.19E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	11/9/2009	278.9	3.68E-01	2.65E-02	3.72E-03	3.49E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	11/16/2009	279.1	3.68E-01	9.56E-03	2.71E-03	3.30E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	11/23/2009	283.1	3.68E-01	2.14E-02	3.34E-03	3.17E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	11/30/2009	274.2	3.68E-01	1.69E-02	3.10E-03	3.11E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	12/7/2009	276.8	3.68E-01	1.16E-02	2.89E-03	3.40E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	12/14/2009	275.9	3.68E-01	2.33E-02	3.53E-03	3.36E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	12/21/2009	276.2	3.68E-01	2.00E-02	3.25E-03	3.06E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	12/28/2009	275.2	3.68E-01	2.08E-02	3.37E-03	3.26E-03
205	0.6 MI SSE - SPOIL POND	1/5/2009	294	3.74E-01	2.03E-02	3.20E-03	3.13E-03
205	0.6 MI SSE - SPOIL POND	1/12/2009	291.7	3.74E-01	2.15E-02	3.17E-03	2.83E-03
205	0.6 MI SSE - SPOIL POND	1/19/2009	283.9	3.74E-01	2.62E-02	3.54E-03	3.14E-03
205	0.6 MI SSE - SPOIL POND	1/26/2009	282	3.74E-01	2.66E-02	3.55E-03	3.11E-03
205	0.6 MI SSE - SPOIL POND	2/2/2009	288	3.74E-01	1.93E-02	3.08E-03	2.86E-03
205	0.6 MI SSE - SPOIL POND	2/9/2009	282.9	3.74E-01	2.40E-02	3.46E-03	3.20E-03
205	0.6 MI SSE - SPOIL POND	2/16/2009	290	3.74E-01	2.51E-02	3.45E-03	3.12E-03
205	0.6 MI SSE - SPOIL POND	2/23/2009	278.4	3.74E-01	2.56E-02	3.63E-03	3.42E-03
205	0.6 MI SSE - SPOIL POND	3/2/2009	286.3	3.74E-01	1.83E-02	3.11E-03	3.09E-03
205	0.6 MI SSE - SPOIL POND	3/9/2009	276.8	3.74E-01	3.04E-02	3.81E-03	3.27E-03



# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Activity: pCi/cubic meter

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	<i><b>LLD</b></i>	
205	0.6 MI SSE - SPOIL POND	3/16/2009	300.6	3.74E-01	2.08E-02	3.08E-03	2.77E-03
205	0.6 MI SSE - SPOIL POND	3/23/2009	289.7	3.74E-01	2.01E-02	3.18E-03	3.05E-03
205	0.6 MI SSE - SPOIL POND	3/30/2009	293.8	3.74E-01	1.74E-02	2.98E-03	2.93E-03
205	0.6 MI SSE - SPOIL POND	4/6/2009	304.2	3.74E-01	1.35E-02	2.83E-03	3.17E-03
205	0.6 MI SSE - SPOIL POND	4/13/2009	292.2	3.74E-01	1.81E-02	3.06E-03	3.05E-03
205	0.6 MI SSE - SPOIL POND	4/20/2009	293.9	3.74E-01	2.15E-02	3.27E-03	3.15E-03
205	0.6 MI SSE - SPOIL POND	4/27/2009	306.3	3.74E-01	2.52E-02	3.34E-03	2.95E-03
205	0.6 MI SSE - SPOIL POND	5/4/2009	307.7	3.74E-01	2.22E-02	3.17E-03	2.90E-03
205	0.6 MI SSE - SPOIL POND	5/11/2009	308.7	3.74E-01	1.56E-02	2.74E-03	2.67E-03
205	0.6 MI SSE - SPOIL POND	5/18/2009	306	3.74E-01	9.84E-03	2.49E-03	2.91E-03
205	0.6 MI SSE - SPOIL POND	5/25/2009	311.8	3.74E-01	1.17E-02	2.57E-03	2.86E-03
205	0.6 MI SSE - SPOIL POND	6/1/2009	278	3.74E-01	1.33E-02	2.78E-03	2.91E-03
205	0.6 MI SSE - SPOIL POND	6/8/2009	285.4	3.74E-01	1.68E-02	3.03E-03	3.10E-03
205	0.6 MI SSE - SPOIL POND	6/15/2009	283.6	3.74E-01	1.63E-02	3.09E-03	3.29E-03
205	0.6 MI SSE - SPOIL POND	6/22/2009	282.7	3.74E-01	2.31E-02	3.37E-03	3.08E-03
205	0.6 MI SSE - SPOIL POND	6/29/2009	281.1	3.74E-01	1.84E-02	3.16E-03	3.17E-03
205	0.6 MI SSE - SPOIL POND	7/6/2009	284.8	3.74E-01	2.55E-02	3.58E-03	3.37E-03
205	0.6 MI SSE - SPOIL POND	7/13/2009	276.3	3.74E-01	1.28E-02	2.92E-03	3.33E-03
205	0.6 MI SSE - SPOIL POND	7/20/2009	283	3.74E-01	2.37E-02	3.50E-03	3.37E-03
205	0.6 MI SSE - SPOIL POND	7/27/2009	279.7	3.68E-01	2.21E-02	3.43E-03	3.31E-03
205	0.6 MI SSE - SPOIL POND	8/3/2009	286.7	3.68E-01	1.50E-02	3.15E-03	3.60E-03
205	0.6 MI SSE - SPOIL POND	8/10/2009	278.3	3.68E-01	1.97E-02	3.35E-03	3.41E-03
205	0.6 MI SSE - SPOIL POND	8/17/2009	281.6	3.68E-01	2.03E-02	3.31E-03	3.27E-03
205	0.6 MI SSE - SPOIL POND	8/24/2009	282.6	3.68E-01	1.27E-02	2.94E-03	3.38E-03
205	0.6 MI SSE - SPOIL POND	8/31/2009	282.6	3.68E-01	1.35E-02	2.91E-03	3.20E-03
205	0.6 MI SSE - SPOIL POND	9/7/2009	279	3.68E-01	1.85E-02	3.22E-03	3.25E-03
205	0.6 MI SSE - SPOIL POND	9/14/2009	281.7	3.68E-01	1.23E-02	2.88E-03	3.29E-03

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Particulate

Analysis: Beta

Quantity: cubic meters

Activity: pCi/cubic meter

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	<i><b>LLD</b></i>	
205	0.6 MI SSE - SPOIL POND	9/21/2009	281	3.68E-01	2.59E-02	3.60E-03	3.27E-03
205	0.6 MI SSE - SPOIL POND	9/28/2009	286.5	3.68E-01	9.66E-03	2.67E-03	3.23E-03
205	0.6 MI SSE - SPOIL POND	10/5/2009	275.1	3.68E-01	2.17E-02	3.39E-03	3.19E-03
205	0.6 MI SSE - SPOIL POND	10/12/2009	282.7	3.68E-01	1.58E-02	3.11E-03	3.38E-03
205	0.6 MI SSE - SPOIL POND	10/19/2009	274.6	3.68E-01	1.41E-02	3.10E-03	3.53E-03
205	0.6 MI SSE - SPOIL POND	10/26/2009	277	3.68E-01	1.92E-02	3.36E-03	3.49E-03
205	0.6 MI SSE - SPOIL POND	11/2/2009	283.4	3.68E-01	9.42E-03	2.65E-03	3.20E-03
205	0.6 MI SSE - SPOIL POND	11/9/2009	275.4	3.68E-01	2.45E-02	3.65E-03	3.54E-03
205	0.6 MI SSE - SPOIL POND	11/16/2009	278.4	3.68E-01	8.88E-03	2.67E-03	3.30E-03
205	0.6 MI SSE - SPOIL POND	11/23/2009	275.4	3.68E-01	1.99E-02	3.32E-03	3.26E-03
205	0.6 MI SSE - SPOIL POND	11/30/2009	273.5	3.68E-01	1.83E-02	3.19E-03	3.12E-03
205	0.6 MI SSE - SPOIL POND	12/7/2009	274.6	3.68E-01	1.15E-02	2.90E-03	3.43E-03
205	0.6 MI SSE - SPOIL POND	12/14/2009	272.8	3.68E-01	2.00E-02	3.38E-03	3.40E-03
205	0.6 MI SSE - SPOIL POND	12/21/2009	272.8	3.68E-01	2.02E-02	3.29E-03	3.10E-03
205	0.6 MI SSE - SPOIL POND	12/28/2009	273.3	3.68E-01	2.19E-02	3.44E-03	3.29E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	4/13/2009	283.7	3.74E-01	1.84E-02	3.15E-03	3.14E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	4/20/2009	285.4	3.74E-01	2.18E-02	3.35E-03	3.24E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	4/27/2009	286.2	3.74E-01	2.48E-02	3.47E-03	3.16E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	5/4/2009	285.5	3.74E-01	2.36E-02	3.40E-03	3.12E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	5/11/2009	288.1	3.74E-01	2.08E-02	3.16E-03	2.86E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	5/18/2009	284.8	3.74E-01	1.01E-02	2.65E-03	3.13E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	5/25/2009	284.9	3.74E-01	1.58E-02	2.99E-03	3.13E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	6/1/2009	284.8	3.74E-01	1.52E-02	2.85E-03	2.84E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	6/8/2009	283.3	3.74E-01	2.13E-02	3.29E-03	3.12E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	6/15/2009	285.2	3.74E-01	1.64E-02	3.08E-03	3.27E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	6/22/2009	285.1	3.74E-01	2.05E-02	3.22E-03	3.05E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	6/29/2009	285.7	3.74E-01	1.69E-02	3.04E-03	3.12E-03

# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Air Particulate

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Beta

Sample Point	Sample Date	Quantity	Efficiency	Activity	2 Sigma Error	LLD	
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	7/6/2009	288.2	3.74E-01	2.72E-02	3.63E-03	3.33E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	7/13/2009	281.4	3.74E-01	2.01E-02	3.29E-03	3.27E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	7/20/2009	284.4	3.74E-01	1.97E-02	3.28E-03	3.35E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	7/27/2009	285.1	3.68E-01	2.06E-02	3.31E-03	3.25E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	8/3/2009	283.8	3.68E-01	1.60E-02	3.23E-03	3.64E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	8/10/2009	282.7	3.68E-01	2.39E-02	3.52E-03	3.35E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	8/17/2009	280.8	3.68E-01	2.14E-02	3.38E-03	3.28E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	8/24/2009	281.7	3.68E-01	1.90E-02	3.29E-03	3.39E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	8/31/2009	280.8	3.68E-01	1.55E-02	3.04E-03	3.22E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	9/7/2009	278.4	3.68E-01	2.34E-02	3.48E-03	3.25E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	9/14/2009	279.9	3.68E-01	1.88E-02	3.26E-03	3.31E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	9/21/2009	279	3.68E-01	2.90E-02	3.76E-03	3.30E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	9/28/2009	279.5	3.68E-01	1.16E-02	2.85E-03	3.32E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	10/5/2009	278.7	3.68E-01	2.33E-02	3.44E-03	3.14E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	10/12/2009	278.6	3.68E-01	1.70E-02	3.21E-03	3.43E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	10/19/2009	277.3	3.68E-01	1.48E-02	3.12E-03	3.49E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	10/26/2009	271.6	3.68E-01	2.19E-02	3.55E-03	3.56E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	11/2/2009	278.3	3.68E-01	1.06E-02	2.76E-03	3.25E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	11/9/2009	272.6	3.68E-01	2.65E-02	3.77E-03	3.58E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	11/16/2009	273.7	3.68E-01	1.29E-02	2.96E-03	3.36E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	11/23/2009	277.4	3.68E-01	2.07E-02	3.34E-03	3.24E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	11/30/2009	269.2	3.68E-01	2.15E-02	3.39E-03	3.17E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	12/7/2009	272.2	3.68E-01	1.23E-02	2.97E-03	3.46E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	12/14/2009	271.9	3.68E-01	2.13E-02	3.46E-03	3.41E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	12/21/2009	272.9	3.68E-01	2.15E-02	3.36E-03	3.10E-03
206	11.3 MILES NW FROM PLANT AT BRUNSWICK	12/28/2009	270.8	3.68E-01	2.48E-02	3.61E-03	3.32E-03

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Cartridge

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Iodine

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Activity</i></b>	<b><i>LLD</i></b>
200 1.0 MI WSW - VISITORS CENTER	1/5/2009	270.6	<LLD	3.05E-02
200 1.0 MI WSW - VISITORS CENTER	1/12/2009	266.9	<LLD	2.46E-02
200 1.0 MI WSW - VISITORS CENTER	1/19/2009	265.9	<LLD	2.30E-02
200 1.0 MI WSW - VISITORS CENTER	1/26/2009	264.3	<LLD	2.31E-02
200 1.0 MI WSW - VISITORS CENTER	2/2/2009	267.9	<LLD	2.37E-02
200 1.0 MI WSW - VISITORS CENTER	2/9/2009	263.0	<LLD	2.98E-02
200 1.0 MI WSW - VISITORS CENTER	2/16/2009	266.8	<LLD	2.30E-02
200 1.0 MI WSW - VISITORS CENTER	2/23/2009	264.7	<LLD	2.48E-02
200 1.0 MI WSW - VISITORS CENTER	3/2/2009	297.5	<LLD	2.13E-02
200 1.0 MI WSW - VISITORS CENTER	3/9/2009	293.8	<LLD	2.30E-02
200 1.0 MI WSW - VISITORS CENTER	3/16/2009	301.3	<LLD	1.79E-02
200 1.0 MI WSW - VISITORS CENTER	3/23/2009	298.0	<LLD	2.02E-02
200 1.0 MI WSW - VISITORS CENTER	3/30/2009	297.2	<LLD	2.24E-02
200 1.0 MI WSW - VISITORS CENTER	4/6/2009	301.8	<LLD	2.21E-02
200 1.0 MI WSW - VISITORS CENTER	4/13/2009	297.8	<LLD	2.03E-02
200 1.0 MI WSW - VISITORS CENTER	4/20/2009	299.3	<LLD	2.01E-02
200 1.0 MI WSW - VISITORS CENTER	4/27/2009	302.1	<LLD	1.76E-02
200 1.0 MI WSW - VISITORS CENTER	5/4/2009	303.0	<LLD	1.95E-02
200 1.0 MI WSW - VISITORS CENTER	5/11/2009	304.6	<LLD	1.98E-02
200 1.0 MI WSW - VISITORS CENTER	5/18/2009	301.0	<LLD	1.51E-02
200 1.0 MI WSW - VISITORS CENTER	5/25/2009	308.4	<LLD	1.85E-02
200 1.0 MI WSW - VISITORS CENTER	6/1/2009	281.3	<LLD	1.93E-02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Cartridge

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Iodine

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>LLD</i>
200 1.0 MI WSW - VISITORS CENTER	6/8/2009	284.4	<LLD	2.38E-02
200 1.0 MI WSW - VISITORS CENTER	6/15/2009	285.5	<LLD	1.75E-02
200 1.0 MI WSW - VISITORS CENTER	6/22/2009	288.3	<LLD	2.48E-02
200 1.0 MI WSW - VISITORS CENTER	6/29/2009	286.2	<LLD	1.81E-02
200 1.0 MI WSW - VISITORS CENTER	7/6/2009	291.5	<LLD	2.25E-02
200 1.0 MI WSW - VISITORS CENTER	7/13/2009	285.0	<LLD	1.95E-02
200 1.0 MI WSW - VISITORS CENTER	7/20/2009	289.4	<LLD	1.79E-02
200 1.0 MI WSW - VISITORS CENTER	7/27/2009	284.1	<LLD	1.96E-02
200 1.0 MI WSW - VISITORS CENTER	8/3/2009	292.0	<LLD	2.05E-02
200 1.0 MI WSW - VISITORS CENTER	8/10/2009	281.0	<LLD	1.50E-02
200 1.0 MI WSW - VISITORS CENTER	8/17/2009	285.6	<LLD	1.94E-02
200 1.0 MI WSW - VISITORS CENTER	8/24/2009	284.5	<LLD	1.87E-02
200 1.0 MI WSW - VISITORS CENTER	8/31/2009	284.4	<LLD	2.00E-02
200 1.0 MI WSW - VISITORS CENTER	9/7/2009	281.4	<LLD	2.40E-02
200 1.0 MI WSW - VISITORS CENTER	9/14/2009	284.4	<LLD	2.51E-02
200 1.0 MI WSW - VISITORS CENTER	9/21/2009	282.2	<LLD	1.87E-02
200 1.0 MI WSW - VISITORS CENTER	9/28/2009	286.0	<LLD	2.49E-02
200 1.0 MI WSW - VISITORS CENTER	10/5/2009	273.6	<LLD	2.37E-02
200 1.0 MI WSW - VISITORS CENTER	10/12/2009	280.9	<LLD	1.96E-02
200 1.0 MI WSW - VISITORS CENTER	10/19/2009	273.2	<LLD	2.43E-02
200 1.0 MI WSW - VISITORS CENTER	10/26/2009	275.1	<LLD	2.42E-02
200 1.0 MI WSW - VISITORS CENTER	11/2/2009	279.2	<LLD	2.62E-02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Cartridge

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Iodine

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Activity</i></b>	<b><i>LLD</i></b>
200 1.0 MI WSW - VISITORS CENTER	11/9/2009	273.6	<LLD	2.63E-02
200 1.0 MI WSW - VISITORS CENTER	11/16/2009	272.1	<LLD	2.31E-02
200 1.0 MI WSW - VISITORS CENTER	11/23/2009	272.9	<LLD	1.86E-02
200 1.0 MI WSW - VISITORS CENTER	11/30/2009	271.3	<LLD	2.38E-02
200 1.0 MI WSW - VISITORS CENTER	12/7/2009	270.8	<LLD	2.31E-02
200 1.0 MI WSW - VISITORS CENTER	12/14/2009	261.6	<LLD	1.93E-02
200 1.0 MI WSW - VISITORS CENTER	12/21/2009	270.6	<LLD	1.69E-02
200 1.0 MI WSW - VISITORS CENTER	12/28/2009	271.4	<LLD	2.42E-02
201 0.5 MI NE - PMAC	1/5/2009	286.0	<LLD	2.63E-02
201 0.5 MI NE - PMAC	1/12/2009	282.2	<LLD	2.42E-02
201 0.5 MI NE - PMAC	1/19/2009	277.5	<LLD	2.30E-02
201 0.5 MI NE - PMAC	1/26/2009	278.0	<LLD	1.94E-02
201 0.5 MI NE - PMAC	2/2/2009	282.6	<LLD	2.02E-02
201 0.5 MI NE - PMAC	2/9/2009	276.4	<LLD	1.56E-02
201 0.5 MI NE - PMAC	2/16/2009	289.4	<LLD	2.08E-02
201 0.5 MI NE - PMAC	2/23/2009	269.2	<LLD	1.89E-02
201 0.5 MI NE - PMAC	3/2/2009	277.8	<LLD	2.10E-02
201 0.5 MI NE - PMAC	3/9/2009	278.2	<LLD	1.94E-02
201 0.5 MI NE - PMAC	3/16/2009	278.3	<LLD	2.37E-02
201 0.5 MI NE - PMAC	3/23/2009	286.0	<LLD	2.07E-02
201 0.5 MI NE - PMAC	3/30/2009	283.3	<LLD	1.87E-02
201 0.5 MI NE - PMAC	4/6/2009	285.9	<LLD	2.11E-02

# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Iodine

Sample Point		Sample Date	Quantity	Activity	LLD
201	0.5 MI NE - PMAC	4/13/2009	282.7	<LLD	1.76E-02
201	0.5 MI NE - PMAC	4/20/2009	283.6	<LLD	1.49E-02
201	0.5 MI NE - PMAC	4/27/2009	285.4	<LLD	1.85E-02
201	0.5 MI NE - PMAC	5/4/2009	287.0	<LLD	1.92E-02
201	0.5 MI NE - PMAC	5/11/2009	287.3	<LLD	1.88E-02
201	0.5 MI NE - PMAC	5/18/2009	289.0	<LLD	1.93E-02
201	0.5 MI NE - PMAC	5/25/2009	294.0	<LLD	2.57E-02
201	0.5 MI NE - PMAC	6/1/2009	281.8	<LLD	2.34E-02
201	0.5 MI NE - PMAC	6/8/2009	289.4	<LLD	1.72E-02
201	0.5 MI NE - PMAC	6/15/2009	288.3	<LLD	2.25E-02
201	0.5 MI NE - PMAC	6/22/2009	290.8	<LLD	1.90E-02
201	0.5 MI NE - PMAC	6/29/2009	288.5	<LLD	1.65E-02
201	0.5 MI NE - PMAC	7/6/2009	292.6	<LLD	1.78E-02
201	0.5 MI NE - PMAC	7/13/2009	286.0	<LLD	2.16E-02
201	0.5 MI NE - PMAC	7/20/2009	291.2	<LLD	1.38E-02
201	0.5 MI NE - PMAC	7/27/2009	285.5	<LLD	1.61E-02
201	0.5 MI NE - PMAC	8/3/2009	291.5	<LLD	2.05E-02
201	0.5 MI NE - PMAC	8/10/2009	284.2	<LLD	2.16E-02
201	0.5 MI NE - PMAC	8/17/2009	255.8	<LLD	2.15E-02
201	0.5 MI NE - PMAC	8/24/2009	284.6	<LLD	1.82E-02
201	0.5 MI NE - PMAC	8/31/2009	284.4	<LLD	1.66E-02
201	0.5 MI NE - PMAC	9/7/2009	283.5	<LLD	1.99E-02



# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Iodine

Sample Point	Sample Date	Quantity	Activity	LLD
201 0.5 MI NE - PMAC	9/14/2009	284.6	<LLD	1.78E-02
201 0.5 MI NE - PMAC	9/21/2009	282.6	<LLD	2.24E-02
201 0.5 MI NE - PMAC	9/28/2009	285.9	<LLD	1.85E-02
201 0.5 MI NE - PMAC	10/5/2009	276.5	<LLD	2.31E-02
201 0.5 MI NE - PMAC	10/12/2009	274.0	<LLD	2.12E-02
201 0.5 MI NE - PMAC	10/19/2009	275.9	<LLD	1.83E-02
201 0.5 MI NE - PMAC	10/26/2009	276.3	<LLD	1.87E-02
201 0.5 MI NE - PMAC	11/2/2009	280.3	<LLD	1.77E-02
201 0.5 MI NE - PMAC	11/9/2009	275.6	<LLD	1.90E-02
201 0.5 MI NE - PMAC	11/16/2009	276.5	<LLD	1.85E-02
201 0.5 MI NE - PMAC	11/23/2009	277.4	<LLD	2.80E-02
201 0.5 MI NE - PMAC	11/30/2009	273.0	<LLD	1.90E-02
201 0.5 MI NE - PMAC	12/7/2009	274.2	<LLD	2.02E-02
201 0.5 MI NE - PMAC	12/14/2009	272.3	<LLD	1.63E-02
201 0.5 MI NE - PMAC	12/21/2009	271.4	<LLD	2.41E-02
201 0.5 MI NE - PMAC	12/28/2009	272.4	<LLD	1.84E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	1/5/2009	274.1	<LLD	3.84E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	1/12/2009	270.8	<LLD	2.29E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	1/19/2009	269.9	<LLD	1.89E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	1/26/2009	268.1	<LLD	2.20E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	2/2/2009	272.1	<LLD	2.14E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	2/9/2009	267.2	<LLD	2.12E-02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Cartridge

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Iodine

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Activity</i></b>	<b><i>LLD</i></b>
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	2/16/2009	271.7	<LLD	2.15E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	2/23/2009	269.5	<LLD	1.72E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	3/2/2009	271.0	<LLD	2.38E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	3/9/2009	266.2	<LLD	1.81E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	3/16/2009	273.7	<LLD	2.45E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	3/23/2009	271.3	<LLD	2.15E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	3/30/2009	272.6	<LLD	1.70E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	4/6/2009	275.2	<LLD	1.62E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	4/13/2009	269.8	<LLD	1.22E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	4/20/2009	271.4	<LLD	2.53E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	4/27/2009	274.5	<LLD	1.54E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	5/4/2009	277.2	<LLD	2.55E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	5/11/2009	277.4	<LLD	2.48E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	5/18/2009	277.4	<LLD	2.11E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	5/25/2009	282.3	<LLD	2.15E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	6/1/2009	277.3	<LLD	1.89E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	6/8/2009	286.1	<LLD	1.99E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	6/15/2009	284.4	<LLD	2.01E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	6/22/2009	286.2	<LLD	2.75E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	6/29/2009	283.8	<LLD	2.27E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	7/6/2009	287.5	<LLD	2.10E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	7/13/2009	280.7	<LLD	2.17E-02

# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Iodine

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>LLD</i>
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	7/20/2009	284.4	<LLD	1.66E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	7/27/2009	278.1	<LLD	2.05E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	8/3/2009	280.3	<LLD	1.87E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	8/10/2009	271.5	<LLD	2.11E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	8/17/2009	274.9	<LLD	1.75E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	8/24/2009	275.4	<LLD	2.32E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	8/31/2009	275.2	<LLD	1.54E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	9/7/2009	273.5	<LLD	2.40E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	9/14/2009	274.6	<LLD	1.88E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	9/21/2009	273.8	<LLD	1.31E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	9/28/2009	277.3	<LLD	1.99E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	10/5/2009	266.3	<LLD	2.59E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	10/12/2009	267.7	<LLD	1.90E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	10/19/2009	266.7	<LLD	1.74E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	10/26/2009	266.0	<LLD	2.07E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	11/2/2009	270.2	<LLD	1.78E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	11/9/2009	263.9	<LLD	1.77E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	11/16/2009	264.5	<LLD	1.69E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	11/23/2009	261.7	<LLD	1.98E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	11/30/2009	257.3	<LLD	1.56E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	12/7/2009	250.8	<LLD	2.13E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	12/14/2009	247.5	<LLD	2.53E-02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Cartridge

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Iodine

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Activity</i></b>	<b><i>LLD</i></b>
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	12/21/2009	297.0	<LLD	1.49E-02
202 1.0 MI S - SUBSTATION ON CONSTRUCTION RD	12/28/2009	296.0	<LLD	1.52E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	1/5/2009	285.9	<LLD	2.57E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	1/12/2009	282.1	<LLD	1.93E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	1/19/2009	277.5	<LLD	2.29E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	1/26/2009	277.1	<LLD	1.74E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	2/2/2009	283.5	<LLD	2.13E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	2/9/2009	274.2	<LLD	2.23E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	2/16/2009	283.1	<LLD	2.24E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	2/23/2009	278.5	<LLD	2.21E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	3/2/2009	280.5	<LLD	2.03E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	3/9/2009	275.7	<LLD	1.93E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	3/16/2009	285.9	<LLD	1.83E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	3/23/2009	284.4	<LLD	2.31E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	3/30/2009	283.9	<LLD	2.00E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	4/6/2009	287.9	<LLD	1.90E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	4/13/2009	282.0	<LLD	1.89E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	4/20/2009	284.6	<LLD	2.35E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	4/27/2009	288.3	<LLD	1.89E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	5/4/2009	289.4	<LLD	1.63E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	5/11/2009	288.9	<LLD	1.88E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	5/18/2009	288.3	<LLD	2.25E-02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Cartridge

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Iodine

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Activity</i></b>	<b><i>LLD</i></b>
203 2.0 MI SSW - SOUTHPORT SUBSTATION	5/25/2009	293.8	<LLD	2.41E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	6/1/2009	281.3	<LLD	2.94E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	6/8/2009	261.8	<LLD	2.18E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	6/15/2009	276.9	<LLD	2.02E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	6/22/2009	282.1	<LLD	1.34E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	6/29/2009	281.6	<LLD	1.92E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	7/6/2009	288.0	<LLD	1.81E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	7/13/2009	283.7	<LLD	2.26E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	7/20/2009	290.2	<LLD	2.23E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	7/27/2009	285.8	<LLD	1.82E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	8/3/2009	293.8	<LLD	2.12E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	8/10/2009	287.5	<LLD	1.68E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	8/17/2009	294.0	<LLD	1.89E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	8/24/2009	295.3	<LLD	2.01E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	8/31/2009	296.1	<LLD	2.22E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	9/7/2009	294.9	<LLD	1.83E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	9/14/2009	297.0	<LLD	2.06E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	9/21/2009	296.3	<LLD	1.99E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	9/28/2009	301.2	<LLD	2.34E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	10/5/2009	287.7	<LLD	1.72E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	10/12/2009	298.3	<LLD	2.17E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	10/19/2009	290.0	<LLD	2.08E-02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Cartridge

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Iodine

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Activity</b></i>	<i><b>LLD</b></i>	
203	2.0 MI SSW - SOUTHPORT SUBSTATION	10/26/2009	291.0	<LLD	1.59E-02
203	2.0 MI SSW - SOUTHPORT SUBSTATION	11/2/2009	295.8	<LLD	2.15E-02
203	2.0 MI SSW - SOUTHPORT SUBSTATION	11/9/2009	291.2	<LLD	1.89E-02
203	2.0 MI SSW - SOUTHPORT SUBSTATION	11/16/2009	293.0	<LLD	2.00E-02
203	2.0 MI SSW - SOUTHPORT SUBSTATION	11/23/2009	291.3	<LLD	2.03E-02
203	2.0 MI SSW - SOUTHPORT SUBSTATION	11/30/2009	288.1	<LLD	1.93E-02
203	2.0 MI SSW - SOUTHPORT SUBSTATION	12/7/2009	288.5	<LLD	2.14E-02
203	2.0 MI SSW - SOUTHPORT SUBSTATION	12/14/2009	286.8	<LLD	1.40E-02
203	2.0 MI SSW - SOUTHPORT SUBSTATION	12/21/2009	286.7	<LLD	2.18E-02
203	2.0 MI SSW - SOUTHPORT SUBSTATION	12/28/2009	286.4	<LLD	1.90E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	1/5/2009	296.7	<LLD	2.49E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	1/12/2009	296.9	<LLD	2.06E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	1/19/2009	290.3	<LLD	1.79E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	1/26/2009	287.0	<LLD	2.25E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	2/2/2009	288.6	<LLD	2.38E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	2/9/2009	281.0	<LLD	2.06E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	2/16/2009	284.7	<LLD	1.96E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	2/23/2009	280.3	<LLD	2.20E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	3/2/2009	282.2	<LLD	1.90E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	3/9/2009	279.0	<LLD	2.04E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	3/16/2009	285.1	<LLD	1.42E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	3/23/2009	283.0	<LLD	2.29E-02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Cartridge

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Iodine

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>LLD</i>
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	3/30/2009	283.4	<LLD	2.32E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	4/6/2009	284.6	<LLD	1.95E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	4/13/2009	281.0	<LLD	1.99E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	4/20/2009	280.1	<LLD	2.16E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	4/27/2009	280.9	<LLD	2.36E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	5/4/2009	279.9	<LLD	1.73E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	5/11/2009	281.8	<LLD	1.80E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	5/18/2009	278.7	<LLD	2.07E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	5/25/2009	276.9	<LLD	1.93E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	6/1/2009	287.0	<LLD	1.95E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	6/8/2009	284.6	<LLD	1.96E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	6/15/2009	287.4	<LLD	2.21E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	6/22/2009	287.4	<LLD	1.93E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	6/29/2009	287.5	<LLD	1.55E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	7/6/2009	291.2	<LLD	1.70E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	7/13/2009	283.8	<LLD	2.11E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	7/20/2009	286.7	<LLD	2.23E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	7/27/2009	288.2	<LLD	2.61E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	8/3/2009	286.8	<LLD	1.84E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	8/10/2009	288.0	<LLD	2.49E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	8/17/2009	286.5	<LLD	2.53E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	8/24/2009	287.8	<LLD	2.07E-02



# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Iodine

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>LLD</i>
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	8/31/2009	287.8	<LLD	2.10E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	9/7/2009	283.9	<LLD	1.93E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	9/14/2009	283.1	<LLD	2.28E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	9/21/2009	286.1	<LLD	1.76E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	9/28/2009	285.5	<LLD	2.26E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	10/5/2009	284.1	<LLD	2.18E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	10/12/2009	284.0	<LLD	2.05E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	10/19/2009	281.6	<LLD	2.44E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	10/26/2009	278.2	<LLD	2.40E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	11/2/2009	283.9	<LLD	2.31E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	11/9/2009	278.9	<LLD	2.34E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	11/16/2009	279.1	<LLD	2.52E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	11/23/2009	283.1	<LLD	2.14E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	11/30/2009	274.2	<LLD	2.76E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	12/7/2009	276.8	<LLD	1.94E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	12/14/2009	275.9	<LLD	1.93E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	12/21/2009	276.2	<LLD	1.73E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	12/28/2009	275.2	<LLD	1.99E-02
205 0.6 MI SSE - SPOIL POND	1/5/2009	294.0	<LLD	2.65E-02
205 0.6 MI SSE - SPOIL POND	1/12/2009	291.7	<LLD	1.87E-02
205 0.6 MI SSE - SPOIL POND	1/19/2009	283.9	<LLD	1.72E-02
205 0.6 MI SSE - SPOIL POND	1/26/2009	282.0	<LLD	1.80E-02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Cartridge

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Iodine

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>LLD</i>
205 0.6 MI SSE - SPOIL POND	2/2/2009	288.0	<LLD	1.96E-02
205 0.6 MI SSE - SPOIL POND	2/9/2009	282.9	<LLD	1.95E-02
205 0.6 MI SSE - SPOIL POND	2/16/2009	290.0	<LLD	2.01E-02
205 0.6 MI SSE - SPOIL POND	2/23/2009	278.4	<LLD	2.35E-02
205 0.6 MI SSE - SPOIL POND	3/2/2009	286.3	<LLD	2.23E-02
205 0.6 MI SSE - SPOIL POND	3/9/2009	276.8	<LLD	1.84E-02
205 0.6 MI SSE - SPOIL POND	3/16/2009	300.6	<LLD	2.02E-02
205 0.6 MI SSE - SPOIL POND	3/23/2009	289.7	<LLD	1.67E-02
205 0.6 MI SSE - SPOIL POND	3/30/2009	293.8	<LLD	1.84E-02
205 0.6 MI SSE - SPOIL POND	4/6/2009	304.2	<LLD	1.99E-02
205 0.6 MI SSE - SPOIL POND	4/13/2009	292.2	<LLD	1.63E-02
205 0.6 MI SSE - SPOIL POND	4/20/2009	293.9	<LLD	1.44E-02
205 0.6 MI SSE - SPOIL POND	4/27/2009	306.3	<LLD	1.89E-02
205 0.6 MI SSE - SPOIL POND	5/4/2009	307.7	<LLD	1.73E-02
205 0.6 MI SSE - SPOIL POND	5/11/2009	308.7	<LLD	1.51E-02
205 0.6 MI SSE - SPOIL POND	5/18/2009	306.0	<LLD	2.49E-02
205 0.6 MI SSE - SPOIL POND	5/25/2009	311.8	<LLD	2.17E-02
205 0.6 MI SSE - SPOIL POND	6/1/2009	278.0	<LLD	1.89E-02
205 0.6 MI SSE - SPOIL POND	6/8/2009	285.4	<LLD	1.91E-02
205 0.6 MI SSE - SPOIL POND	6/15/2009	283.6	<LLD	1.77E-02
205 0.6 MI SSE - SPOIL POND	6/22/2009	282.7	<LLD	2.18E-02
205 0.6 MI SSE - SPOIL POND	6/29/2009	281.1	<LLD	2.45E-02

# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Air Cartridge

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Iodine

Sample Point		Sample Date	Quantity	Activity	LLD
205	0.6 MI SSE - SPOIL POND	7/6/2009	284.8	<LLD	1.64E-02
205	0.6 MI SSE - SPOIL POND	7/13/2009	276.3	<LLD	2.06E-02
205	0.6 MI SSE - SPOIL POND	7/20/2009	283.0	<LLD	2.10E-02
205	0.6 MI SSE - SPOIL POND	7/27/2009	279.7	<LLD	1.98E-02
205	0.6 MI SSE - SPOIL POND	8/3/2009	286.7	<LLD	1.71E-02
205	0.6 MI SSE - SPOIL POND	8/10/2009	278.3	<LLD	1.83E-02
205	0.6 MI SSE - SPOIL POND	8/17/2009	281.6	<LLD	2.11E-02
205	0.6 MI SSE - SPOIL POND	8/24/2009	282.6	<LLD	1.77E-02
205	0.6 MI SSE - SPOIL POND	8/31/2009	282.6	<LLD	2.14E-02
205	0.6 MI SSE - SPOIL POND	9/7/2009	279.0	<LLD	2.36E-02
205	0.6 MI SSE - SPOIL POND	9/14/2009	281.7	<LLD	1.68E-02
205	0.6 MI SSE - SPOIL POND	9/21/2009	281.0	<LLD	2.22E-02
205	0.6 MI SSE - SPOIL POND	9/28/2009	286.5	<LLD	2.07E-02
205	0.6 MI SSE - SPOIL POND	10/5/2009	275.1	<LLD	1.95E-02
205	0.6 MI SSE - SPOIL POND	10/12/2009	282.7	<LLD	1.90E-02
205	0.6 MI SSE - SPOIL POND	10/19/2009	274.6	<LLD	2.09E-02
205	0.6 MI SSE - SPOIL POND	10/26/2009	277.0	<LLD	2.03E-02
205	0.6 MI SSE - SPOIL POND	11/2/2009	283.4	<LLD	1.87E-02
205	0.6 MI SSE - SPOIL POND	11/9/2009	275.4	<LLD	1.86E-02
205	0.6 MI SSE - SPOIL POND	11/16/2009	278.4	<LLD	2.08E-02
205	0.6 MI SSE - SPOIL POND	11/23/2009	275.4	<LLD	1.95E-02
205	0.6 MI SSE - SPOIL POND	11/30/2009	273.5	<LLD	2.07E-02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Air Cartridge

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Iodine

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Activity</b></i>	<i><b>LLD</b></i>
205 0.6 MI SSE - SPOIL POND	12/7/2009	274.6	<LLD	1.81E-02
205 0.6 MI SSE - SPOIL POND	12/14/2009	272.8	<LLD	2.34E-02
205 0.6 MI SSE - SPOIL POND	12/21/2009	272.8	<LLD	1.55E-02
205 0.6 MI SSE - SPOIL POND	12/28/2009	273.3	<LLD	1.48E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	4/13/2009	283.7	<LLD	1.84E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	4/20/2009	285.4	<LLD	2.00E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	4/27/2009	286.2	<LLD	1.95E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	5/4/2009	285.5	<LLD	2.73E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	5/11/2009	288.1	<LLD	2.14E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	5/18/2009	284.8	<LLD	2.45E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	5/25/2009	284.9	<LLD	1.94E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	6/1/2009	284.8	<LLD	2.37E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	6/8/2009	283.3	<LLD	1.65E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	6/15/2009	285.2	<LLD	1.65E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	6/22/2009	285.1	<LLD	2.01E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	6/29/2009	285.7	<LLD	2.07E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	7/6/2009	288.2	<LLD	2.46E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	7/13/2009	281.4	<LLD	2.15E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	7/20/2009	284.4	<LLD	1.34E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	7/27/2009	285.1	<LLD	1.73E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	8/3/2009	283.8	<LLD	2.08E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	8/10/2009	282.7	<LLD	2.33E-02

# *BSEP Radiological Environmental Monitoring Analysis Report*

Media Type: Air Cartridge

Quantity: cubic meters

Activity: pCi/cubic meter

Analysis: Iodine

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Activity</i>	<i>LLD</i>
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	8/17/2009	280.8	<LLD	2.14E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	8/24/2009	281.7	<LLD	2.24E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	8/31/2009	280.8	<LLD	1.66E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	9/7/2009	278.4	<LLD	2.48E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	9/14/2009	279.9	<LLD	1.86E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	9/21/2009	279.0	<LLD	1.96E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	9/28/2009	279.5	<LLD	1.86E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	10/5/2009	278.7	<LLD	2.42E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	10/12/2009	278.6	<LLD	2.01E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	10/19/2009	277.3	<LLD	1.61E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	10/26/2009	271.6	<LLD	1.56E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	11/2/2009	278.3	<LLD	1.93E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	11/9/2009	272.6	<LLD	2.11E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	11/16/2009	273.7	<LLD	1.21E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	11/23/2009	277.4	<LLD	2.55E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	11/30/2009	269.2	<LLD	2.35E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	12/7/2009	272.2	<LLD	1.92E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	12/14/2009	271.9	<LLD	1.86E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	12/21/2009	272.9	<LLD	2.13E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOVERN.	12/28/2009	270.8	<LLD	2.11E-02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

*Media Type: Fish and Invertebrate*

*Quantity: Grams*

*Concentration (Activity): pCi/Gram*

*Analysis: Tritium*

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Efficiency</i></b>	<b><i>Activity</i></b>	<b><i>LLD</i></b>
706 NANCY'S CREEK - FREE SWIMMERS	9/30/2009	1455		<LLD	8.72E+00
707 NANCY'S CREEK - BOTTOM FEEDERS	9/30/2009	1699		<LLD	8.14E+00
708 NANCY'S CREEK - SH/BO*	9/30/2009	2150		<LLD	8.37E+00

# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Ground Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Efficiency</i>	<i>Activity</i>	<i>LLD</i>
402	WELL ESS-2C, 0.17 MILES W	1/16/2009	1	1.04E+06	
402	WELL ESS-2C, 0.17 MILES W	2/20/2009	1	6.75E+05	
402	WELL ESS-2C, 0.17 MILES W	3/19/2009	1	6.76E+05	
402	WELL ESS-2C, 0.17 MILES W	4/17/2009	1	6.22E+05	
402	WELL ESS-2C, 0.17 MILES W	5/15/2009	1	5.23E+05	
402	WELL ESS-2C, 0.17 MILES W	6/18/2009	1	5.64E+05	
402	WELL ESS-2C, 0.17 MILES W	7/6/2009	1	6.37E+05	
402	WELL ESS-2C, 0.17 MILES W	8/10/2009	1	4.79E+05	
402	WELL ESS-2C, 0.17 MILES W	9/7/2009	1	4.34E+05	
402	WELL ESS-2C, 0.17 MILES W	10/13/2009	1	3.26E+05	
402	WELL ESS-2C, 0.17 MILES W	11/9/2009	1	2.42E+05	
402	WELL ESS-2C, 0.17 MILES W	12/8/2009	1	2.58E+05	
403	WELL ESS-16, 0.16 MILES W	1/16/2009	1	5.28E+03	
403	WELL ESS-16, 0.16 MILES W	2/20/2009	1	5.94E+03	
403	WELL ESS-16, 0.16 MILES W	3/19/2009	1	5.76E+03	
403	WELL ESS-16, 0.16 MILES W	4/17/2009	1	1.21E+04	
403	WELL ESS-16, 0.16 MILES W	5/15/2009	1	8.24E+03	
403	WELL ESS-16, 0.16 MILES W	6/18/2009	1	8.56E+03	
403	WELL ESS-16, 0.16 MILES W	7/6/2009	1	6.08E+03	
403	WELL ESS-16, 0.16 MILES W	8/10/2009	1	2.53E+03	
403	WELL ESS-16, 0.16 MILES W	9/7/2009	1	3.20E+03	
403	WELL ESS-16, 0.16 MILES W	10/13/2009	1	4.21E+03	
403	WELL ESS-16, 0.16 MILES W	11/8/2009	1	2.92E+03	
403	WELL ESS-16, 0.16 MILES W	11/9/2009	1	3.05E+03	

# *BSEP Radiological Environmental Monitoring Analysis Report*

Media Type: Ground Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Efficiency</i>	<i>Activity</i>	<i>LLD</i>
403	WELL ESS-16, 0.16 MILES W	12/8/2009	1	2.92E+03	
404	WELL ESS-1B, 0.16 MILES SW	1/22/2009	1	<LLD	2.42E+02
404	WELL ESS-1B, 0.16 MILES SW	2/19/2009	1	<LLD	2.34E+02
404	WELL ESS-1B, 0.16 MILES SW	3/17/2009	1	<LLD	2.40E+02
404	WELL ESS-1B, 0.16 MILES SW	4/20/2009	1	<LLD	2.36E+02
404	WELL ESS-1B, 0.16 MILES SW	5/18/2009	1	<LLD	2.41E+02
404	WELL ESS-1B, 0.16 MILES SW	6/16/2009	1	<LLD	2.37E+02
404	WELL ESS-1B, 0.16 MILES SW	7/8/2009	1	<LLD	2.40E+02
404	WELL ESS-1B, 0.16 MILES SW	8/4/2009	1	<LLD	2.39E+02
404	WELL ESS-1B, 0.16 MILES SW	11/2/2009	1	<LLD	2.30E+02
405	WELL ESS-2B, 0.17 MILES W	1/22/2009	1	<LLD	2.44E+02
405	WELL ESS-2B, 0.17 MILES W	2/23/2009	1	<LLD	2.36E+02
405	WELL ESS-2B, 0.17 MILES W	3/19/2009	1	<LLD	2.40E+02
405	WELL ESS-2B, 0.17 MILES W	4/27/2009	1	<LLD	2.36E+02
405	WELL ESS-2B, 0.17 MILES W	5/15/2009	1	<LLD	2.40E+02
405	WELL ESS-2B, 0.17 MILES W	6/24/2009	1	<LLD	2.38E+02
405	WELL ESS-2B, 0.17 MILES W	7/6/2009	1	<LLD	2.35E+02
405	WELL ESS-2B, 0.17 MILES W	8/10/2009	1	<LLD	2.36E+02
405	WELL ESS-2B, 0.17 MILES W	11/4/2009	1	<LLD	2.42E+02
406	WELL ESS-3B, 0.08 MILES N	1/20/2009	1	<LLD	2.38E+02
406	WELL ESS-3B, 0.08 MILES N	2/18/2009	1	<LLD	2.41E+02
406	WELL ESS-3B, 0.08 MILES N	3/13/2009	1	<LLD	2.34E+02
406	WELL ESS-3B, 0.08 MILES N	4/16/2009	1	<LLD	2.39E+02
406	WELL ESS-3B, 0.08 MILES N	5/6/2009	1	<LLD	2.49E+02



# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Ground Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>LLD</b></i>
406 WELL ESS-3B, 0.08 MILES N	6/16/2009	1		<LLD	2.36E+02
406 WELL ESS-3B, 0.08 MILES N	7/8/2009	1		<LLD	2.40E+02
406 WELL ESS-3B, 0.08 MILES N	8/5/2009	1		<LLD	2.39E+02
406 WELL ESS-3B, 0.08 MILES N	9/29/2009	1		<LLD	2.40E+02
406 WELL ESS-3B, 0.08 MILES N	10/8/2009	1		2.84E+02	
406 WELL ESS-3B, 0.08 MILES N	11/2/2009	1		3.14E+02	
406 WELL ESS-3B, 0.08 MILES N	12/2/2009	1		2.83E+02	
407 WELL ESS-13B, 0.06 MILES ENE	1/23/2009	1		<LLD	2.43E+02
407 WELL ESS-13B, 0.06 MILES ENE	2/19/2009	1		2.99E+02	
407 WELL ESS-13B, 0.06 MILES ENE	3/16/2009	1		<LLD	2.47E+02
407 WELL ESS-13B, 0.06 MILES ENE	4/16/2009	1		<LLD	2.39E+02
407 WELL ESS-13B, 0.06 MILES ENE	5/15/2009	1		<LLD	2.42E+02
407 WELL ESS-13B, 0.06 MILES ENE	6/16/2009	1		<LLD	2.35E+02
407 WELL ESS-13B, 0.06 MILES ENE	7/8/2009	1		<LLD	2.39E+02
407 WELL ESS-13B, 0.06 MILES ENE	8/11/2009	1		<LLD	2.40E+02
407 WELL ESS-13B, 0.06 MILES ENE	11/4/2009	1		<LLD	2.45E+02
408 WELL ESS-13C, 0.06 MILES ENE	1/23/2009	1		<LLD	2.47E+02
408 WELL ESS-13C, 0.06 MILES ENE	2/19/2009	1		<LLD	2.35E+02
408 WELL ESS-13C, 0.06 MILES ENE	3/16/2009	1		<LLD	2.44E+02
408 WELL ESS-13C, 0.06 MILES ENE	4/16/2009	1		<LLD	2.36E+02
408 WELL ESS-13C, 0.06 MILES ENE	5/15/2009	1		<LLD	2.39E+02
408 WELL ESS-13C, 0.06 MILES ENE	6/16/2009	1		<LLD	2.34E+02
408 WELL ESS-13C, 0.06 MILES ENE	7/8/2009	1		2.39E+02	
408 WELL ESS-13C, 0.06 MILES ENE	8/11/2009	1		<LLD	2.40E+02

# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Ground Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

Sample Point	Sample Date	Quantity	Efficiency	Activity	LLD
408	WELL ESS-13C, 0.06 MILES ENE	9/3/2009	1	<LLD	2.39E+02
408	WELL ESS-13C, 0.06 MILES ENE	10/8/2009	1	<LLD	2.43E+02
408	WELL ESS-13C, 0.06 MILES ENE	11/4/2009	1	<LLD	2.54E+02
408	WELL ESS-13C, 0.06 MILES ENE	12/2/2009	1	<LLD	2.46E+02
409	WELL ESS-17A, 0.65 MILES NE	1/15/2009	1	<LLD	2.46E+02
409	WELL ESS-17A, 0.65 MILES NE	2/10/2009	1	<LLD	2.41E+02
409	WELL ESS-17A, 0.65 MILES NE	3/11/2009	1	<LLD	2.37E+02
409	WELL ESS-17A, 0.65 MILES NE	4/14/2009	1	<LLD	2.37E+02
409	WELL ESS-17A, 0.65 MILES NE	5/11/2009	1	<LLD	2.42E+02
409	WELL ESS-17A, 0.65 MILES NE	6/9/2009	1	<LLD	2.41E+02
409	WELL ESS-17A, 0.65 MILES NE	7/15/2009	1	<LLD	2.37E+02
409	WELL ESS-17A, 0.65 MILES NE	8/5/2009	1	<LLD	2.39E+02
409	WELL ESS-17A, 0.65 MILES NE	9/1/2009	1	<LLD	2.33E+02
409	WELL ESS-17A, 0.65 MILES NE	12/1/2009	1	<LLD	2.36E+02
410	WELL ESS-17B, 0.65 MILES NE	1/15/2009	1	<LLD	2.48E+02
410	WELL ESS-17B, 0.65 MILES NE	2/10/2009	1	<LLD	2.41E+02
410	WELL ESS-17B, 0.65 MILES NE	3/11/2009	1	<LLD	2.37E+02
410	WELL ESS-17B, 0.65 MILES NE	4/14/2009	1	<LLD	2.38E+02
410	WELL ESS-17B, 0.65 MILES NE	5/11/2009	1	<LLD	2.42E+02
410	WELL ESS-17B, 0.65 MILES NE	6/9/2009	1	<LLD	2.38E+02
410	WELL ESS-17B, 0.65 MILES NE	7/15/2009	1	<LLD	2.34E+02
410	WELL ESS-17B, 0.65 MILES NE	8/5/2009	1	<LLD	2.39E+02
410	WELL ESS-17B, 0.65 MILES NE	9/1/2009	1	<LLD	2.30E+02
410	WELL ESS-17B, 0.65 MILES NE	12/1/2009	1	<LLD	2.32E+02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Ground Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>LLD</b></i>
411 WELL ESS-17C, 0.65 MILES NE	1/15/2009	1		4.24E+03	
411 WELL ESS-17C, 0.65 MILES NE	2/10/2009	1		4.08E+03	
411 WELL ESS-17C, 0.65 MILES NE	3/11/2009	1		4.01E+03	
411 WELL ESS-17C, 0.65 MILES NE	4/14/2009	1		3.82E+03	
411 WELL ESS-17C, 0.65 MILES NE	5/11/2009	1		4.23E+03	
411 WELL ESS-17C, 0.65 MILES NE	6/9/2009	1		4.27E+03	
411 WELL ESS-17C, 0.65 MILES NE	7/15/2009	1		4.11E+03	
411 WELL ESS-17C, 0.65 MILES NE	8/5/2009	1		4.16E+03	
411 WELL ESS-17C, 0.65 MILES NE	9/1/2009	1		3.73E+03	
411 WELL ESS-17C, 0.65 MILES NE	12/1/2009	1		5.49E+03	
412 WELL ESS-18B, NEAR (SDSP) STORM DRAIN STABILIZAT	1/19/2009	1		<LLD	2.46E+02
412 WELL ESS-18B, NEAR (SDSP) STORM DRAIN STABILIZAT	2/13/2009	1		<LLD	2.35E+02
412 WELL ESS-18B, NEAR (SDSP) STORM DRAIN STABILIZAT	3/11/2009	1		<LLD	2.37E+02
412 WELL ESS-18B, NEAR (SDSP) STORM DRAIN STABILIZAT	4/15/2009	1		<LLD	2.50E+02
412 WELL ESS-18B, NEAR (SDSP) STORM DRAIN STABILIZAT	5/18/2009	1		<LLD	2.39E+02
412 WELL ESS-18B, NEAR (SDSP) STORM DRAIN STABILIZAT	6/11/2009	1		<LLD	2.35E+02
412 WELL ESS-18B, NEAR (SDSP) STORM DRAIN STABILIZAT	7/13/2009	1		<LLD	2.43E+02
412 WELL ESS-18B, NEAR (SDSP) STORM DRAIN STABILIZAT	8/11/2009	1		<LLD	2.36E+02
412 WELL ESS-18B, NEAR (SDSP) STORM DRAIN STABILIZAT	9/15/2009	1		<LLD	2.36E+02
412 WELL ESS-18B, NEAR (SDSP) STORM DRAIN STABILIZAT	12/16/2009	1		<LLD	2.57E+02
413 WELL ESS-18C, NEAR SDSP	1/19/2009	1		5.46E+05	
413 WELL ESS-18C, NEAR SDSP	2/12/2009	1		5.36E+05	
413 WELL ESS-18C, NEAR SDSP	3/11/2009	1		5.38E+05	
413 WELL ESS-18C, NEAR SDSP	4/15/2009	1		5.18E+05	

# ***BSEP Radiological Environmental Monitoring Analysis Report***

*Media Type: Ground Water*

*Quantity: Liters*

*Concentration (Activity): pCi/Liter*

*Analysis: Tritium*

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Efficiency</i></b>	<b><i>Activity</i></b>	<b><i>LLD</i></b>
413	WELL ESS-18C, NEAR SDSP	5/18/2009	1	2.83E+05	
413	WELL ESS-18C, NEAR SDSP	6/11/2009	1	4.90E+05	
413	WELL ESS-18C, NEAR SDSP	7/13/2009	1	4.72E+05	
413	WELL ESS-18C, NEAR SDSP	8/11/2009	1	4.60E+05	
413	WELL ESS-18C, NEAR SDSP	9/15/2009	1	4.51E+05	
413	WELL ESS-18C, NEAR SDSP	12/16/2009	1	3.69E+05	
414	WELL ESS-19B, NEAR SDSP	1/19/2009	1	4.42E+04	
414	WELL ESS-19B, NEAR SDSP	2/13/2009	1	7.12E+04	
414	WELL ESS-19B, NEAR SDSP	2/19/2009	1	3.78E+04	
414	WELL ESS-19B, NEAR SDSP	3/10/2009	1	5.82E+04	
414	WELL ESS-19B, NEAR SDSP	4/21/2009	1	5.13E+04	
414	WELL ESS-19B, NEAR SDSP	5/19/2009	1	6.85E+04	
414	WELL ESS-19B, NEAR SDSP	6/17/2009	1	4.97E+04	
414	WELL ESS-19B, NEAR SDSP	7/7/2009	1	5.23E+04	
414	WELL ESS-19B, NEAR SDSP	8/10/2009	1	7.53E+04	
414	WELL ESS-19B, NEAR SDSP	9/3/2009	1	7.40E+04	
414	WELL ESS-19B, NEAR SDSP	10/12/2009	1	4.31E+04	
414	WELL ESS-19B, NEAR SDSP	11/3/2009	1	7.65E+04	
414	WELL ESS-19B, NEAR SDSP	12/2/2009	1	3.68E+04	
414	WELL ESS-19B, NEAR SDSP	12/16/2009	1	2.72E+04	
415	WELL ESS-19C, NEAR SDSP	1/19/2009	1	5.26E+05	
415	WELL ESS-19C, NEAR SDSP	2/13/2009	1	5.32E+05	
415	WELL ESS-19C, NEAR SDSP	2/19/2009	1	5.36E+05	
415	WELL ESS-19C, NEAR SDSP	3/10/2009	1	5.52E+05	

# *BSEP Radiological Environmental Monitoring Analysis Report*

Media Type: Ground Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Efficiency</i>	<i>Activity</i>	<i>LLD</i>
415	WELL ESS-19C, NEAR SDSP	4/21/2009	1	4.50E+05	
415	WELL ESS-19C, NEAR SDSP	5/19/2009	1	5.36E+05	
415	WELL ESS-19C, NEAR SDSP	6/17/2009	1	5.33E+05	
415	WELL ESS-19C, NEAR SDSP	7/7/2009	1	6.54E+05	
415	WELL ESS-19C, NEAR SDSP	8/10/2009	1	5.61E+05	
415	WELL ESS-19C, NEAR SDSP	9/3/2009	1	5.04E+05	
415	WELL ESS-19C, NEAR SDSP	10/12/2009	1	5.73E+05	
415	WELL ESS-19C, NEAR SDSP	11/3/2009	1	5.44E+05	
415	WELL ESS-19C, NEAR SDSP	12/2/2009	1	4.65E+05	
416	WELL ESS-20B, NEAR SDSP	1/19/2009	1	<LLD	2.45E+02
416	WELL ESS-20B, NEAR SDSP	2/13/2009	1	<LLD	2.38E+02
416	WELL ESS-20B, NEAR SDSP	3/10/2009	1	<LLD	2.37E+02
416	WELL ESS-20B, NEAR SDSP	4/20/2009	1	<LLD	2.33E+02
416	WELL ESS-20B, NEAR SDSP	5/19/2009	1	<LLD	2.41E+02
416	WELL ESS-20B, NEAR SDSP	6/17/2009	1	<LLD	2.39E+02
416	WELL ESS-20B, NEAR SDSP	7/7/2009	1	<LLD	2.37E+02
416	WELL ESS-20B, NEAR SDSP	8/10/2009	1	<LLD	2.35E+02
416	WELL ESS-20B, NEAR SDSP	9/15/2009	1	<LLD	2.46E+02
416	WELL ESS-20B, NEAR SDSP	12/2/2009	1	<LLD	2.38E+02
417	WELL ESS-20C, NEAR SDSP	1/19/2009	1	1.90E+04	
417	WELL ESS-20C, NEAR SDSP	2/13/2009	1	1.78E+04	
417	WELL ESS-20C, NEAR SDSP	3/10/2009	1	1.83E+04	
417	WELL ESS-20C, NEAR SDSP	4/20/2009	1	1.89E+04	
417	WELL ESS-20C, NEAR SDSP	5/19/2009	1	1.97E+04	

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Ground Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>LLD</b></i>
417	WELL ESS-20C, NEAR SDSP	6/17/2009	1	1.93E+04	
417	WELL ESS-20C, NEAR SDSP	7/7/2009	1	1.91E+04	
417	WELL ESS-20C, NEAR SDSP	8/10/2009	1	1.86E+04	
417	WELL ESS-20C, NEAR SDSP	9/15/2009	1	1.85E+04	
417	WELL ESS-20C, NEAR SDSP	12/2/2009	1	2.12E+04	
418	WELL ESS-21B, NEAR SDSP	1/15/2009	1	<LLD	2.48E+02
418	WELL ESS-21B, NEAR SDSP	2/18/2009	1	<LLD	2.44E+02
418	WELL ESS-21B, NEAR SDSP	3/12/2009	1	<LLD	2.36E+02
418	WELL ESS-21B, NEAR SDSP	4/10/2009	1	<LLD	2.39E+02
418	WELL ESS-21B, NEAR SDSP	5/12/2009	1	<LLD	2.35E+02
418	WELL ESS-21B, NEAR SDSP	6/17/2009	1	<LLD	2.39E+02
418	WELL ESS-21B, NEAR SDSP	7/13/2009	1	<LLD	2.38E+02
418	WELL ESS-21B, NEAR SDSP	8/6/2009	1	<LLD	2.39E+02
418	WELL ESS-21B, NEAR SDSP	10/8/2009	1	<LLD	2.44E+02
419	WELL ESS-21C, NEAR SDSP	1/8/2009	1	4.74E+02	
419	WELL ESS-21C, NEAR SDSP	2/18/2009	1	3.70E+02	
419	WELL ESS-21C, NEAR SDSP	3/12/2009	1	3.95E+02	
419	WELL ESS-21C, NEAR SDSP	4/10/2009	1	3.35E+02	
419	WELL ESS-21C, NEAR SDSP	5/12/2009	1	4.35E+02	
419	WELL ESS-21C, NEAR SDSP	6/17/2009	1	3.13E+02	
419	WELL ESS-21C, NEAR SDSP	7/13/2009	1	3.85E+02	
419	WELL ESS-21C, NEAR SDSP	8/6/2009	1	3.03E+02	
419	WELL ESS-21C, NEAR SDSP	10/8/2009	1	5.52E+03	
419	WELL ESS-21C, NEAR SDSP	11/23/2009	1	5.36E+02	

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Ground Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>LLD</b></i>
420	WELL ESS-22B, NEAR SDSP	1		<LLD	2.44E+02
420	WELL ESS-22B, NEAR SDSP	1		<LLD	2.42E+02
420	WELL ESS-22B, NEAR SDSP	1		<LLD	2.34E+02
420	WELL ESS-22B, NEAR SDSP	1		<LLD	2.39E+02
420	WELL ESS-22B, NEAR SDSP	1		<LLD	2.38E+02
420	WELL ESS-22B, NEAR SDSP	1		<LLD	2.34E+02
420	WELL ESS-22B, NEAR SDSP	1		<LLD	2.37E+02
420	WELL ESS-22B, NEAR SDSP	1		<LLD	2.39E+02
420	WELL ESS-22B, NEAR SDSP	1		<LLD	2.43E+02
421	WELL ESS-22C, NEAR SDSP	1		4.98E+05	
421	WELL ESS-22C, NEAR SDSP	1		6.71E+05	
421	WELL ESS-22C, NEAR SDSP	1		7.15E+05	
421	WELL ESS-22C, NEAR SDSP	1		6.17E+05	
421	WELL ESS-22C, NEAR SDSP	1		7.61E+05	
421	WELL ESS-22C, NEAR SDSP	1		7.65E+05	
421	WELL ESS-22C, NEAR SDSP	1		8.93E+05	
421	WELL ESS-22C, NEAR SDSP	1		8.53E+05	
421	WELL ESS-22C, NEAR SDSP	1		4.35E+05	
421	WELL ESS-22C, NEAR SDSP	1		2.72E+05	
422	WELL ESS-23C, NEAR SDSP	1		1.90E+05	
422	WELL ESS-23C, NEAR SDSP	1		1.77E+05	
422	WELL ESS-23C, NEAR SDSP	1		1.64E+05	
422	WELL ESS-23C, NEAR SDSP	1		1.46E+05	
422	WELL ESS-23C, NEAR SDSP	1		1.40E+05	

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Ground Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>LLD</b></i>
422	WELL ESS-23C, NEAR SDSP	6/11/2009	1	1.51E+05	
422	WELL ESS-23C, NEAR SDSP	7/13/2009	1	1.47E+05	
422	WELL ESS-23C, NEAR SDSP	8/12/2009	1	1.55E+05	
422	WELL ESS-23C, NEAR SDSP	9/17/2009	1	1.61E+05	
422	WELL ESS-23C, NEAR SDSP	12/1/2009	1	1.82E+05	
423	WELL ESS-24A, NEAR SDSP	1/15/2009	1	<LLD	2.52E+02
423	WELL ESS-24A, NEAR SDSP	2/12/2009	1	<LLD	2.44E+02
423	WELL ESS-24A, NEAR SDSP	3/12/2009	1	<LLD	2.41E+02
423	WELL ESS-24A, NEAR SDSP	4/21/2009	1	<LLD	2.26E+02
423	WELL ESS-24A, NEAR SDSP	5/11/2009	1	<LLD	2.45E+02
423	WELL ESS-24A, NEAR SDSP	6/9/2009	1	<LLD	2.40E+02
423	WELL ESS-24A, NEAR SDSP	7/15/2009	1	<LLD	2.37E+02
423	WELL ESS-24A, NEAR SDSP	8/5/2009	1	<LLD	2.39E+02
423	WELL ESS-24A, NEAR SDSP	10/6/2009	1	<LLD	2.32E+02
424	WELL ESS-24B, NEAR SDSP	1/15/2009	1	<LLD	2.47E+02
424	WELL ESS-24B, NEAR SDSP	2/12/2009	1	<LLD	2.38E+02
424	WELL ESS-24B, NEAR SDSP	3/12/2009	1	<LLD	2.35E+02
424	WELL ESS-24B, NEAR SDSP	4/14/2009	1	<LLD	2.40E+02
424	WELL ESS-24B, NEAR SDSP	5/12/2009	1	<LLD	2.36E+02
424	WELL ESS-24B, NEAR SDSP	6/9/2009	1	<LLD	2.38E+02
424	WELL ESS-24B, NEAR SDSP	7/15/2009	1	<LLD	2.36E+02
425	WELL ESS-24C, NEAR SDSP	1/15/2009	1	4.57E+03	
425	WELL ESS-24C, NEAR SDSP	2/12/2009	1	4.48E+03	
425	WELL ESS-24C, NEAR SDSP	3/12/2009	1	4.33E+03	



# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Ground Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

Sample Point	Sample Date	Quantity	Efficiency	Activity	LLD
425	WELL ESS-24C, NEAR SDSP	4/14/2009	1	4.47E+03	
425	WELL ESS-24C, NEAR SDSP	4/21/2009	1	4.52E+03	
425	WELL ESS-24C, NEAR SDSP	5/12/2009	1	4.80E+03	
425	WELL ESS-24C, NEAR SDSP	6/9/2009	1	4.81E+03	
425	WELL ESS-24C, NEAR SDSP	7/15/2009	1	4.06E+03	
425	WELL ESS-24C, NEAR SDSP	8/5/2009	1	4.67E+03	
425	WELL ESS-24C, NEAR SDSP	10/6/2009	1	5.55E+03	
426	WELL ESS-25B, NEAR SDSP	1/22/2009	1	<LLD	2.42E+02
426	WELL ESS-25B, NEAR SDSP	2/17/2009	1	<LLD	2.36E+02
426	WELL ESS-25B, NEAR SDSP	3/18/2009	1	<LLD	2.40E+02
426	WELL ESS-25B, NEAR SDSP	4/17/2009	1	<LLD	2.40E+02
426	WELL ESS-25B, NEAR SDSP	5/20/2009	1	<LLD	2.37E+02
426	WELL ESS-25B, NEAR SDSP	6/8/2009	1	<LLD	2.35E+02
426	WELL ESS-25B, NEAR SDSP	7/20/2009	1	<LLD	2.39E+02
426	WELL ESS-25B, NEAR SDSP	8/4/2009	1	<LLD	2.38E+02
426	WELL ESS-25B, NEAR SDSP	9/16/2009	1	<LLD	2.38E+02
426	WELL ESS-25B, NEAR SDSP	12/9/2009	1	<LLD	2.84E+02
427	WELL ESS-25C, NEAR SDSP	1/22/2009	1	<LLD	2.44E+02
427	WELL ESS-25C, NEAR SDSP	2/17/2009	1	<LLD	2.37E+02
427	WELL ESS-25C, NEAR SDSP	3/18/2009	1	<LLD	2.40E+02
427	WELL ESS-25C, NEAR SDSP	4/17/2009	1	<LLD	2.43E+02
427	WELL ESS-25C, NEAR SDSP	5/20/2009	1	<LLD	2.40E+02
427	WELL ESS-25C, NEAR SDSP	6/8/2009	1	<LLD	2.35E+02
427	WELL ESS-25C, NEAR SDSP	7/20/2009	1	2.40E+02	

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Ground Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>LLD</b></i>
427	WELL ESS-25C, NEAR SDSP	8/4/2009	1	2.39E+02	
427	WELL ESS-25C, NEAR SDSP	9/16/2009	1	2.66E+02	
427	WELL ESS-25C, NEAR SDSP	12/9/2009	1	2.53E+02	
428	WELL ESS-26C, NEAR SDSP	1/20/2009	1	2.98E+04	
428	WELL ESS-26C, NEAR SDSP	2/12/2009	1	9.13E+04	
428	WELL ESS-26C, NEAR SDSP	3/13/2009	1	1.44E+05	
428	WELL ESS-26C, NEAR SDSP	4/15/2009	1	2.22E+05	
428	WELL ESS-26C, NEAR SDSP	5/12/2009	1	2.79E+05	
428	WELL ESS-26C, NEAR SDSP	6/11/2009	1	9.19E+04	
428	WELL ESS-26C, NEAR SDSP	7/9/2009	1	4.48E+05	
428	WELL ESS-26C, NEAR SDSP	8/12/2009	1	4.13E+05	
428	WELL ESS-26C, NEAR SDSP	9/16/2009	1	3.80E+05	
428	WELL ESS-26C, NEAR SDSP	12/15/2009	1	4.12E+04	
429	WELL ESS-27A, NEAR SDSP	1/19/2009	1	<LLD	2.46E+02
429	WELL ESS-27A, NEAR SDSP	2/13/2009	1	<LLD	2.39E+02
429	WELL ESS-27A, NEAR SDSP	3/13/2009	1	<LLD	2.44E+02
429	WELL ESS-27A, NEAR SDSP	4/15/2009	1	<LLD	2.38E+02
429	WELL ESS-27A, NEAR SDSP	5/18/2009	1	<LLD	2.38E+02
429	WELL ESS-27A, NEAR SDSP	6/11/2009	1	<LLD	2.40E+02
429	WELL ESS-27A, NEAR SDSP	7/13/2009	1	<LLD	2.43E+02
429	WELL ESS-27A, NEAR SDSP	8/12/2009	1	<LLD	2.34E+02
429	WELL ESS-27A, NEAR SDSP	9/17/2009	1	<LLD	2.33E+02
429	WELL ESS-27A, NEAR SDSP	12/31/2009	1	<LLD	2.43E+02
430	WELL ESS-27C, NEAR SDSP	1/20/2009	1	2.69E+05	

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Ground Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>LLD</b></i>
430	WELL ESS-27C, NEAR SDSP	2/13/2009	1	2.88E+05	
430	WELL ESS-27C, NEAR SDSP	3/13/2009	1	2.80E+05	
430	WELL ESS-27C, NEAR SDSP	4/15/2009	1	2.78E+05	
430	WELL ESS-27C, NEAR SDSP	5/18/2009	1	2.81E+05	
430	WELL ESS-27C, NEAR SDSP	6/11/2009	1	2.83E+05	
430	WELL ESS-27C, NEAR SDSP	7/13/2009	1	2.84E+05	
430	WELL ESS-27C, NEAR SDSP	8/13/2009	1	3.00E+05	
430	WELL ESS-27C, NEAR SDSP	9/17/2009	1	3.00E+05	
430	WELL ESS-27C, NEAR SDSP	12/2/2009	1	2.87E+05	
431	WELL ESS-30C, NEAR SDSP	1/15/2009	1	1.47E+03	
431	WELL ESS-30C, NEAR SDSP	2/12/2009	1	2.31E+03	
431	WELL ESS-30C, NEAR SDSP	3/12/2009	1	2.28E+03	
431	WELL ESS-30C, NEAR SDSP	4/15/2009	1	1.81E+03	
431	WELL ESS-30C, NEAR SDSP	5/12/2009	1	1.79E+03	
431	WELL ESS-30C, NEAR SDSP	6/17/2009	1	1.07E+04	
431	WELL ESS-30C, NEAR SDSP	7/14/2009	1	6.02E+04	
431	WELL ESS-30C, NEAR SDSP	8/6/2009	1	9.72E+04	
431	WELL ESS-30C, NEAR SDSP	10/8/2009	1	1.55E+04	
432	WELL ESS-31C, NEAR SDSP	1/15/2009	1	<LLD	2.43E+02
432	WELL ESS-31C, NEAR SDSP	2/12/2009	1	<LLD	2.42E+02
432	WELL ESS-31C, NEAR SDSP	3/12/2009	1	2.78E+02	
432	WELL ESS-31C, NEAR SDSP	4/10/2009	1	<LLD	2.36E+02
432	WELL ESS-31C, NEAR SDSP	5/12/2009	1	<LLD	2.37E+02
432	WELL ESS-31C, NEAR SDSP	6/8/2009	1	4.14E+02	

# *BSEP Radiological Environmental Monitoring Analysis Report*

Media Type: Ground Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Efficiency</i>	<i>Activity</i>	<i>LLD</i>
432	WELL ESS-31C, NEAR SDSP	7/14/2009	1	1.22E+03	
432	WELL ESS-31C, NEAR SDSP	8/6/2009	1	1.71E+03	
432	WELL ESS-31C, NEAR SDSP	10/8/2009	1	2.28E+03	
433	WELL MW-2, 0.02 MILES S	1/16/2009	1	<LLD	2.45E+02
433	WELL MW-2, 0.02 MILES S	2/20/2009	1	<LLD	2.34E+02
433	WELL MW-2, 0.02 MILES S	3/19/2009	1	<LLD	2.40E+02
433	WELL MW-2, 0.02 MILES S	4/17/2009	1	<LLD	2.39E+02
433	WELL MW-2, 0.02 MILES S	5/18/2009	1	<LLD	2.40E+02
433	WELL MW-2, 0.02 MILES S	6/18/2009	1	<LLD	2.37E+02
433	WELL MW-2, 0.02 MILES S	7/6/2009	1	<LLD	2.34E+02
433	WELL MW-2, 0.02 MILES S	8/10/2009	1	<LLD	2.37E+02
433	WELL MW-2, 0.02 MILES S	10/13/2009	1	3.00E+02	
434	WELL MW-3, 0.03 MILES S	1/16/2009	1	<LLD	2.46E+02
434	WELL MW-3, 0.03 MILES S	2/20/2009	1	<LLD	2.36E+02
434	WELL MW-3, 0.03 MILES S	3/19/2009	1	<LLD	2.40E+02
434	WELL MW-3, 0.03 MILES S	4/17/2009	1	<LLD	2.41E+02
434	WELL MW-3, 0.03 MILES S	5/18/2009	1	<LLD	2.40E+02
434	WELL MW-3, 0.03 MILES S	6/18/2009	1	<LLD	2.37E+02
434	WELL MW-3, 0.03 MILES S	7/6/2009	1	<LLD	2.34E+02
434	WELL MW-3, 0.03 MILES S	8/10/2009	1	<LLD	2.36E+02
434	WELL MW-3, 0.03 MILES S	10/13/2009	1	<LLD	2.52E+02
435	WELL ESS-NANCY CREEK-1, (NC-1)	1/28/2009	1	3.12E+02	
435	WELL ESS-NANCY CREEK-1, (NC-1)	2/11/2009	1	2.52E+02	
435	WELL ESS-NANCY CREEK-1, (NC-1)	3/26/2009	1	4.20E+02	

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Ground Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>LLD</b></i>
435 WELL ESS-NANCY CREEK-1, (NC-1)	4/10/2009	1		3.74E+02	
435 WELL ESS-NANCY CREEK-1, (NC-1)	5/14/2009	1		2.67E+02	
435 WELL ESS-NANCY CREEK-1, (NC-1)	6/10/2009	1		<LLD	2.39E+02
435 WELL ESS-NANCY CREEK-1, (NC-1)	7/14/2009	1		<LLD	2.38E+02
435 WELL ESS-NANCY CREEK-1, (NC-1)	8/18/2009	1		<LLD	2.37E+02
435 WELL ESS-NANCY CREEK-1, (NC-1)	9/18/2009	1		<LLD	2.42E+02
435 WELL ESS-NANCY CREEK-1, (NC-1)	12/4/2009	1		2.94E+02	
436 WELL ESS-NANCY CREEK-2, (NC-2)	1/28/2009	1		<LLD	2.42E+02
436 WELL ESS-NANCY CREEK-2, (NC-2)	2/11/2009	1		<LLD	2.45E+02
436 WELL ESS-NANCY CREEK-2, (NC-2)	3/26/2009	1		<LLD	2.41E+02
436 WELL ESS-NANCY CREEK-2, (NC-2)	4/10/2009	1		<LLD	2.42E+02
436 WELL ESS-NANCY CREEK-2, (NC-2)	5/14/2009	1		<LLD	2.36E+02
436 WELL ESS-NANCY CREEK-2, (NC-2)	6/10/2009	1		<LLD	2.37E+02
436 WELL ESS-NANCY CREEK-2, (NC-2)	7/14/2009	1		<LLD	2.38E+02
436 WELL ESS-NANCY CREEK-2, (NC-2)	8/18/2009	1		<LLD	2.37E+02
436 WELL ESS-NANCY CREEK-2, (NC-2)	9/18/2009	1		<LLD	2.44E+02
436 WELL ESS-NANCY CREEK-2, (NC-2)	12/4/2009	1		<LLD	2.37E+02
437 WELL ESS-NANCY CREEK-3, (NC-3)	1/28/2009	1		<LLD	2.44E+02
437 WELL ESS-NANCY CREEK-3, (NC-3)	2/11/2009	1		<LLD	2.35E+02
437 WELL ESS-NANCY CREEK-3, (NC-3)	3/26/2009	1		<LLD	2.41E+02
437 WELL ESS-NANCY CREEK-3, (NC-3)	4/10/2009	1		<LLD	2.41E+02
437 WELL ESS-NANCY CREEK-3, (NC-3)	5/14/2009	1		<LLD	2.36E+02
437 WELL ESS-NANCY CREEK-3, (NC-3)	6/10/2009	1		<LLD	2.40E+02
437 WELL ESS-NANCY CREEK-3, (NC-3)	7/9/2009	1		<LLD	2.40E+02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Ground Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>LLD</b></i>
437	WELL ESS-NANCY CREEK-3, (NC-3)	8/18/2009	1	<LLD	2.40E+02
437	WELL ESS-NANCY CREEK-3, (NC-3)	9/18/2009	1	<LLD	2.43E+02
437	WELL ESS-NANCY CREEK-3, (NC-3)	12/4/2009	1	<LLD	2.29E+02
438	WELL ESS-NANCY CREEK-4, (NC-4)	1/29/2009	1	3.28E+02	
438	WELL ESS-NANCY CREEK-4, (NC-4)	2/11/2009	1	<LLD	2.36E+02
438	WELL ESS-NANCY CREEK-4, (NC-4)	3/26/2009	1	3.21E+02	
438	WELL ESS-NANCY CREEK-4, (NC-4)	4/10/2009	1	2.65E+02	
438	WELL ESS-NANCY CREEK-4, (NC-4)	5/14/2009	1	<LLD	2.38E+02
438	WELL ESS-NANCY CREEK-4, (NC-4)	6/10/2009	1	<LLD	2.39E+02
438	WELL ESS-NANCY CREEK-4, (NC-4)	7/9/2009	1	<LLD	2.40E+02
438	WELL ESS-NANCY CREEK-4, (NC-4)	8/18/2009	1	<LLD	2.38E+02
438	WELL ESS-NANCY CREEK-4, (NC-4)	9/18/2009	1	<LLD	2.42E+02
438	WELL ESS-NANCY CREEK-4, (NC-4)	12/4/2009	1	<LLD	2.31E+02
439	WELL ESS-NANCY CREEK-5, (NC-5)	1/29/2009	1	<LLD	2.41E+02
439	WELL ESS-NANCY CREEK-5, (NC-5)	2/11/2009	1	<LLD	2.37E+02
439	WELL ESS-NANCY CREEK-5, (NC-5)	3/26/2009	1	<LLD	2.44E+02
439	WELL ESS-NANCY CREEK-5, (NC-5)	4/10/2009	1	<LLD	2.36E+02
439	WELL ESS-NANCY CREEK-5, (NC-5)	5/14/2009	1	<LLD	2.35E+02
439	WELL ESS-NANCY CREEK-5, (NC-5)	6/10/2009	1	<LLD	2.38E+02
439	WELL ESS-NANCY CREEK-5, (NC-5)	7/9/2009	1	<LLD	2.38E+02
439	WELL ESS-NANCY CREEK-5, (NC-5)	8/18/2009	1	<LLD	2.37E+02
439	WELL ESS-NANCY CREEK-5, (NC-5)	9/18/2009	1	<LLD	2.44E+02
439	WELL ESS-NANCY CREEK-5, (NC-5)	12/4/2009	1	<LLD	2.32E+02
440	WELL ESS-GUM LOG BRANCH-1, (GLB-1)	1/29/2009	1	<LLD	2.43E+02

# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Ground Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Efficiency</i>	<i>Activity</i>	<i>LLD</i>
440	WELL ESS-GUM LOG BRANCH-1, (GLB-1)	2/11/2009	1	<LLD	2.38E+02
440	WELL ESS-GUM LOG BRANCH-1, (GLB-1)	3/26/2009	1	<LLD	2.39E+02
440	WELL ESS-GUM LOG BRANCH-1, (GLB-1)	4/10/2009	1	<LLD	2.43E+02
440	WELL ESS-GUM LOG BRANCH-1, (GLB-1)	5/14/2009	1	<LLD	2.35E+02
440	WELL ESS-GUM LOG BRANCH-1, (GLB-1)	6/10/2009	1	<LLD	2.38E+02
440	WELL ESS-GUM LOG BRANCH-1, (GLB-1)	7/9/2009	1	<LLD	2.40E+02
440	WELL ESS-GUM LOG BRANCH-1, (GLB-1)	8/18/2009	1	<LLD	2.36E+02
440	WELL ESS-GUM LOG BRANCH-1, (GLB-1)	9/18/2009	1	<LLD	2.44E+02
440	WELL ESS-GUM LOG BRANCH-1, (GLB-1)	12/4/2009	1	<LLD	2.27E+02
447	WELL ESS-28C, NEAR SDSP	1/20/2009	1	3.09E+02	
447	WELL ESS-28C, NEAR SDSP	2/13/2009	1	2.78E+02	
447	WELL ESS-28C, NEAR SDSP	3/13/2009	1	4.27E+02	
447	WELL ESS-28C, NEAR SDSP	4/15/2009	1	3.97E+02	
447	WELL ESS-28C, NEAR SDSP	5/18/2009	1	4.33E+02	
447	WELL ESS-28C, NEAR SDSP	6/11/2009	1	3.81E+02	
447	WELL ESS-28C, NEAR SDSP	7/13/2009	1	3.19E+02	
447	WELL ESS-28C, NEAR SDSP	8/12/2009	1	4.11E+02	
447	WELL ESS-28C, NEAR SDSP	9/17/2009	1	3.62E+02	
447	WELL ESS-28C, NEAR SDSP	12/2/2009	1	3.69E+02	

# *BSEP Radiological Environmental Monitoring Hard-To-Detect Analysis Report*

*Media Type: Shoreline Sediment*

*Quantity: GRAMS*

*Concentration (Activity): pCi/gm*

<i>Sample Point</i>	<i>Sample Date</i>	<i>Analysis</i>	<i>Activity</i>	<i>2 Sigma Error</i>	<i>LLD</i>
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	5/1/2009	FE-55	<LLD		2.00E+01
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	5/1/2009	SR-90	<LLD		2.00E+00
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	5/1/2009	SR-89	<LLD		2.00E+00



# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

Sample Point	Sample Date	Quantity	Efficiency	Activity	LLD
400	0.6 MI NE - INTAKE CANAL (CONTROL)	1/17/2009	0.005	4.05E-01	<LLD 2.35E+02
400	0.6 MI NE - INTAKE CANAL (CONTROL)	2/16/2009	0.005	4.03E-01	<LLD 2.37E+02
400	0.6 MI NE - INTAKE CANAL (CONTROL)	3/17/2009	0.005	4.06E-01	<LLD 2.36E+02
400	0.6 MI NE - INTAKE CANAL (CONTROL)	4/16/2009	0.005	4.07E-01	<LLD 2.36E+02
400	0.6 MI NE - INTAKE CANAL (CONTROL)	5/16/2009	0.005	4.06E-01	<LLD 2.31E+02
400	0.6 MI NE - INTAKE CANAL (CONTROL)	6/16/2009	0.005	4.05E-01	<LLD 2.07E+02
400	0.6 MI NE - INTAKE CANAL (CONTROL)	7/16/2009	0.005	4.04E-01	<LLD 2.36E+02
400	0.6 MI NE - INTAKE CANAL (CONTROL)	8/16/2009	0.005	4.06E-01	<LLD 2.31E+02
400	0.6 MI NE - INTAKE CANAL (CONTROL)	9/16/2009	0.005	4.05E-01	<LLD 2.31E+02
400	0.6 MI NE - INTAKE CANAL (CONTROL)	10/16/2009	0.005	4.05E-01	<LLD 2.37E+02
400	0.6 MI NE - INTAKE CANAL (CONTROL)	11/16/2009	0.005	4.08E-01	<LLD 2.32E+02
400	0.6 MI NE - INTAKE CANAL (CONTROL)	12/16/2009	0.005	3.93E-01	<LLD 2.39E+02
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	1/17/2009	0.005	4.05E-01	<LLD 2.35E+02
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	2/16/2009	0.005	4.06E-01	<LLD 2.35E+02
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	3/17/2009	0.005	4.06E-01	5.75E+02 2.36E+02
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	4/16/2009	0.005	4.07E-01	<LLD 2.36E+02
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	5/16/2009	0.005	4.05E-01	<LLD 2.32E+02
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	6/16/2009	0.005	4.06E-01	<LLD 2.06E+02
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	7/16/2009	0.005	4.05E-01	<LLD 2.36E+02
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	8/16/2009	0.005	4.04E-01	<LLD 2.32E+02
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	9/16/2009	0.005	4.03E-01	<LLD 2.32E+02
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	10/16/2009	0.005	4.07E-01	<LLD 2.36E+02
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	11/16/2009	0.005	4.06E-01	<LLD 2.33E+02
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	12/16/2009	0.005	3.95E-01	<LLD 2.38E+02

# *BSEP Radiological Environmental Monitoring Analysis Report*

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Efficiency</i>	<i>Activity</i>	<i>LLD</i>
494	NANCY'S CREEK - WP-106	1/6/2009	1	4.76E+02	
494	NANCY'S CREEK - WP-106	1/14/2009	1	2.70E+02	
494	NANCY'S CREEK - WP-106	1/21/2009	1	7.29E+02	
494	NANCY'S CREEK - WP-106	1/27/2009	1	3.23E+02	
494	NANCY'S CREEK - WP-106	2/2/2009	1	5.45E+02	
494	NANCY'S CREEK - WP-106	2/10/2009	1	2.66E+02	
494	NANCY'S CREEK - WP-106	2/17/2009	1	6.31E+02	
494	NANCY'S CREEK - WP-106	2/24/2009	1	<LLD	2.44E+02
494	NANCY'S CREEK - WP-106	3/4/2009	1	1.10E+03	
494	NANCY'S CREEK - WP-106	3/10/2009	1	<LLD	2.35E+02
494	NANCY'S CREEK - WP-106	3/17/2009	1	6.05E+02	
494	NANCY'S CREEK - WP-106	3/24/2009	1	<LLD	2.43E+02
494	NANCY'S CREEK - WP-106	3/31/2009	1	2.69E+02	
494	NANCY'S CREEK - WP-106	4/7/2009	1	3.73E+02	
494	NANCY'S CREEK - WP-106	4/14/2009	1	<LLD	2.48E+02
494	NANCY'S CREEK - WP-106	4/23/2009	1	3.98E+02	
494	NANCY'S CREEK - WP-106	4/28/2009	1	<LLD	2.40E+02
494	NANCY'S CREEK - WP-106	5/6/2009	1	<LLD	2.36E+02
494	NANCY'S CREEK - WP-106	5/12/2009	1	<LLD	2.39E+02
494	NANCY'S CREEK - WP-106	5/21/2009	1	3.00E+02	
494	NANCY'S CREEK - WP-106	5/27/2009	1	2.65E+02	
494	NANCY'S CREEK - WP-106	6/4/2009	1	<LLD	2.36E+02
494	NANCY'S CREEK - WP-106	6/8/2009	1	<LLD	2.36E+02
494	NANCY'S CREEK - WP-106	6/16/2009	1	<LLD	2.39E+02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>LLD</b></i>
494	NANCY'S CREEK - WP-106	6/23/2009	1	<LLD	2.39E+02
494	NANCY'S CREEK - WP-106	6/29/2009	1	<LLD	2.39E+02
494	NANCY'S CREEK - WP-106	7/7/2009	1	<LLD	2.38E+02
494	NANCY'S CREEK - WP-106	7/14/2009	1	<LLD	2.40E+02
494	NANCY'S CREEK - WP-106	7/21/2009	1	<LLD	2.39E+02
494	NANCY'S CREEK - WP-106	7/29/2009	1	2.66E+02	
494	NANCY'S CREEK - WP-106	8/4/2009	1	<LLD	2.37E+02
494	NANCY'S CREEK - WP-106	8/11/2009	1	<LLD	2.36E+02
494	NANCY'S CREEK - WP-106	8/17/2009	1	<LLD	2.35E+02
494	NANCY'S CREEK - WP-106	8/24/2009	1	<LLD	2.41E+02
494	NANCY'S CREEK - WP-106	9/2/2009	1	<LLD	2.39E+02
494	NANCY'S CREEK - WP-106	9/9/2009	1	<LLD	2.45E+02
494	NANCY'S CREEK - WP-106	9/15/2009	1	<LLD	2.41E+02
494	NANCY'S CREEK - WP-106	9/22/2009	1	<LLD	2.38E+02
494	NANCY'S CREEK - WP-106	9/29/2009	1	<LLD	2.37E+02
494	NANCY'S CREEK - WP-106	10/6/2009	1	<LLD	2.36E+02
494	NANCY'S CREEK - WP-106	10/13/2009	1	3.15E+02	
494	NANCY'S CREEK - WP-106	10/20/2009	1	<LLD	2.31E+02
494	NANCY'S CREEK - WP-106	10/27/2009	1	2.79E+02	
494	NANCY'S CREEK - WP-106	11/3/2009	1	<LLD	2.44E+02
494	NANCY'S CREEK - WP-106	11/9/2009	1	<LLD	2.34E+02
494	NANCY'S CREEK - WP-106	11/17/2009	1	<LLD	2.44E+02
494	NANCY'S CREEK - WP-106	11/24/2009	1	<LLD	2.28E+02
494	NANCY'S CREEK - WP-106	11/30/2009	1	<LLD	2.36E+02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>LLD</b></i>
494 NANCY'S CREEK - WP-106	12/7/2009	1		<LLD	2.37E+02
494 NANCY'S CREEK - WP-106	12/15/2009	1		<LLD	2.56E+02
494 NANCY'S CREEK - WP-106	12/21/2009	1		<LLD	2.18E+02
494 NANCY'S CREEK - WP-106	12/29/2009	1		2.49E+02	
495 NANCY'S CREEK - WP-52	1/6/2009	1		2.46E+02	
495 NANCY'S CREEK - WP-52	1/14/2009	1		2.51E+02	
495 NANCY'S CREEK - WP-52	1/21/2009	1		2.45E+02	
495 NANCY'S CREEK - WP-52	1/27/2009	1		<LLD	2.44E+02
495 NANCY'S CREEK - WP-52	2/2/2009	1		<LLD	2.38E+02
495 NANCY'S CREEK - WP-52	2/10/2009	1		<LLD	2.33E+02
495 NANCY'S CREEK - WP-52	2/17/2009	1		<LLD	2.37E+02
495 NANCY'S CREEK - WP-52	2/24/2009	1		<LLD	2.36E+02
495 NANCY'S CREEK - WP-52	3/5/2009	1		2.64E+02	
495 NANCY'S CREEK - WP-52	3/10/2009	1		<LLD	2.36E+02
495 NANCY'S CREEK - WP-52	3/17/2009	1		<LLD	2.42E+02
495 NANCY'S CREEK - WP-52	3/24/2009	1		<LLD	2.48E+02
495 NANCY'S CREEK - WP-52	3/31/2009	1		<LLD	2.45E+02
495 NANCY'S CREEK - WP-52	4/7/2009	1		<LLD	2.36E+02
495 NANCY'S CREEK - WP-52	4/14/2009	1		<LLD	2.43E+02
495 NANCY'S CREEK - WP-52	4/23/2009	1		<LLD	2.35E+02
495 NANCY'S CREEK - WP-52	4/28/2009	1		<LLD	2.40E+02
495 NANCY'S CREEK - WP-52	5/6/2009	1		<LLD	2.36E+02
495 NANCY'S CREEK - WP-52	5/12/2009	1		<LLD	2.41E+02
495 NANCY'S CREEK - WP-52	5/21/2009	1		<LLD	2.38E+02

# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

Sample Point	Sample Date	Quantity	Efficiency	Activity	LLD
495 NANCY'S CREEK - WP-52	5/27/2009	1		<LLD	2.31E+02
495 NANCY'S CREEK - WP-52	6/4/2009	1		<LLD	2.37E+02
495 NANCY'S CREEK - WP-52	6/8/2009	1		<LLD	2.38E+02
495 NANCY'S CREEK - WP-52	6/16/2009	1		<LLD	2.40E+02
495 NANCY'S CREEK - WP-52	6/23/2009	1		<LLD	2.39E+02
495 NANCY'S CREEK - WP-52	6/29/2009	1		<LLD	2.40E+02
495 NANCY'S CREEK - WP-52	7/7/2009	1		<LLD	2.38E+02
495 NANCY'S CREEK - WP-52	7/14/2009	1		<LLD	2.38E+02
495 NANCY'S CREEK - WP-52	7/21/2009	1		<LLD	2.37E+02
495 NANCY'S CREEK - WP-52	7/29/2009	1		<LLD	2.35E+02
495 NANCY'S CREEK - WP-52	8/4/2009	1		<LLD	2.40E+02
495 NANCY'S CREEK - WP-52	8/11/2009	1		<LLD	2.40E+02
495 NANCY'S CREEK - WP-52	8/17/2009	1		<LLD	2.33E+02
495 NANCY'S CREEK - WP-52	8/24/2009	1		<LLD	2.40E+02
495 NANCY'S CREEK - WP-52	9/2/2009	1		<LLD	2.33E+02
495 NANCY'S CREEK - WP-52	9/9/2009	1		<LLD	2.40E+02
495 NANCY'S CREEK - WP-52	9/15/2009	1		<LLD	2.31E+02
495 NANCY'S CREEK - WP-52	9/22/2009	1		<LLD	2.36E+02
495 NANCY'S CREEK - WP-52	9/29/2009	1		<LLD	2.36E+02
495 NANCY'S CREEK - WP-52	10/6/2009	1		<LLD	2.32E+02
495 NANCY'S CREEK - WP-52	10/13/2009	1		<LLD	2.38E+02
495 NANCY'S CREEK - WP-52	10/20/2009	1		<LLD	2.33E+02
495 NANCY'S CREEK - WP-52	10/27/2009	1		<LLD	2.34E+02
495 NANCY'S CREEK - WP-52	11/3/2009	1		<LLD	2.35E+02

# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Efficiency</i>	<i>Activity</i>	<i>LLD</i>
495 NANCY'S CREEK - WP-52	11/9/2009	1		<LLD	2.33E+02
495 NANCY'S CREEK - WP-52	11/17/2009	1		<LLD	2.42E+02
495 NANCY'S CREEK - WP-52	11/24/2009	1		<LLD	2.25E+02
495 NANCY'S CREEK - WP-52	11/30/2009	1		<LLD	2.37E+02
495 NANCY'S CREEK - WP-52	12/7/2009	1		<LLD	2.26E+02
495 NANCY'S CREEK - WP-52	12/15/2009	1		<LLD	2.28E+02
495 NANCY'S CREEK - WP-52	12/21/2009	1		<LLD	2.30E+02
495 NANCY'S CREEK - WP-52	12/29/2009	1		<LLD	2.34E+02
496 NANCY'S CREEK - WP-53	1/6/2009	1		<LLD	2.41E+02
496 NANCY'S CREEK - WP-53	1/14/2009	1		3.51E+02	
496 NANCY'S CREEK - WP-53	1/21/2009	1		8.78E+02	
496 NANCY'S CREEK - WP-53	1/27/2009	1		2.87E+02	
496 NANCY'S CREEK - WP-53	2/2/2009	1		<LLD	2.40E+02
496 NANCY'S CREEK - WP-53	2/10/2009	1		<LLD	2.33E+02
496 NANCY'S CREEK - WP-53	2/17/2009	1		<LLD	2.39E+02
496 NANCY'S CREEK - WP-53	2/24/2009	1		2.99E+02	
496 NANCY'S CREEK - WP-53	3/5/2009	1		3.29E+02	
496 NANCY'S CREEK - WP-53	3/10/2009	1		<LLD	2.36E+02
496 NANCY'S CREEK - WP-53	3/17/2009	1		<LLD	2.41E+02
496 NANCY'S CREEK - WP-53	3/24/2009	1		<LLD	2.52E+02
496 NANCY'S CREEK - WP-53	3/31/2009	1		<LLD	2.43E+02
496 NANCY'S CREEK - WP-53	4/7/2009	1		<LLD	2.35E+02
496 NANCY'S CREEK - WP-53	4/14/2009	1		<LLD	2.46E+02
496 NANCY'S CREEK - WP-53	4/23/2009	1		<LLD	2.37E+02

# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

Sample Point	Sample Date	Quantity	Efficiency	Activity	LLD
496 NANCY'S CREEK - WP-53	4/28/2009	1		<LLD	2.42E+02
496 NANCY'S CREEK - WP-53	5/6/2009	1		<LLD	2.37E+02
496 NANCY'S CREEK - WP-53	5/12/2009	1		<LLD	2.40E+02
496 NANCY'S CREEK - WP-53	5/21/2009	1		<LLD	2.38E+02
496 NANCY'S CREEK - WP-53	5/27/2009	1		<LLD	2.34E+02
496 NANCY'S CREEK - WP-53	6/4/2009	1		<LLD	2.37E+02
496 NANCY'S CREEK - WP-53	6/8/2009	1		<LLD	2.37E+02
496 NANCY'S CREEK - WP-53	6/16/2009	1		<LLD	2.38E+02
496 NANCY'S CREEK - WP-53	6/23/2009	1		<LLD	2.38E+02
496 NANCY'S CREEK - WP-53	6/29/2009	1		<LLD	2.38E+02
496 NANCY'S CREEK - WP-53	7/7/2009	1		<LLD	2.40E+02
496 NANCY'S CREEK - WP-53	7/17/2009	1		<LLD	2.36E+02
496 NANCY'S CREEK - WP-53	7/21/2009	1		<LLD	2.38E+02
496 NANCY'S CREEK - WP-53	7/29/2009	1		<LLD	2.35E+02
496 NANCY'S CREEK - WP-53	8/4/2009	1		<LLD	2.39E+02
496 NANCY'S CREEK - WP-53	8/11/2009	1		<LLD	2.39E+02
496 NANCY'S CREEK - WP-53	8/17/2009	1		<LLD	2.33E+02
496 NANCY'S CREEK - WP-53	8/24/2009	1		<LLD	2.39E+02
496 NANCY'S CREEK - WP-53	9/2/2009	1		<LLD	2.34E+02
496 NANCY'S CREEK - WP-53	9/9/2009	1		<LLD	2.40E+02
496 NANCY'S CREEK - WP-53	9/15/2009	1		<LLD	2.31E+02
496 NANCY'S CREEK - WP-53	9/22/2009	1		<LLD	2.36E+02
496 NANCY'S CREEK - WP-53	9/29/2009	1		<LLD	2.32E+02
496 NANCY'S CREEK - WP-53	10/6/2009	1		<LLD	2.32E+02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>LLD</b></i>
496	NANCY'S CREEK - WP-53	10/13/2009	1	<LLD	2.34E+02
496	NANCY'S CREEK - WP-53	10/20/2009	1	<LLD	2.35E+02
496	NANCY'S CREEK - WP-53	10/27/2009	1	<LLD	2.31E+02
496	NANCY'S CREEK - WP-53	11/3/2009	1	<LLD	2.31E+02
496	NANCY'S CREEK - WP-53	11/9/2009	1	<LLD	2.34E+02
496	NANCY'S CREEK - WP-53	11/17/2009	1	<LLD	2.42E+02
496	NANCY'S CREEK - WP-53	11/24/2009	1	<LLD	2.28E+02
496	NANCY'S CREEK - WP-53	11/30/2009	1	<LLD	2.35E+02
496	NANCY'S CREEK - WP-53	12/7/2009	1	<LLD	2.29E+02
496	NANCY'S CREEK - WP-53	12/15/2009	1	<LLD	2.30E+02
496	NANCY'S CREEK - WP-53	12/21/2009	1	<LLD	2.27E+02
496	NANCY'S CREEK - WP-53	12/29/2009	1	2.46E+02	
497	NANCY'S CREEK - WP-55	1/6/2009	1	2.97E+02	
497	NANCY'S CREEK - WP-55	1/14/2009	1	5.04E+02	
497	NANCY'S CREEK - WP-55	1/21/2009	1	7.14E+02	
497	NANCY'S CREEK - WP-55	1/27/2009	1	4.23E+02	
497	NANCY'S CREEK - WP-55	2/2/2009	1	<LLD	2.43E+02
497	NANCY'S CREEK - WP-55	2/10/2009	1	<LLD	2.34E+02
497	NANCY'S CREEK - WP-55	2/17/2009	1	2.78E+02	
497	NANCY'S CREEK - WP-55	2/24/2009	1	<LLD	2.41E+02
497	NANCY'S CREEK - WP-55	3/5/2009	1	2.98E+02	
497	NANCY'S CREEK - WP-55	3/10/2009	1	<LLD	2.35E+02
497	NANCY'S CREEK - WP-55	3/17/2009	1	<LLD	2.40E+02
497	NANCY'S CREEK - WP-55	3/24/2009	1	<LLD	2.52E+02



# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

Sample Point	Sample Date	Quantity	Efficiency	Activity	LLD
497 NANCY'S CREEK - WP-55	3/31/2009	1		<LLD	2.44E+02
497 NANCY'S CREEK - WP-55	4/7/2009	1		<LLD	2.35E+02
497 NANCY'S CREEK - WP-55	4/14/2009	1		<LLD	2.45E+02
497 NANCY'S CREEK - WP-55	4/23/2009	1		<LLD	2.37E+02
497 NANCY'S CREEK - WP-55	4/28/2009	1		<LLD	2.42E+02
497 NANCY'S CREEK - WP-55	5/6/2009	1		<LLD	2.37E+02
497 NANCY'S CREEK - WP-55	5/12/2009	1		<LLD	2.40E+02
497 NANCY'S CREEK - WP-55	5/21/2009	1		<LLD	2.38E+02
497 NANCY'S CREEK - WP-55	5/27/2009	1		<LLD	2.36E+02
497 NANCY'S CREEK - WP-55	6/4/2009	1		<LLD	2.36E+02
497 NANCY'S CREEK - WP-55	6/8/2009	1		<LLD	2.37E+02
497 NANCY'S CREEK - WP-55	6/16/2009	1		<LLD	2.38E+02
497 NANCY'S CREEK - WP-55	6/23/2009	1		<LLD	2.39E+02
497 NANCY'S CREEK - WP-55	6/29/2009	1		<LLD	2.38E+02
497 NANCY'S CREEK - WP-55	7/7/2009	1		<LLD	2.40E+02
497 NANCY'S CREEK - WP-55	7/14/2009	1		<LLD	2.34E+02
497 NANCY'S CREEK - WP-55	7/21/2009	1		<LLD	2.37E+02
497 NANCY'S CREEK - WP-55	7/29/2009	1		<LLD	2.35E+02
497 NANCY'S CREEK - WP-55	8/4/2009	1		<LLD	2.40E+02
497 NANCY'S CREEK - WP-55	8/11/2009	1		<LLD	2.38E+02
497 NANCY'S CREEK - WP-55	8/17/2009	1		<LLD	2.33E+02
497 NANCY'S CREEK - WP-55	8/24/2009	1		<LLD	2.40E+02
497 NANCY'S CREEK - WP-55	9/2/2009	1		<LLD	2.36E+02
497 NANCY'S CREEK - WP-55	9/9/2009	1		<LLD	2.40E+02

## ***BSEP Radiological Environmental Monitoring Analysis Report***

*Media Type: Surface Water*

*Quantity: Liters*

*Concentration (Activity): pCi/Liter*

*Analysis: Tritium*

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Efficiency</i></b>	<b><i>Activity</i></b>	<b><i>LLD</i></b>
497	NANCY'S CREEK - WP-55	9/15/2009	1	<LLD	2.31E+02
497	NANCY'S CREEK - WP-55	9/22/2009	1	<LLD	2.37E+02
497	NANCY'S CREEK - WP-55	9/29/2009	1	<LLD	2.32E+02
497	NANCY'S CREEK - WP-55	10/6/2009	1	<LLD	2.31E+02
497	NANCY'S CREEK - WP-55	10/13/2009	1	<LLD	2.30E+02
497	NANCY'S CREEK - WP-55	10/20/2009	1	<LLD	2.37E+02
497	NANCY'S CREEK - WP-55	10/27/2009	1	<LLD	2.34E+02
497	NANCY'S CREEK - WP-55	11/3/2009	1	<LLD	2.29E+02
497	NANCY'S CREEK - WP-55	11/9/2009	1	<LLD	2.34E+02
497	NANCY'S CREEK - WP-55	11/17/2009	1	<LLD	2.43E+02
497	NANCY'S CREEK - WP-55	11/24/2009	1	<LLD	2.23E+02
497	NANCY'S CREEK - WP-55	11/30/2009	1	<LLD	2.35E+02
497	NANCY'S CREEK - WP-55	12/7/2009	1	<LLD	2.33E+02
497	NANCY'S CREEK - WP-55	12/15/2009	1	<LLD	2.34E+02
497	NANCY'S CREEK - WP-55	12/21/2009	1	<LLD	2.24E+02
497	NANCY'S CREEK - WP-55	12/29/2009	1	<LLD	2.41E+02
498	NANCY'S CREEK - WP-57	1/6/2009	1	3.99E+02	
498	NANCY'S CREEK - WP-57	1/14/2009	1	3.56E+02	
498	NANCY'S CREEK - WP-57	1/21/2009	1	7.65E+02	
498	NANCY'S CREEK - WP-57	1/27/2009	1	3.39E+02	
498	NANCY'S CREEK - WP-57	2/2/2009	1	3.02E+02	
498	NANCY'S CREEK - WP-57	2/10/2009	1	<LLD	2.36E+02
498	NANCY'S CREEK - WP-57	2/17/2009	1	<LLD	2.39E+02
498	NANCY'S CREEK - WP-57	2/24/2009	1	2.86E+02	

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>LLD</b></i>
498 NANCY'S CREEK - WP-57	3/5/2009	1		4.94E+02	
498 NANCY'S CREEK - WP-57	3/10/2009	1		<LLD	2.35E+02
498 NANCY'S CREEK - WP-57	3/17/2009	1		4.55E+02	
498 NANCY'S CREEK - WP-57	3/24/2009	1		<LLD	2.50E+02
498 NANCY'S CREEK - WP-57	3/31/2009	1		<LLD	2.44E+02
498 NANCY'S CREEK - WP-57	4/7/2009	1		<LLD	2.34E+02
498 NANCY'S CREEK - WP-57	4/14/2009	1		<LLD	2.46E+02
498 NANCY'S CREEK - WP-57	4/23/2009	1		<LLD	2.36E+02
498 NANCY'S CREEK - WP-57	4/28/2009	1		2.51E+02	
498 NANCY'S CREEK - WP-57	5/6/2009	1		3.02E+02	
498 NANCY'S CREEK - WP-57	5/12/2009	1		<LLD	2.40E+02
498 NANCY'S CREEK - WP-57	5/21/2009	1		<LLD	2.39E+02
498 NANCY'S CREEK - WP-57	5/27/2009	1		<LLD	2.36E+02
498 NANCY'S CREEK - WP-57	6/4/2009	1		<LLD	2.38E+02
498 NANCY'S CREEK - WP-57	6/8/2009	1		<LLD	2.37E+02
498 NANCY'S CREEK - WP-57	6/16/2009	1		<LLD	2.37E+02
498 NANCY'S CREEK - WP-57	6/23/2009	1		<LLD	2.39E+02
498 NANCY'S CREEK - WP-57	6/29/2009	1		<LLD	2.36E+02
498 NANCY'S CREEK - WP-57	7/7/2009	1		<LLD	2.39E+02
498 NANCY'S CREEK - WP-57	7/14/2009	1		<LLD	2.35E+02
498 NANCY'S CREEK - WP-57	7/21/2009	1		<LLD	2.38E+02
498 NANCY'S CREEK - WP-57	7/29/2009	1		<LLD	2.35E+02
498 NANCY'S CREEK - WP-57	8/4/2009	1		<LLD	2.38E+02
498 NANCY'S CREEK - WP-57	8/11/2009	1		<LLD	2.39E+02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Efficiency</b></i>	<i><b>Activity</b></i>	<i><b>LLD</b></i>
498	NANCY'S CREEK - WP-57	8/17/2009	1	<LLD	2.34E+02
498	NANCY'S CREEK - WP-57	8/24/2009	1	<LLD	2.42E+02
498	NANCY'S CREEK - WP-57	9/2/2009	1	<LLD	2.35E+02
498	NANCY'S CREEK - WP-57	9/9/2009	1	<LLD	2.34E+02
498	NANCY'S CREEK - WP-57	9/15/2009	1	<LLD	2.33E+02
498	NANCY'S CREEK - WP-57	9/22/2009	1	<LLD	2.39E+02
498	NANCY'S CREEK - WP-57	9/29/2009	1	<LLD	2.36E+02
498	NANCY'S CREEK - WP-57	10/6/2009	1	<LLD	2.33E+02
498	NANCY'S CREEK - WP-57	10/13/2009	1	<LLD	2.33E+02
498	NANCY'S CREEK - WP-57	10/20/2009	1	<LLD	2.34E+02
498	NANCY'S CREEK - WP-57	10/27/2009	1	2.83E+02	
498	NANCY'S CREEK - WP-57	11/3/2009	1	<LLD	2.33E+02
498	NANCY'S CREEK - WP-57	11/9/2009	1	<LLD	2.35E+02
498	NANCY'S CREEK - WP-57	11/17/2009	1	<LLD	2.44E+02
498	NANCY'S CREEK - WP-57	11/24/2009	1	<LLD	2.25E+02
498	NANCY'S CREEK - WP-57	11/30/2009	1	<LLD	2.35E+02
498	NANCY'S CREEK - WP-57	12/7/2009	1	<LLD	2.35E+02
498	NANCY'S CREEK - WP-57	12/15/2009	1	<LLD	2.33E+02
498	NANCY'S CREEK - WP-57	12/21/2009	1	2.83E+02	
498	NANCY'S CREEK - WP-57	12/29/2009	1	2.83E+02	
499	CAPE FEAR RIVER - WP-61 - CONTROL	1/6/2009	1	<LLD	2.40E+02
499	CAPE FEAR RIVER - WP-61 - CONTROL	1/14/2009	1	<LLD	2.40E+02
499	CAPE FEAR RIVER - WP-61 - CONTROL	1/21/2009	1	<LLD	2.51E+02
499	CAPE FEAR RIVER - WP-61 - CONTROL	1/27/2009	1	<LLD	2.39E+02

# ***BSEP Radiological Environmental Monitoring Analysis Report***

*Media Type: Surface Water*

*Quantity: Liters*

*Concentration (Activity): pCi/Liter*

*Analysis: Tritium*

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Efficiency</i></b>	<b><i>Activity</i></b>	<b><i>LLD</i></b>
499 CAPE FEAR RIVER - WP-61 - CONTROL	2/2/2009	1		<LLD	2.49E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	2/10/2009	1		<LLD	2.38E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	2/17/2009	1		<LLD	2.37E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	2/24/2009	1		<LLD	2.35E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	3/5/2009	1		<LLD	2.34E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	3/10/2009	1		<LLD	2.36E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	3/17/2009	1		<LLD	2.39E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	3/24/2009	1		<LLD	2.47E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	3/31/2009	1		<LLD	2.43E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	4/7/2009	1		<LLD	2.36E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	4/14/2009	1		<LLD	2.47E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	4/23/2009	1		<LLD	2.38E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	4/28/2009	1		<LLD	2.33E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	5/6/2009	1		<LLD	2.36E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	5/12/2009	1		<LLD	2.40E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	5/21/2009	1		<LLD	2.39E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	5/27/2009	1		<LLD	2.36E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	6/4/2009	1		<LLD	2.38E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	6/8/2009	1		<LLD	2.39E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	6/16/2009	1		<LLD	2.38E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	6/23/2009	1		<LLD	2.40E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	6/29/2009	1		<LLD	2.31E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	7/7/2009	1		<LLD	2.35E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	7/14/2009	1		<LLD	2.38E+02

# BSEP Radiological Environmental Monitoring Analysis Report

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/Liter

Analysis: Tritium

Sample Point	Sample Date	Quantity	Efficiency	Activity	LLD
499 CAPE FEAR RIVER - WP-61 - CONTROL	7/21/2009	1		<LLD	2.38E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	7/29/2009	1		<LLD	2.37E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	8/4/2009	1		<LLD	2.39E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	8/11/2009	1		<LLD	2.40E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	8/17/2009	1		<LLD	2.33E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	8/24/2009	1		<LLD	2.39E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	9/2/2009	1		<LLD	2.40E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	9/9/2009	1		<LLD	2.39E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	9/15/2009	1		<LLD	2.33E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	9/22/2009	1		<LLD	2.39E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	9/29/2009	1		<LLD	2.38E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	10/6/2009	1		<LLD	2.34E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	10/13/2009	1		<LLD	2.35E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	10/20/2009	1		<LLD	2.32E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	10/27/2009	1		<LLD	2.36E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	11/3/2009	1		<LLD	2.36E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	11/9/2009	1		<LLD	2.33E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	11/17/2009	1		<LLD	2.44E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	11/24/2009	1		<LLD	2.32E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	11/30/2009	1		<LLD	2.34E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	12/7/2009	1		<LLD	2.36E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	12/15/2009	1		<LLD	2.34E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	12/21/2009	1		<LLD	2.28E+02
499 CAPE FEAR RIVER - WP-61 - CONTROL	12/29/2009	1		<LLD	2.45E+02

# 2009 BSEP

## Radiological Environmental Monitoring

### Gamma Isotopic Report

#### Comments

- All AC and AP samples were available during 2009.
- Aquatic organism monitoring includes fish (free swimmers and bottom feeders), invertebrates (shellfish – (SH)), and Benthic organisms (BO). Invertebrates in the Gamma Isotopic data are represented by SH/BO\*.
- Gamma results are Less than LLD (< LLD) and do not appear in the Gamma Isotopic Report for the following samples:
  - Fish and Invertebrate samples (706 – 708)
  - Ground Water samples (402 – 440 and 447)
  - Surface Water samples (494 – 499)

# ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

*Media Type: Air Particulate*

*Quantity: CUBIC METERS*

*Concentration (Activity): pCi/cubic meter*

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Isotope</i></b>	<b><i>Activity</i></b>	<b><i>2 Sigma Error</i></b>
200 1.0 MI WSW - VISITORS CENTER	2/16/2009	3617.9	BE-7	1.46E-01	1.80E-02
200 1.0 MI WSW - VISITORS CENTER	2/16/2009	3617.9	K-40	2.03E-02	7.48E-03
200 1.0 MI WSW - VISITORS CENTER	2/16/2009	3617.9	PB-212	1.02E-03	7.23E-04
200 1.0 MI WSW - VISITORS CENTER	2/16/2009	3617.9	BI-214	3.20E-03	1.49E-03
200 1.0 MI WSW - VISITORS CENTER	2/16/2009	3617.9	PB-214	4.76E-03	1.19E-03
200 1.0 MI WSW - VISITORS CENTER	5/18/2009	3843.7	K-40	4.93E-02	9.89E-03
200 1.0 MI WSW - VISITORS CENTER	5/18/2009	3843.7	BI-214	1.55E-03	1.27E-03
200 1.0 MI WSW - VISITORS CENTER	5/18/2009	3843.7	PB-214	2.71E-03	1.36E-03
200 1.0 MI WSW - VISITORS CENTER	5/18/2009	3843.7	BE-7	1.33E-01	1.75E-02
200 1.0 MI WSW - VISITORS CENTER	8/17/2009	3711.5	TL-208	6.02E-04	5.12E-04
200 1.0 MI WSW - VISITORS CENTER	8/17/2009	3711.5	K-40	2.85E-02	8.78E-03
200 1.0 MI WSW - VISITORS CENTER	8/17/2009	3711.5	BI-214	3.73E-03	1.16E-03
200 1.0 MI WSW - VISITORS CENTER	8/17/2009	3711.5	PB-214	4.97E-03	1.25E-03
200 1.0 MI WSW - VISITORS CENTER	8/17/2009	3711.5	RA-226	1.42E-02	7.31E-03
200 1.0 MI WSW - VISITORS CENTER	8/17/2009	3711.5	TH-234	1.56E-02	1.07E-02
200 1.0 MI WSW - VISITORS CENTER	8/17/2009	3711.5	BE-7	1.15E-01	1.64E-02
200 1.0 MI WSW - VISITORS CENTER	11/16/2009	3546.3	K-40	5.91E-02	1.11E-02
200 1.0 MI WSW - VISITORS CENTER	11/16/2009	3546.3	PB-212	1.04E-03	6.58E-04
200 1.0 MI WSW - VISITORS CENTER	11/16/2009	3546.3	TH-234	1.57E-02	1.37E-02
200 1.0 MI WSW - VISITORS CENTER	11/16/2009	3546.3	BE-7	1.01E-01	1.63E-02
200 1.0 MI WSW - VISITORS CENTER	11/16/2009	3546.3	RA-226	1.63E-02	9.18E-03
201 0.5 MI NE - PMAC	2/16/2009	3644.9	K-40	3.90E-02	9.55E-03
201 0.5 MI NE - PMAC	2/16/2009	3644.9	PB-214	6.45E-03	1.34E-03
201 0.5 MI NE - PMAC	2/16/2009	3644.9	BE-7	1.49E-01	1.93E-02



# ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Air Particulate

Quantity: CUBIC METERS

Concentration (Activity): pCi/cubic meter

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	
201	0.5 MI NE - PMAC	2/16/2009	3644.9	TL-208	9.80E-04	6.11E-04
201	0.5 MI NE - PMAC	2/16/2009	3644.9	RA-226	1.71E-02	7.63E-03
201	0.5 MI NE - PMAC	2/16/2009	3644.9	BI-214	6.40E-03	1.60E-03
201	0.5 MI NE - PMAC	2/16/2009	3644.9	PB-212	2.82E-03	7.25E-04
201	0.5 MI NE - PMAC	5/18/2009	3733.7	PB-214	5.40E-03	1.38E-03
201	0.5 MI NE - PMAC	5/18/2009	3733.7	K-40	2.54E-02	1.09E-02
201	0.5 MI NE - PMAC	5/18/2009	3733.7	TH-234	1.69E-02	1.03E-02
201	0.5 MI NE - PMAC	5/18/2009	3733.7	BI-214	4.34E-03	1.34E-03
201	0.5 MI NE - PMAC	5/18/2009	3733.7	BE-7	1.22E-01	1.64E-02
201	0.5 MI NE - PMAC	5/18/2009	3733.7	RA-226	1.43E-02	1.23E-02
201	0.5 MI NE - PMAC	8/17/2009	3692.4	RA-226	1.57E-02	8.00E-03
201	0.5 MI NE - PMAC	8/17/2009	3692.4	PB-214	6.28E-03	1.24E-03
201	0.5 MI NE - PMAC	8/17/2009	3692.4	BI-214	5.22E-03	1.32E-03
201	0.5 MI NE - PMAC	8/17/2009	3692.4	PB-212	1.49E-03	5.89E-04
201	0.5 MI NE - PMAC	8/17/2009	3692.4	K-40	2.09E-02	8.84E-03
201	0.5 MI NE - PMAC	8/17/2009	3692.4	BE-7	1.19E-01	1.60E-02
201	0.5 MI NE - PMAC	11/16/2009	3575.8	BE-7	1.02E-01	1.56E-02
201	0.5 MI NE - PMAC	11/16/2009	3575.8	BI-214	4.32E-03	1.94E-03
201	0.5 MI NE - PMAC	11/16/2009	3575.8	K-40	6.81E-02	1.45E-02
201	0.5 MI NE - PMAC	11/16/2009	3575.8	PB-214	3.82E-03	1.79E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	2/16/2009	3518.2	K-40	2.32E-02	8.29E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	2/16/2009	3518.2	TL-208	4.81E-04	3.98E-04
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	2/16/2009	3518.2	TH-234	1.27E-02	1.07E-02
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	2/16/2009	3518.2	PB-212	1.45E-03	7.79E-04

# ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Air Particulate

Quantity: CUBIC METERS

Concentration (Activity): pCi/cubic meter

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	2/16/2009	3518.2	BI-214	7.64E-03	1.49E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	2/16/2009	3518.2	PB-214	6.27E-03	1.27E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	2/16/2009	3518.2	RA-226	1.88E-02	9.82E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	2/16/2009	3518.2	BE-7	1.61E-01	1.90E-02
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	5/18/2009	3623	PB-214	4.34E-03	1.43E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	5/18/2009	3623	BE-7	1.32E-01	1.91E-02
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	5/18/2009	3623	RA-226	1.42E-02	8.88E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	5/18/2009	3623	K-40	2.74E-02	7.66E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	5/18/2009	3623	PB-212	1.76E-03	1.16E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	5/18/2009	3623	BI-214	3.78E-03	1.30E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	8/17/2009	3607.2	PB-214	1.61E-03	1.05E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	8/17/2009	3607.2	BE-7	1.18E-01	1.80E-02
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	8/17/2009	3607.2	TL-208	1.14E-03	6.04E-04
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	8/17/2009	3607.2	BI-214	1.84E-03	1.09E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	8/17/2009	3607.2	PB-212	1.43E-03	7.77E-04
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	8/17/2009	3607.2	K-40	5.88E-02	1.16E-02
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	8/17/2009	3607.2	RA-226	2.99E-02	1.17E-02
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	11/16/2009	3475.6	BI-214	7.77E-03	1.46E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	11/16/2009	3475.6	PB-214	7.85E-03	1.61E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	11/16/2009	3475.6	PB-212	1.59E-03	7.00E-04
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	11/16/2009	3475.6	K-40	3.60E-02	9.08E-03
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	11/16/2009	3475.6	BE-7	1.07E-01	1.69E-02
202	1.0 MI S - SUBSTATION ON CONSTRUCTION RD	11/16/2009	3475.6	RA-226	2.45E-03	1.27E-03
203	2.0 MI SSW - SOUTHPORT SUBSTATION	2/16/2009	3652.1	BI-214	3.46E-03	1.50E-03

## ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Air Particulate

Quantity: CUBIC METERS

Concentration (Activity): pCi/cubic meter

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>
203 2.0 MI SSW - SOUTHPORT SUBSTATION	2/16/2009	3652.1	PB-214	4.40E-03	1.23E-03
203 2.0 MI SSW - SOUTHPORT SUBSTATION	2/16/2009	3652.1	BE-7	1.51E-01	1.82E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	2/16/2009	3652.1	K-40	2.24E-02	7.41E-03
203 2.0 MI SSW - SOUTHPORT SUBSTATION	2/16/2009	3652.1	RA-226	1.83E-02	1.05E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	5/18/2009	3686.9	RA-226	1.76E-02	1.08E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	5/18/2009	3686.9	PB-212	1.41E-03	8.02E-04
203 2.0 MI SSW - SOUTHPORT SUBSTATION	5/18/2009	3686.9	TH-234	2.03E-02	1.14E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	5/18/2009	3686.9	BE-7	1.22E-01	1.74E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	5/18/2009	3686.9	K-40	4.85E-02	1.01E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	8/17/2009	3803.8	PB-214	3.91E-03	1.38E-03
203 2.0 MI SSW - SOUTHPORT SUBSTATION	8/17/2009	3803.8	BI-214	1.91E-03	1.14E-03
203 2.0 MI SSW - SOUTHPORT SUBSTATION	8/17/2009	3803.8	K-40	5.86E-02	1.10E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	8/17/2009	3803.8	BE-7	1.32E-01	1.76E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	11/16/2009	3774.8	RA-226	1.34E-02	8.13E-03
203 2.0 MI SSW - SOUTHPORT SUBSTATION	11/16/2009	3774.8	PB-214	6.06E-03	1.34E-03
203 2.0 MI SSW - SOUTHPORT SUBSTATION	11/16/2009	3774.8	BI-214	4.00E-03	1.56E-03
203 2.0 MI SSW - SOUTHPORT SUBSTATION	11/16/2009	3774.8	PB-212	1.14E-03	5.74E-04
203 2.0 MI SSW - SOUTHPORT SUBSTATION	11/16/2009	3774.8	K-40	2.50E-02	8.76E-03
203 2.0 MI SSW - SOUTHPORT SUBSTATION	11/16/2009	3774.8	BE-7	1.04E-01	1.66E-02
203 2.0 MI SSW - SOUTHPORT SUBSTATION	11/16/2009	3774.8	TL-208	6.34E-04	5.70E-04
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	2/16/2009	3718.2	PB-212	1.71E-03	7.23E-04
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	2/16/2009	3718.2	TH-234	1.47E-02	1.02E-02
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	2/16/2009	3718.2	K-40	3.57E-02	8.24E-03
204 22.4 MI NNE - SUTTON PLANT (CONTROL)	2/16/2009	3718.2	BI-214	4.29E-03	1.12E-03

# ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Air Particulate

Quantity: CUBIC METERS

Concentration (Activity): pCi/cubic meter

<i><b>Sample Point</b></i>		<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	2/16/2009	3718.2	PB-214	4.12E-03	1.28E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	2/16/2009	3718.2	RA-226	1.68E-02	9.03E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	2/16/2009	3718.2	BE-7	1.47E-01	1.87E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	2/16/2009	3718.2	TL-208	9.42E-04	4.86E-04
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	5/18/2009	3677.8	K-40	7.07E-02	1.30E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	5/18/2009	3677.8	PB-212	1.07E-03	8.59E-04
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	5/18/2009	3677.8	BI-214	2.02E-03	1.22E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	5/18/2009	3677.8	BE-7	1.46E-01	2.02E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	8/17/2009	3725.4	TH-234	1.13E-02	9.94E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	8/17/2009	3725.4	BE-7	1.14E-01	1.68E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	8/17/2009	3725.4	K-40	2.20E-02	8.09E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	8/17/2009	3725.4	TL-208	6.49E-04	4.48E-04
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	8/17/2009	3725.4	PB-212	9.74E-04	5.69E-04
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	8/17/2009	3725.4	BI-214	5.17E-03	1.23E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	8/17/2009	3725.4	RA-226	1.40E-02	8.43E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	8/17/2009	3725.4	PB-214	6.52E-03	1.17E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	11/16/2009	3631.2	BE-7	1.12E-01	1.73E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	11/16/2009	3631.2	TH-234	2.08E-02	1.00E-02
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	11/16/2009	3631.2	RA-226	1.32E-03	1.11E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	11/16/2009	3631.2	PB-214	2.10E-03	1.08E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	11/16/2009	3631.2	BI-214	2.45E-03	1.25E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	11/16/2009	3631.2	PB-212	2.36E-03	1.09E-03
204	22.4 MI NNE - SUTTON PLANT (CONTROL)	11/16/2009	3631.2	K-40	4.82E-02	1.10E-02
205	0.6 MI SSE - SPOIL POND	2/16/2009	3738.1	BI-214	2.81E-03	1.19E-03

# ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Air Particulate

Quantity: CUBIC METERS

Concentration (Activity): pCi/cubic meter

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	
205	0.6 MI SSE - SPOIL POND	2/16/2009	3738.1	PB-212	1.04E-03	7.59E-04
205	0.6 MI SSE - SPOIL POND	2/16/2009	3738.1	PB-214	4.04E-03	1.17E-03
205	0.6 MI SSE - SPOIL POND	2/16/2009	3738.1	RA-226	1.37E-02	8.53E-03
205	0.6 MI SSE - SPOIL POND	2/16/2009	3738.1	BE-7	1.69E-01	2.02E-02
205	0.6 MI SSE - SPOIL POND	2/16/2009	3738.1	K-40	4.04E-02	8.88E-03
205	0.6 MI SSE - SPOIL POND	2/16/2009	3738.1	TH-234	1.42E-02	8.80E-03
205	0.6 MI SSE - SPOIL POND	5/18/2009	3841.6	K-40	3.44E-02	7.39E-03
205	0.6 MI SSE - SPOIL POND	5/18/2009	3841.6	BE-7	1.39E-01	1.73E-02
205	0.6 MI SSE - SPOIL POND	5/18/2009	3841.6	PB-212	8.98E-04	6.01E-04
205	0.6 MI SSE - SPOIL POND	5/18/2009	3841.6	BI-214	6.95E-03	1.47E-03
205	0.6 MI SSE - SPOIL POND	5/18/2009	3841.6	PB-214	7.00E-03	1.37E-03
205	0.6 MI SSE - SPOIL POND	5/18/2009	3841.6	RA-226	1.29E-02	8.39E-03
205	0.6 MI SSE - SPOIL POND	5/18/2009	3841.6	TH-234	1.23E-02	9.52E-03
205	0.6 MI SSE - SPOIL POND	8/17/2009	3663.8	BE-7	1.15E-01	1.71E-02
205	0.6 MI SSE - SPOIL POND	8/17/2009	3663.8	TH-234	1.44E-02	1.06E-02
205	0.6 MI SSE - SPOIL POND	8/17/2009	3663.8	RA-226	2.23E-02	1.33E-02
205	0.6 MI SSE - SPOIL POND	8/17/2009	3663.8	BI-214	2.61E-03	1.10E-03
205	0.6 MI SSE - SPOIL POND	8/17/2009	3663.8	PB-212	1.15E-03	8.06E-04
205	0.6 MI SSE - SPOIL POND	8/17/2009	3663.8	K-40	5.10E-02	9.94E-03
205	0.6 MI SSE - SPOIL POND	11/16/2009	3589	BE-7	1.03E-01	1.61E-02
205	0.6 MI SSE - SPOIL POND	11/16/2009	3589	BI-214	4.45E-03	1.62E-03
205	0.6 MI SSE - SPOIL POND	11/16/2009	3589	PB-212	1.45E-03	6.83E-04
205	0.6 MI SSE - SPOIL POND	11/16/2009	3589	TL-208	6.49E-04	4.33E-04
205	0.6 MI SSE - SPOIL POND	11/16/2009	3589	K-40	2.13E-02	7.48E-03

# ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

*Media Type: Air Particulate*

*Quantity: CUBIC METERS*

*Concentration (Activity): pCi/cubic meter*

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Isotope</i></b>	<b><i>Activity</i></b>	<b><i>2 Sigma Error</i></b>
205 0.6 MI SSE - SPOIL POND	11/16/2009	3589	PB-214	6.20E-03	1.37E-03
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	5/18/2009	3422.7	BE-7	1.27E-01	1.85E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	5/18/2009	3422.7	PB-212	1.31E-03	7.63E-04
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	5/18/2009	3422.7	RA-226	1.76E-02	8.65E-03
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	5/18/2009	3422.7	BI-214	8.00E-03	2.02E-03
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	5/18/2009	3422.7	PB-214	9.67E-03	1.73E-03
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	5/18/2009	3422.7	K-40	2.93E-02	9.09E-03
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	8/17/2009	3665.7	BE-7	1.32E-01	1.85E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	8/17/2009	3665.7	K-40	6.87E-02	1.28E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	8/17/2009	3665.7	PB-212	1.04E-03	7.27E-04
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	8/17/2009	3665.7	BI-214	2.16E-03	1.14E-03
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	8/17/2009	3665.7	RA-226	1.22E-02	1.00E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	11/16/2009	3565.2	K-40	5.20E-02	1.18E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	11/16/2009	3565.2	TL-208	6.60E-04	4.96E-04
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	11/16/2009	3565.2	PB-212	1.00E-03	9.70E-04
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	11/16/2009	3565.2	BI-214	2.81E-03	1.47E-03
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	11/16/2009	3565.2	RA-226	1.20E-02	1.14E-02
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	11/16/2009	3565.2	TH-234	1.57E-02	9.21E-03
206 11.3 MILES NW FROM PLANT AT BRUNSWICK COUNTY GOV	11/16/2009	3565.2	BE-7	9.94E-02	1.58E-02

# ***BNP Radiological Environmental Monitoring Gamma Isotopic Report***

*Media Type: Broadleaf Vegetation*

*Quantity: GRAMS (wet)*

*Concentration (Activity): pCi/gm wet*

**Media:** CHERRY

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Isotope</i></b>	<b><i>Activity</i></b>	<b><i>2 Sigma Error</i></b>
803 0.6 MI SSE - SPOIL POND	10/1/2009	443.7	PB-212	5.11E-02	3.35E-02
803 0.6 MI SSE - SPOIL POND	10/1/2009	443.7	BE-7	1.21E+00	2.27E-01
803 0.6 MI SSE - SPOIL POND	10/1/2009	443.7	K-40	3.27E+00	4.78E-01
803 0.6 MI SSE - SPOIL POND	10/1/2009	443.7	TH-234	6.99E-01	5.77E-01
803 0.6 MI SSE - SPOIL POND	10/1/2009	443.7	TL-208	1.82E-02	1.43E-02
803 0.6 MI SSE - SPOIL POND	10/1/2009	443.7	RA-226	9.15E-01	4.29E-01
803 0.6 MI SSE - SPOIL POND	10/1/2009	443.7	BI-214	4.72E-02	2.98E-02

# ***BNP Radiological Environmental Monitoring Gamma Isotopic Report***

*Media Type: Broadleaf Vegetation*

*Quantity: GRAMS (wet)*

*Concentration (Activity): pCi/gm wet*

**Media:** SWEETGUM

<b>Sample Point</b>	<b>Sample Date</b>	<b>Quantity</b>	<b>Isotope</b>	<b>Activity</b>	<b>2 Sigma Error</b>
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	480.4	BE-7	2.09E+00	3.20E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	480.4	K-40	3.71E+00	6.49E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	480.4	PB-212	5.26E-02	2.89E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	480.4	BI-214	6.07E-02	4.92E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	480.4	RA-226	6.04E-01	5.17E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	476.6	PB-214	9.70E-02	3.94E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	476.6	BI-214	1.12E-01	3.93E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	476.6	PB-212	1.28E-01	3.56E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	476.6	K-40	1.96E+00	3.69E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	476.6	BE-7	2.16E+00	2.78E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	476.6	TL-208	4.14E-02	2.21E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	476.6	RA-226	5.56E-01	3.22E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	425.1	PB-214	8.86E-02	3.26E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	425.1	RA-226	5.55E-01	2.68E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	425.1	BI-214	8.07E-02	4.33E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	425.1	TH-234	5.46E-01	3.92E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	425.1	BE-7	2.94E+00	2.82E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	425.1	K-40	2.76E+00	3.34E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	425.1	TL-208	3.74E-02	1.43E-02



# *BNP Radiological Environmental Monitoring Gamma Isotopic Report*

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

Media: SWEETGUM

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>	
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	12/1/2009	425.1	PB-212	8.73E-02	2.57E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	10/1/2009	558.3	K-40	2.32E+00	2.89E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	10/1/2009	558.3	RA-226	3.89E-01	3.24E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	10/1/2009	558.3	PB-214	4.73E-02	2.38E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	10/1/2009	558.3	TL-208	1.90E-02	1.16E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	10/1/2009	558.3	BE-7	2.17E+00	2.23E+00
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	10/1/2009	558.3	BI-214	6.32E-02	2.05E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	11/2/2009	468.1	PB-214	1.36E-01	3.07E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	11/2/2009	468.1	TH-234	5.89E-01	4.13E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	11/2/2009	468.1	BE-7	1.11E+00	1.73E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	11/2/2009	468.1	K-40	2.11E+00	2.71E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	11/2/2009	468.1	TL-208	1.93E-02	9.55E-03
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	11/2/2009	468.1	PB-212	7.80E-02	2.06E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	11/2/2009	468.1	BI-214	1.65E-01	3.62E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	12/1/2009	433.7	RA-226	3.28E-01	2.49E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	12/1/2009	433.7	BI-214	6.17E-02	2.83E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	12/1/2009	433.7	PB-212	5.19E-02	2.33E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	12/1/2009	433.7	TL-208	2.92E-02	1.51E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	12/1/2009	433.7	K-40	1.61E+00	2.44E-01

# ***BNP Radiological Environmental Monitoring Gamma Isotopic Report***

*Media Type: Broadleaf Vegetation*

*Quantity: GRAMS (wet)*

*Concentration (Activity): pCi/gm wet*

**Media:** SWEETGUM

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Isotope</i></b>	<b><i>Activity</i></b>	<b><i>2 Sigma Error</i></b>	
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	12/1/2009	433.7	BE-7	1.22E+00	1.75E-01

# ***BNP Radiological Environmental Monitoring Gamma Isotopic Report***

*Media Type: Broadleaf Vegetation*

*Quantity: GRAMS (wet)*

*Concentration (Activity): pCi/gm wet*

**Media:** WAX MYRTLE

<b>Sample Point</b>	<b>Sample Date</b>	<b>Quantity</b>	<b>Isotope</b>	<b>Activity</b>	<b>2 Sigma Error</b>	
800	0.7 MI NE - INTAKE CANAL	1/1/2009	536.2	K-40	3.14E+00	5.11E-01
800	0.7 MI NE - INTAKE CANAL	1/1/2009	536.2	BE-7	1.31E+00	2.47E-01
800	0.7 MI NE - INTAKE CANAL	1/1/2009	536.2	BI-214	5.49E-02	3.74E-02
800	0.7 MI NE - INTAKE CANAL	2/2/2009	489.2	BE-7	1.79E+00	2.06E-01
800	0.7 MI NE - INTAKE CANAL	2/2/2009	489.2	K-40	2.36E+00	3.02E-01
800	0.7 MI NE - INTAKE CANAL	2/2/2009	489.2	PB-212	3.05E-02	1.74E-02
800	0.7 MI NE - INTAKE CANAL	2/2/2009	489.2	RA-226	6.59E-01	3.09E-01
800	0.7 MI NE - INTAKE CANAL	2/2/2009	489.2	PB-214	1.08E-01	2.89E-02
800	0.7 MI NE - INTAKE CANAL	2/2/2009	489.2	BI-214	1.22E-01	2.98E-02
800	0.7 MI NE - INTAKE CANAL	3/1/2009	670.4	TH-234	4.05E-01	3.48E-01
800	0.7 MI NE - INTAKE CANAL	3/1/2009	670.4	BE-7	2.62E+00	2.27E-01
800	0.7 MI NE - INTAKE CANAL	3/1/2009	670.4	K-40	2.19E+00	2.50E-01
800	0.7 MI NE - INTAKE CANAL	3/1/2009	670.4	PB-212	3.38E-02	1.48E-02
800	0.7 MI NE - INTAKE CANAL	3/1/2009	670.4	PB-214	1.96E-02	1.81E-02
800	0.7 MI NE - INTAKE CANAL	3/1/2009	670.4	BI-214	2.67E-02	1.43E-02
800	0.7 MI NE - INTAKE CANAL	4/1/2009	565.4	K-40	1.91E+00	2.53E-01
800	0.7 MI NE - INTAKE CANAL	4/1/2009	565.4	PB-212	3.48E-02	1.74E-02
800	0.7 MI NE - INTAKE CANAL	4/1/2009	565.4	BI-214	8.50E-02	2.53E-02
800	0.7 MI NE - INTAKE CANAL	4/1/2009	565.4	PB-214	5.33E-02	2.37E-02

# *BNP Radiological Environmental Monitoring Gamma Isotopic Report*

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

**Media:** WAX MYRTLE

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
800 0.7 MI NE - INTAKE CANAL	4/1/2009	565.4	RA-226	4.12E-01	2.79E-01
800 0.7 MI NE - INTAKE CANAL	4/1/2009	565.4	BE-7	2.17E+00	2.18E-01
800 0.7 MI NE - INTAKE CANAL	5/1/2009	605.9	BE-7	2.27E+00	2.19E-01
800 0.7 MI NE - INTAKE CANAL	5/1/2009	605.9	K-40	2.90E+00	3.28E-01
800 0.7 MI NE - INTAKE CANAL	5/1/2009	605.9	TL-208	1.52E-02	8.48E-03
800 0.7 MI NE - INTAKE CANAL	5/1/2009	605.9	PB-214	4.58E-02	2.29E-02
800 0.7 MI NE - INTAKE CANAL	5/1/2009	605.9	BI-214	3.45E-02	2.02E-02
800 0.7 MI NE - INTAKE CANAL	5/1/2009	605.9	PB-212	3.02E-02	1.95E-02
800 0.7 MI NE - INTAKE CANAL	6/1/2009	483.7	PB-212	5.41E-02	2.35E-02
800 0.7 MI NE - INTAKE CANAL	6/1/2009	483.7	RA-226	4.97E-01	3.61E-01
800 0.7 MI NE - INTAKE CANAL	6/1/2009	483.7	PB-214	5.75E-02	3.59E-02
800 0.7 MI NE - INTAKE CANAL	6/1/2009	483.7	TH-234	5.80E-01	4.23E-01
800 0.7 MI NE - INTAKE CANAL	6/1/2009	483.7	K-40	3.35E+00	4.51E-01
800 0.7 MI NE - INTAKE CANAL	6/1/2009	483.7	BE-7	1.08E+00	2.06E-01
800 0.7 MI NE - INTAKE CANAL	6/1/2009	483.7	TL-208	2.73E-02	1.94E-02
800 0.7 MI NE - INTAKE CANAL	7/1/2009	577.6	RA-226	4.09E-01	2.31E-01
800 0.7 MI NE - INTAKE CANAL	7/1/2009	577.6	BE-7	9.45E-01	1.41E-01
800 0.7 MI NE - INTAKE CANAL	7/1/2009	577.6	K-40	3.15E+00	3.30E-01
800 0.7 MI NE - INTAKE CANAL	7/1/2009	577.6	BI-214	9.15E-02	2.45E-02

# BNP 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	
800	0.7 MI NE - INTAKE CANAL	7/1/2009	577.6	PB-214	4.86E-02	2.48E-02
800	0.7 MI NE - INTAKE CANAL	8/1/2009	571.7	TL-208	7.95E-03	7.36E-03
800	0.7 MI NE - INTAKE CANAL	8/1/2009	571.7	PB-212	3.73E-02	1.62E-02
800	0.7 MI NE - INTAKE CANAL	8/1/2009	571.7	K-40	2.76E+00	2.93E-01
800	0.7 MI NE - INTAKE CANAL	8/1/2009	571.7	BE-7	1.08E+00	1.41E-01
800	0.7 MI NE - INTAKE CANAL	8/1/2009	571.7	BI-214	1.39E-01	2.83E-02
800	0.7 MI NE - INTAKE CANAL	8/1/2009	571.7	PB-214	1.14E-01	3.25E-02
800	0.7 MI NE - INTAKE CANAL	9/1/2009	407.5	TH-234	1.22E+00	5.98E-01
800	0.7 MI NE - INTAKE CANAL	9/1/2009	407.5	PB-212	6.63E-02	2.52E-02
800	0.7 MI NE - INTAKE CANAL	9/1/2009	407.5	RA-226	4.57E-01	2.79E-01
800	0.7 MI NE - INTAKE CANAL	9/1/2009	407.5	BI-214	5.18E-02	3.84E-02
800	0.7 MI NE - INTAKE CANAL	9/1/2009	407.5	TL-208	3.06E-02	1.99E-02
800	0.7 MI NE - INTAKE CANAL	9/1/2009	407.5	K-40	3.36E+00	3.80E-01
800	0.7 MI NE - INTAKE CANAL	9/1/2009	407.5	BE-7	1.49E+00	1.96E-01
800	0.7 MI NE - INTAKE CANAL	9/1/2009	407.5	PB-214	8.25E-02	3.90E-02
800	0.7 MI NE - INTAKE CANAL	10/1/2009	424	K-40	4.76E+00	6.66E-01
800	0.7 MI NE - INTAKE CANAL	10/1/2009	424	PB-212	7.06E-02	4.84E-02
800	0.7 MI NE - INTAKE CANAL	10/1/2009	424	TL-208	3.59E-02	2.67E-02
800	0.7 MI NE - INTAKE CANAL	10/1/2009	424	BI-214	1.05E-01	5.80E-02

# ***BNP Radiological Environmental Monitoring Gamma Isotopic Report***

*Media Type: Broadleaf Vegetation*

*Quantity: GRAMS (wet)*

*Concentration (Activity): pCi/gm wet*

**Media:** WAX MYRTLE

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	
800	0.7 MI NE - INTAKE CANAL	10/1/2009	424	BE-7	1.43E+00	3.07E-01
800	0.7 MI NE - INTAKE CANAL	11/2/2009	391.4	BI-214	2.21E-01	4.75E-02
800	0.7 MI NE - INTAKE CANAL	11/2/2009	391.4	TH-234	9.94E-01	4.82E-01
800	0.7 MI NE - INTAKE CANAL	11/2/2009	391.4	PB-214	1.44E-01	3.86E-02
800	0.7 MI NE - INTAKE CANAL	11/2/2009	391.4	PB-212	7.01E-02	2.49E-02
800	0.7 MI NE - INTAKE CANAL	11/2/2009	391.4	TL-208	2.54E-02	1.77E-02
800	0.7 MI NE - INTAKE CANAL	11/2/2009	391.4	K-40	2.45E+00	3.62E-01
800	0.7 MI NE - INTAKE CANAL	11/2/2009	391.4	BE-7	1.49E+00	2.06E-01
800	0.7 MI NE - INTAKE CANAL	11/2/2009	391.4	RA-226	7.13E-01	3.28E-01
800	0.7 MI NE - INTAKE CANAL	12/1/2009	421	BI-214	9.27E-02	3.50E-02
800	0.7 MI NE - INTAKE CANAL	12/1/2009	421	PB-214	8.12E-02	4.49E-02
800	0.7 MI NE - INTAKE CANAL	12/1/2009	421	BE-7	2.02E+00	2.83E-01
800	0.7 MI NE - INTAKE CANAL	12/1/2009	421	RA-226	8.77E-01	3.66E-01
800	0.7 MI NE - INTAKE CANAL	12/1/2009	421	K-40	2.06E+00	4.37E-01
800	0.7 MI NE - INTAKE CANAL	12/1/2009	421	TH-234	1.01E+00	6.07E-01
800	0.7 MI NE - INTAKE CANAL	12/1/2009	421	TL-208	3.96E-02	1.56E-02
800	0.7 MI NE - INTAKE CANAL	12/1/2009	421	PB-212	5.65E-02	3.70E-02
801	0.8 MI SW - DISCHARGE CANAL	1/1/2009	465	BI-214	1.06E-01	4.52E-02
801	0.8 MI SW - DISCHARGE CANAL	1/1/2009	465	K-40	3.04E+00	5.75E-01

# *BNP Radiological Environmental Monitoring Gamma Isotopic Report*

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

**Media:** WAX MYRTLE

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
801 0.8 MI SW - DISCHARGE CANAL	1/1/2009	465	BE-7	1.86E+00	3.65E-01
801 0.8 MI SW - DISCHARGE CANAL	2/2/2009	524.5	BI-214	7.74E-02	2.22E-02
801 0.8 MI SW - DISCHARGE CANAL	2/2/2009	524.5	PB-212	4.03E-02	1.68E-02
801 0.8 MI SW - DISCHARGE CANAL	2/2/2009	524.5	TL-208	1.42E-02	1.00E-02
801 0.8 MI SW - DISCHARGE CANAL	2/2/2009	524.5	K-40	2.35E+00	2.86E-01
801 0.8 MI SW - DISCHARGE CANAL	2/2/2009	524.5	PB-214	6.78E-02	2.54E-02
801 0.8 MI SW - DISCHARGE CANAL	2/2/2009	524.5	RA-226	6.24E-01	2.60E-01
801 0.8 MI SW - DISCHARGE CANAL	2/2/2009	524.5	TH-234	4.88E-01	3.67E-01
801 0.8 MI SW - DISCHARGE CANAL	2/2/2009	524.5	BE-7	2.75E+00	2.55E-01
801 0.8 MI SW - DISCHARGE CANAL	3/1/2009	579.3	BE-7	1.15E+00	1.46E-01
801 0.8 MI SW - DISCHARGE CANAL	3/1/2009	579.3	TH-234	4.72E-01	3.06E-01
801 0.8 MI SW - DISCHARGE CANAL	3/1/2009	579.3	RA-226	2.97E-01	1.84E-01
801 0.8 MI SW - DISCHARGE CANAL	3/1/2009	579.3	BI-214	4.39E-02	1.98E-02
801 0.8 MI SW - DISCHARGE CANAL	3/1/2009	579.3	PB-212	2.90E-02	1.49E-02
801 0.8 MI SW - DISCHARGE CANAL	3/1/2009	579.3	K-40	1.95E+00	2.38E-01
801 0.8 MI SW - DISCHARGE CANAL	3/1/2009	579.3	TL-208	1.59E-02	9.03E-03
801 0.8 MI SW - DISCHARGE CANAL	4/1/2009	525.3	PB-214	3.29E-02	2.29E-02
801 0.8 MI SW - DISCHARGE CANAL	4/1/2009	525.3	BI-214	5.77E-02	2.43E-02
801 0.8 MI SW - DISCHARGE CANAL	4/1/2009	525.3	K-40	2.46E+00	2.98E-01

# ***BNP Radiological Environmental Monitoring Gamma Isotopic Report***

*Media Type: Broadleaf Vegetation*

*Quantity: GRAMS (wet)*

*Concentration (Activity): pCi/gm wet*

**Media:** WAX MYRTLE

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	
801	0.8 MI SW - DISCHARGE CANAL	4/1/2009	525.3	BE-7	1.43E+00	1.78E-01
801	0.8 MI SW - DISCHARGE CANAL	5/1/2009	605.7	BI-214	3.44E-02	1.97E-02
801	0.8 MI SW - DISCHARGE CANAL	5/1/2009	605.7	PB-214	4.67E-02	1.96E-02
801	0.8 MI SW - DISCHARGE CANAL	5/1/2009	605.7	RA-226	3.86E-01	2.36E-01
801	0.8 MI SW - DISCHARGE CANAL	5/1/2009	605.7	TH-234	5.53E-01	3.37E-01
801	0.8 MI SW - DISCHARGE CANAL	5/1/2009	605.7	BE-7	7.93E-01	1.32E-01
801	0.8 MI SW - DISCHARGE CANAL	5/1/2009	605.7	K-40	2.20E+00	2.71E-01
801	0.8 MI SW - DISCHARGE CANAL	5/1/2009	605.7	CO-60	7.57E-02	1.52E-02
801	0.8 MI SW - DISCHARGE CANAL	5/1/2009	605.7	PB-212	3.04E-02	1.20E-02
801	0.8 MI SW - DISCHARGE CANAL	5/6/2009	543.7	BE-7	7.51E-01	1.25E-01
801	0.8 MI SW - DISCHARGE CANAL	5/6/2009	543.7	K-40	3.03E+00	3.25E-01
801	0.8 MI SW - DISCHARGE CANAL	5/6/2009	543.7	CO-60	2.31E-02	1.82E-02
801	0.8 MI SW - DISCHARGE CANAL	5/6/2009	543.7	RA-226	4.82E-01	2.30E-01
801	0.8 MI SW - DISCHARGE CANAL	5/6/2009	543.7	TL-208	1.56E-02	1.12E-02
801	0.8 MI SW - DISCHARGE CANAL	5/6/2009	543.7	PB-212	6.72E-02	2.08E-02
801	0.8 MI SW - DISCHARGE CANAL	5/6/2009	543.7	BI-214	4.87E-02	2.58E-02
801	0.8 MI SW - DISCHARGE CANAL	6/1/2009	544.4	BE-7	9.57E-01	2.11E-01
801	0.8 MI SW - DISCHARGE CANAL	6/1/2009	544.4	K-40	5.08E+00	5.96E-01
801	0.8 MI SW - DISCHARGE CANAL	6/1/2009	544.4	TL-208	2.63E-02	1.75E-02



# ***BNP Radiological Environmental Monitoring Gamma Isotopic Report***

*Media Type: Broadleaf Vegetation*

*Quantity: GRAMS (wet)*

*Concentration (Activity): pCi/gm wet*

**Media:** WAX MYRTLE

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	
801	0.8 MI SW - DISCHARGE CANAL	6/1/2009	544.4	PB-212	3.82E-02	3.04E-02
801	0.8 MI SW - DISCHARGE CANAL	7/1/2009	588.1	K-40	3.25E+00	3.51E-01
801	0.8 MI SW - DISCHARGE CANAL	7/1/2009	588.1	BI-214	4.77E-02	2.02E-02
801	0.8 MI SW - DISCHARGE CANAL	7/1/2009	588.1	BE-7	7.80E-01	1.31E-01
801	0.8 MI SW - DISCHARGE CANAL	8/1/2009	569.6	BE-7	1.15E+00	1.57E-01
801	0.8 MI SW - DISCHARGE CANAL	8/1/2009	569.6	K-40	2.52E+00	2.84E-01
801	0.8 MI SW - DISCHARGE CANAL	8/1/2009	569.6	PB-212	4.22E-02	1.87E-02
801	0.8 MI SW - DISCHARGE CANAL	8/1/2009	569.6	BI-214	5.21E-02	2.11E-02
801	0.8 MI SW - DISCHARGE CANAL	8/1/2009	569.6	RA-226	1.96E-01	1.75E-01
801	0.8 MI SW - DISCHARGE CANAL	8/1/2009	569.6	TH-234	4.48E-01	2.99E-01
801	0.8 MI SW - DISCHARGE CANAL	9/1/2009	412.8	PB-212	1.03E-01	4.54E-02
801	0.8 MI SW - DISCHARGE CANAL	9/1/2009	412.8	RA-226	4.99E-01	4.32E-01
801	0.8 MI SW - DISCHARGE CANAL	9/1/2009	412.8	K-40	3.19E+00	5.08E-01
801	0.8 MI SW - DISCHARGE CANAL	9/1/2009	412.8	BI-214	1.19E-01	5.67E-02
801	0.8 MI SW - DISCHARGE CANAL	9/1/2009	412.8	PB-214	8.97E-02	4.03E-02
801	0.8 MI SW - DISCHARGE CANAL	9/1/2009	412.8	BE-7	9.07E-01	2.13E-01
801	0.8 MI SW - DISCHARGE CANAL	10/1/2009	557.3	BI-214	1.61E-01	3.03E-02
801	0.8 MI SW - DISCHARGE CANAL	10/1/2009	557.3	BE-7	1.29E+00	1.69E-01
801	0.8 MI SW - DISCHARGE CANAL	10/1/2009	557.3	PB-214	8.40E-02	2.35E-02

# ***BNP Radiological Environmental Monitoring Gamma Isotopic Report***

*Media Type: Broadleaf Vegetation*

*Quantity: GRAMS (wet)*

*Concentration (Activity): pCi/gm wet*

**Media:** WAX MYRTLE

<b>Sample Point</b>	<b>Sample Date</b>	<b>Quantity</b>	<b>Isotope</b>	<b>Activity</b>	<b>2 Sigma Error</b>
801 0.8 MI SW - DISCHARGE CANAL	10/1/2009	557.3	TL-208	1.98E-02	1.32E-02
801 0.8 MI SW - DISCHARGE CANAL	10/1/2009	557.3	K-40	3.01E+00	3.24E-01
801 0.8 MI SW - DISCHARGE CANAL	10/1/2009	557.3	PB-212	5.14E-02	1.91E-02
801 0.8 MI SW - DISCHARGE CANAL	11/2/2009	443.9	BE-7	2.32E+00	2.54E-01
801 0.8 MI SW - DISCHARGE CANAL	11/2/2009	443.9	TL-208	2.95E-02	1.80E-02
801 0.8 MI SW - DISCHARGE CANAL	11/2/2009	443.9	PB-212	4.97E-02	3.47E-02
801 0.8 MI SW - DISCHARGE CANAL	11/2/2009	443.9	BI-214	1.08E-01	3.23E-02
801 0.8 MI SW - DISCHARGE CANAL	11/2/2009	443.9	PB-214	1.15E-01	3.44E-02
801 0.8 MI SW - DISCHARGE CANAL	11/2/2009	443.9	RA-226	5.75E-01	3.67E-01
801 0.8 MI SW - DISCHARGE CANAL	11/2/2009	443.9	AC-228	1.36E-01	4.57E-02
801 0.8 MI SW - DISCHARGE CANAL	11/2/2009	443.9	TH-234	6.46E-01	5.02E-01
801 0.8 MI SW - DISCHARGE CANAL	11/2/2009	443.9	K-40	3.06E+00	3.74E-01
801 0.8 MI SW - DISCHARGE CANAL	12/1/2009	504.7	PB-214	8.94E-02	2.53E-02
801 0.8 MI SW - DISCHARGE CANAL	12/1/2009	504.7	BE-7	8.75E-01	1.46E-01
801 0.8 MI SW - DISCHARGE CANAL	12/1/2009	504.7	K-40	2.43E+00	2.87E-01
801 0.8 MI SW - DISCHARGE CANAL	12/1/2009	504.7	TL-208	2.35E-02	1.34E-02
801 0.8 MI SW - DISCHARGE CANAL	12/1/2009	504.7	PB-212	7.85E-02	2.20E-02
801 0.8 MI SW - DISCHARGE CANAL	12/1/2009	504.7	RA-226	3.73E-01	2.31E-01
801 0.8 MI SW - DISCHARGE CANAL	12/1/2009	504.7	BI-214	8.90E-02	3.16E-02

# ***BNP Radiological Environmental Monitoring Gamma Isotopic Report***

*Media Type: Broadleaf Vegetation*

*Quantity: GRAMS (wet)*

*Concentration (Activity): pCi/gm wet*

**Media:** WAX MYRTLE

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>	
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	1/1/2009	468.2	PB-214	8.07E-02	3.33E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	1/1/2009	468.2	BE-7	2.02E+00	2.70E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	1/1/2009	468.2	TH-234	6.22E-01	5.87E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	1/1/2009	468.2	K-40	1.88E+00	3.33E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	1/1/2009	468.2	RA-226	5.45E-01	3.68E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	1/1/2009	468.2	BI-214	1.15E-01	3.41E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	1/1/2009	468.2	PB-212	5.45E-02	3.23E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	1/1/2009	468.2	TL-208	2.10E-02	1.78E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	2/2/2009	505.1	BI-214	6.71E-02	3.01E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	2/2/2009	505.1	BE-7	2.32E+00	2.17E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	2/2/2009	505.1	PB-212	4.72E-02	2.34E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	2/2/2009	505.1	PB-214	4.29E-02	2.33E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	2/2/2009	505.1	RA-226	5.59E-01	3.11E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	2/2/2009	505.1	TL-208	2.00E-02	1.18E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	2/2/2009	505.1	K-40	1.42E+00	2.51E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	3/1/2009	435.3	BE-7	2.05E+00	2.93E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	3/1/2009	435.3	RA-226	5.78E-01	3.46E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	3/1/2009	435.3	K-40	2.16E+00	3.67E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	3/1/2009	435.3	PB-212	6.68E-02	3.12E-02

# ***BNP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

**Media:** WAX MYRTLE

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	3/1/2009	435.3	TL-208	2.17E-02	1.97E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	3/1/2009	435.3	BI-214	7.88E-02	4.82E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	4/1/2009	502	RA-226	4.92E-01	3.37E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	4/1/2009	502	BE-7	3.96E+00	3.81E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	4/1/2009	502	K-40	1.65E+00	3.58E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	4/1/2009	502	BI-214	1.65E-01	5.08E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	4/1/2009	502	TL-208	3.85E-02	1.89E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	4/1/2009	502	PB-212	5.37E-02	2.55E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	4/1/2009	502	PB-214	1.34E-01	4.75E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	5/1/2009	557.7	BI-214	3.78E-02	1.84E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	5/1/2009	557.7	TL-208	2.14E-02	8.96E-03
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	5/1/2009	557.7	PB-214	3.23E-02	2.06E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	5/1/2009	557.7	K-40	3.01E+00	2.97E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	5/1/2009	557.7	RA-226	3.83E-01	1.83E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	5/1/2009	557.7	TH-234	4.91E-01	2.88E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	5/1/2009	557.7	BE-7	1.39E+00	1.51E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	5/1/2009	557.7	PB-212	3.58E-02	1.42E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	6/1/2009	559.2	K-40	2.71E+00	3.00E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	6/1/2009	559.2	CS-137	1.78E-02	1.08E-02

# ***BNP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

**Media:** WAX MYRTLE

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	6/1/2009	559.2	TL-208	1.50E-02	9.32E-03
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	6/1/2009	559.2	PB-212	3.81E-02	1.38E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	6/1/2009	559.2	BI-214	5.46E-02	1.96E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	6/1/2009	559.2	PB-214	3.25E-02	2.13E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	6/1/2009	559.2	RA-226	3.83E-01	3.05E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	6/1/2009	559.2	AC-228	9.64E-02	3.69E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	6/1/2009	559.2	BE-7	1.06E+00	1.43E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	7/1/2009	530.6	TL-208	1.66E-02	9.45E-03
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	7/1/2009	530.6	PB-212	5.55E-02	1.99E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	7/1/2009	530.6	BI-214	1.16E-01	2.94E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	7/1/2009	530.6	PB-214	8.00E-02	2.71E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	7/1/2009	530.6	RA-226	3.08E-01	2.06E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	7/1/2009	530.6	AC-228	1.01E-01	4.51E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	7/1/2009	530.6	BE-7	1.24E+00	1.63E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	7/1/2009	530.6	K-40	2.58E+00	3.10E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	8/1/2009	596.8	BE-7	6.94E-01	1.13E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	8/1/2009	596.8	TH-234	4.37E-01	3.44E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	8/1/2009	596.8	RA-226	3.74E-01	2.17E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	8/1/2009	596.8	BI-214	4.01E-02	1.76E-02

# ***BNP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

**Media:** WAX MYRTLE

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	8/1/2009	596.8	PB-212	3.12E-02	1.91E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	8/1/2009	596.8	CS-137	1.60E-02	1.07E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	8/1/2009	596.8	K-40	1.95E+00	2.48E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	9/1/2009	494.2	TH-234	4.79E-01	3.68E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	9/1/2009	494.2	BE-7	1.03E+00	1.44E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	9/1/2009	494.2	K-40	2.49E+00	3.00E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	9/1/2009	494.2	PB-212	4.65E-02	2.63E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	9/1/2009	494.2	BI-214	4.95E-02	2.48E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	9/1/2009	494.2	PB-214	6.32E-02	2.57E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	9/1/2009	494.2	RA-226	4.31E-01	2.89E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	10/1/2009	439.9	RA-226	7.56E-01	3.77E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	10/1/2009	439.9	BI-214	7.79E-02	4.45E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	10/1/2009	439.9	TL-208	3.33E-02	1.84E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	10/1/2009	439.9	K-40	2.54E+00	4.44E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	10/1/2009	439.9	BE-7	1.80E+00	2.97E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	10/1/2009	439.9	AC-228	1.37E-01	5.21E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	10/1/2009	439.9	PB-212	9.60E-02	3.54E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	11/2/2009	465.3	AC-228	1.42E-01	4.83E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	11/2/2009	465.3	K-40	2.75E+00	3.32E-01

# ***BNP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

**Media:** WAX MYRTLE

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	11/2/2009	465.3	BE-7	2.61E+00	2.63E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	11/2/2009	465.3	TL-208	3.69E-02	1.69E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	11/2/2009	465.3	BI-214	1.15E-01	3.37E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	11/2/2009	465.3	PB-212	8.02E-02	2.69E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	11/2/2009	465.3	PB-214	1.10E-01	3.60E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	12/1/2009	432.9	TL-208	4.79E-02	2.20E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	12/1/2009	432.9	TH-234	1.85E+00	8.06E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	12/1/2009	432.9	PB-212	8.74E-02	3.52E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	12/1/2009	432.9	PB-214	9.88E-02	5.07E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	12/1/2009	432.9	K-40	2.65E+00	4.24E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	12/1/2009	432.9	BE-7	1.88E+00	2.94E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	12/1/2009	432.9	RA-226	5.09E-01	4.41E-01
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	12/1/2009	432.9	AC-228	1.43E-01	6.31E-02
802	10.1 MI - (CONTROL) - LOCATION NOT SPECIFIED	12/1/2009	432.9	BI-214	1.11E-01	5.03E-02
803	0.6 MI SSE - SPOIL POND	1/1/2009	459.3	BI-214	6.21E-02	4.49E-02
803	0.6 MI SSE - SPOIL POND	1/1/2009	459.3	BE-7	1.65E+00	3.18E-01
803	0.6 MI SSE - SPOIL POND	1/1/2009	459.3	K-40	4.48E+00	5.95E-01
803	0.6 MI SSE - SPOIL POND	1/1/2009	459.3	PB-212	6.23E-02	2.76E-02
803	0.6 MI SSE - SPOIL POND	2/2/2009	524.7	TH-234	4.98E-01	3.29E-01

# ***BNP Radiological Environmental Monitoring Gamma Isotopic Report***

*Media Type: Broadleaf Vegetation*

*Quantity: GRAMS (wet)*

*Concentration (Activity): pCi/gm wet*

**Media:** WAX MYRTLE

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>
803 0.6 MI SSE - SPOIL POND	2/2/2009	524.7	PB-214	1.90E-02	1.49E-02
803 0.6 MI SSE - SPOIL POND	2/2/2009	524.7	PB-212	4.51E-02	1.34E-02
803 0.6 MI SSE - SPOIL POND	2/2/2009	524.7	TL-208	1.17E-02	1.03E-02
803 0.6 MI SSE - SPOIL POND	2/2/2009	524.7	CO-60	2.63E-02	1.01E-02
803 0.6 MI SSE - SPOIL POND	2/2/2009	524.7	K-40	1.78E+00	2.44E-01
803 0.6 MI SSE - SPOIL POND	2/2/2009	524.7	BE-7	1.27E+00	1.45E-01
803 0.6 MI SSE - SPOIL POND	2/2/2009	524.7	BI-214	2.99E-02	2.15E-02
803 0.6 MI SSE - SPOIL POND	2/5/2009	501.2	K-40	2.95E+00	3.22E-01
803 0.6 MI SSE - SPOIL POND	2/5/2009	501.2	TL-208	3.09E-02	1.44E-02
803 0.6 MI SSE - SPOIL POND	2/5/2009	501.2	PB-212	5.77E-02	1.92E-02
803 0.6 MI SSE - SPOIL POND	2/5/2009	501.2	BI-214	5.22E-02	2.08E-02
803 0.6 MI SSE - SPOIL POND	2/5/2009	501.2	RA-226	4.28E-01	3.14E-01
803 0.6 MI SSE - SPOIL POND	2/5/2009	501.2	TH-234	4.14E-01	3.37E-01
803 0.6 MI SSE - SPOIL POND	2/5/2009	501.2	BE-7	1.29E+00	1.69E-01
803 0.6 MI SSE - SPOIL POND	3/1/2009	607.3	BE-7	1.12E+00	1.44E-01
803 0.6 MI SSE - SPOIL POND	3/1/2009	607.3	TH-234	5.67E-01	4.58E-01
803 0.6 MI SSE - SPOIL POND	3/1/2009	607.3	PB-212	2.08E-02	1.34E-02
803 0.6 MI SSE - SPOIL POND	3/1/2009	607.3	K-40	1.91E+00	2.38E-01
803 0.6 MI SSE - SPOIL POND	3/1/2009	607.3	PB-214	3.31E-02	2.02E-02



# BNP 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
803 0.6 MI SSE - SPOIL POND	3/1/2009	607.3	TL-208	1.04E-02	9.12E-03
803 0.6 MI SSE - SPOIL POND	3/1/2009	607.3	RA-226	2.30E-01	2.11E-01
803 0.6 MI SSE - SPOIL POND	3/1/2009	607.3	BI-214	2.73E-02	2.15E-02
803 0.6 MI SSE - SPOIL POND	4/1/2009	654.2	TL-208	1.36E-02	9.16E-03
803 0.6 MI SSE - SPOIL POND	4/1/2009	654.2	BE-7	1.45E+00	1.60E-01
803 0.6 MI SSE - SPOIL POND	4/1/2009	654.2	PB-212	1.97E-02	1.71E-02
803 0.6 MI SSE - SPOIL POND	4/1/2009	654.2	BI-214	5.21E-02	2.12E-02
803 0.6 MI SSE - SPOIL POND	4/1/2009	654.2	RA-226	3.25E-01	1.91E-01
803 0.6 MI SSE - SPOIL POND	4/1/2009	654.2	TH-234	4.71E-01	2.65E-01
803 0.6 MI SSE - SPOIL POND	4/1/2009	654.2	K-40	1.76E+00	2.14E-01
803 0.6 MI SSE - SPOIL POND	5/1/2009	582.7	BE-7	1.09E+00	1.45E-01
803 0.6 MI SSE - SPOIL POND	5/1/2009	582.7	K-40	2.42E+00	2.90E-01
803 0.6 MI SSE - SPOIL POND	5/1/2009	582.7	PB-212	3.09E-02	1.78E-02
803 0.6 MI SSE - SPOIL POND	5/1/2009	582.7	BI-214	3.10E-02	1.63E-02
803 0.6 MI SSE - SPOIL POND	5/1/2009	582.7	RA-226	3.47E-01	2.01E-01
803 0.6 MI SSE - SPOIL POND	6/1/2009	577.9	PB-212	3.74E-02	2.01E-02
803 0.6 MI SSE - SPOIL POND	6/1/2009	577.9	K-40	2.86E+00	3.19E-01
803 0.6 MI SSE - SPOIL POND	6/1/2009	577.9	BI-214	3.69E-02	1.86E-02
803 0.6 MI SSE - SPOIL POND	6/1/2009	577.9	RA-226	4.57E-01	2.50E-01

# ***BNP Radiological Environmental Monitoring Gamma Isotopic Report***

*Media Type: Broadleaf Vegetation*

*Quantity: GRAMS (wet)*

*Concentration (Activity): pCi/gm wet*

**Media:** WAX MYRTLE

<b>Sample Point</b>	<b>Sample Date</b>	<b>Quantity</b>	<b>Isotope</b>	<b>Activity</b>	<b>2 Sigma Error</b>
803 0.6 MI SSE - SPOIL POND	6/1/2009	577.9	BE-7	9.82E-01	1.49E-01
803 0.6 MI SSE - SPOIL POND	7/1/2009	519.7	K-40	3.12E+00	3.58E-01
803 0.6 MI SSE - SPOIL POND	7/1/2009	519.7	BE-7	9.50E-01	1.48E-01
803 0.6 MI SSE - SPOIL POND	7/1/2009	519.7	RA-226	3.42E-01	2.47E-01
803 0.6 MI SSE - SPOIL POND	7/1/2009	519.7	PB-214	3.40E-02	2.56E-02
803 0.6 MI SSE - SPOIL POND	7/1/2009	519.7	BI-214	6.51E-02	2.91E-02
803 0.6 MI SSE - SPOIL POND	7/1/2009	519.7	PB-212	3.43E-02	2.10E-02
803 0.6 MI SSE - SPOIL POND	7/1/2009	519.7	TL-208	1.34E-02	9.44E-03
803 0.6 MI SSE - SPOIL POND	8/1/2009	446	BE-7	1.01E+00	2.31E-01
803 0.6 MI SSE - SPOIL POND	8/1/2009	446	BI-214	1.18E-01	4.87E-02
803 0.6 MI SSE - SPOIL POND	8/1/2009	446	PB-214	7.32E-02	3.35E-02
803 0.6 MI SSE - SPOIL POND	8/1/2009	446	PB-212	4.53E-02	2.49E-02
803 0.6 MI SSE - SPOIL POND	8/1/2009	446	RA-226	4.10E-01	3.14E-01
803 0.6 MI SSE - SPOIL POND	8/1/2009	446	TH-234	8.83E-01	4.99E-01
803 0.6 MI SSE - SPOIL POND	8/1/2009	446	K-40	3.36E+00	4.66E-01
803 0.6 MI SSE - SPOIL POND	9/1/2009	419.2	RA-226	5.50E-01	3.79E-01
803 0.6 MI SSE - SPOIL POND	9/1/2009	419.2	TH-234	8.16E-01	5.39E-01
803 0.6 MI SSE - SPOIL POND	9/1/2009	419.2	BE-7	1.11E+00	2.65E-01
803 0.6 MI SSE - SPOIL POND	9/1/2009	419.2	K-40	3.96E+00	5.40E-01

# *BNP Radiological Environmental Monitoring Gamma Isotopic Report*

*Media Type: Broadleaf Vegetation*

*Quantity: GRAMS (wet)*

*Concentration (Activity): pCi/gm wet*

**Media:** WAX MYRTLE

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>	
803	0.6 MI SSE - SPOIL POND	9/1/2009	419.2	TL-208	3.52E-02	2.08E-02
803	0.6 MI SSE - SPOIL POND	9/1/2009	419.2	PB-212	7.69E-02	3.55E-02
803	0.6 MI SSE - SPOIL POND	9/1/2009	419.2	BI-214	1.63E-01	5.21E-02
803	0.6 MI SSE - SPOIL POND	9/1/2009	419.2	PB-214	1.22E-01	4.41E-02
803	0.6 MI SSE - SPOIL POND	10/1/2009	433.4	BE-7	1.54E+00	2.11E-01
803	0.6 MI SSE - SPOIL POND	10/1/2009	433.4	PB-212	4.82E-02	2.51E-02
803	0.6 MI SSE - SPOIL POND	10/1/2009	433.4	BI-214	3.62E-02	3.11E-02
803	0.6 MI SSE - SPOIL POND	10/1/2009	433.4	PB-214	6.78E-02	3.75E-02
803	0.6 MI SSE - SPOIL POND	10/1/2009	433.4	K-40	3.97E+00	4.44E-01
803	0.6 MI SSE - SPOIL POND	11/2/2009	454.3	BI-214	9.59E-02	3.76E-02
803	0.6 MI SSE - SPOIL POND	11/2/2009	454.3	PB-214	8.74E-02	2.57E-02
803	0.6 MI SSE - SPOIL POND	11/2/2009	454.3	PB-212	3.92E-02	2.34E-02
803	0.6 MI SSE - SPOIL POND	11/2/2009	454.3	TL-208	1.64E-02	1.18E-02
803	0.6 MI SSE - SPOIL POND	11/2/2009	454.3	K-40	2.83E+00	3.47E-01
803	0.6 MI SSE - SPOIL POND	11/2/2009	454.3	BE-7	1.74E+00	2.15E-01
803	0.6 MI SSE - SPOIL POND	11/2/2009	454.3	RA-226	6.17E-01	2.34E-01
803	0.6 MI SSE - SPOIL POND	12/1/2009	404.5	BE-7	2.17E+00	3.35E-01
803	0.6 MI SSE - SPOIL POND	12/1/2009	404.5	K-40	2.50E+00	4.09E-01
803	0.6 MI SSE - SPOIL POND	12/1/2009	404.5	TL-208	2.86E-02	1.93E-02

# BNP 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	
803	0.6 MI SSE - SPOIL POND	12/1/2009	404.5	PB-212	7.34E-02	3.58E-02
803	0.6 MI SSE - SPOIL POND	12/1/2009	404.5	BI-214	9.14E-02	3.89E-02
803	0.6 MI SSE - SPOIL POND	12/1/2009	404.5	RA-226	7.47E-01	4.37E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	1/1/2009	484.7	RA-226	4.04E-01	3.59E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	1/1/2009	484.7	TL-208	2.42E-02	1.97E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	1/1/2009	484.7	K-40	2.22E+00	3.54E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	1/1/2009	484.7	PB-212	5.04E-02	2.62E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	1/1/2009	484.7	BE-7	1.63E+00	2.40E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	2/2/2009	534	PB-212	3.93E-02	1.68E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	2/2/2009	534	BE-7	2.20E+00	2.29E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	2/2/2009	534	PB-214	5.22E-02	2.71E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	2/2/2009	534	K-40	2.34E+00	3.03E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	2/2/2009	534	BI-214	5.35E-02	2.62E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	3/1/2009	506.9	BE-7	1.64E+00	1.81E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	3/1/2009	506.9	BI-214	3.13E-02	2.49E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	3/1/2009	506.9	PB-212	3.02E-02	1.73E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	3/1/2009	506.9	K-40	2.25E+00	2.94E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	4/1/2009	647.2	BE-7	1.72E+00	2.52E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	4/1/2009	647.2	K-40	3.35E+00	4.22E-01

# BNP 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	
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	5/1/2009	695.2	RA-226	2.54E-01	1.57E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	5/1/2009	695.2	TL-208	1.40E-02	9.80E-03
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	5/1/2009	695.2	PB-212	2.65E-02	1.76E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	5/1/2009	695.2	BI-214	5.30E-02	1.85E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	5/1/2009	695.2	PB-214	3.33E-02	1.79E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	5/1/2009	695.2	K-40	2.19E+00	2.55E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	5/1/2009	695.2	BE-7	1.16E+00	1.41E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	5/1/2009	695.2	TH-234	3.88E-01	2.79E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	6/1/2009	593.6	PB-214	4.90E-02	2.78E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	6/1/2009	593.6	PB-212	4.24E-02	1.51E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	6/1/2009	593.6	BI-214	5.49E-02	2.38E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	6/1/2009	593.6	BE-7	6.68E-01	1.22E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	6/1/2009	593.6	K-40	2.54E+00	2.80E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	6/1/2009	593.6	TL-208	2.07E-02	1.29E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	6/1/2009	593.6	RA-226	5.07E-01	2.17E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	7/1/2009	548.9	BI-214	7.13E-02	2.20E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	7/1/2009	548.9	PB-212	2.93E-02	2.41E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	7/1/2009	548.9	PB-214	5.11E-02	3.34E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	7/1/2009	548.9	RA-226	2.76E-01	2.31E-01

# BNP 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	
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	7/1/2009	548.9	TH-234	5.22E-01	2.93E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	7/1/2009	548.9	BE-7	1.01E+00	1.58E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	7/1/2009	548.9	TL-208	1.94E-02	1.17E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	7/1/2009	548.9	K-40	2.43E+00	2.74E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	8/1/2009	500.2	TH-234	8.63E-01	5.08E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	8/1/2009	500.2	BE-7	1.14E+00	2.09E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	8/1/2009	500.2	K-40	2.25E+00	3.68E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	8/1/2009	500.2	PB-212	3.93E-02	3.44E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	8/1/2009	500.2	BI-214	4.55E-02	4.11E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	8/1/2009	500.2	PB-214	6.92E-02	3.89E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	8/1/2009	500.2	RA-226	4.27E-01	3.36E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	9/1/2009	472.5	PB-212	5.42E-02	2.23E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	9/1/2009	472.5	RA-226	4.30E-01	2.82E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	9/1/2009	472.5	TH-234	6.84E-01	3.38E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	9/1/2009	472.5	K-40	2.93E+00	3.37E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	9/1/2009	472.5	BE-7	8.32E-01	1.51E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	10/1/2009	489.2	RA-226	3.64E-01	2.15E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	10/1/2009	489.2	BE-7	7.67E-01	1.25E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	10/1/2009	489.2	K-40	2.01E+00	2.59E-01

# ***BNP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Broadleaf Vegetation

Quantity: GRAMS (wet)

Concentration (Activity): pCi/gm wet

**Media:** WAX MYRTLE

<b>Sample Point</b>	<b>Sample Date</b>	<b>Quantity</b>	<b>Isotope</b>	<b>Activity</b>	<b>2 Sigma Error</b>	
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	10/1/2009	489.2	PB-212	2.59E-02	1.53E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	10/1/2009	489.2	PB-214	5.94E-02	2.38E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	10/1/2009	489.2	TH-234	4.26E-01	3.36E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	10/1/2009	489.2	BI-214	4.79E-02	2.80E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	11/2/2009	510.2	TL-208	2.09E-02	1.22E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	11/2/2009	510.2	PB-212	4.29E-02	2.15E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	11/2/2009	510.2	RA-226	3.10E-01	2.62E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	11/2/2009	510.2	BI-214	6.31E-02	2.34E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	11/2/2009	510.2	K-40	2.16E+00	2.73E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	11/2/2009	510.2	TH-234	6.30E-01	3.39E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	11/2/2009	510.2	BE-7	6.63E-01	1.34E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	12/1/2009	497.3	BI-214	2.72E-02	2.43E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	12/1/2009	497.3	PB-212	5.09E-02	2.12E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	12/1/2009	497.3	TL-208	2.23E-02	1.50E-02
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	12/1/2009	497.3	K-40	2.48E+00	3.20E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	12/1/2009	497.3	BE-7	8.08E-01	1.53E-01
804	0.7 MILES S - LEONARD STREET PLANT EXIT ADJ	12/1/2009	497.3	RA-226	2.74E-01	2.51E-01

# ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: *Fish and Invertebrates*

Quantity: *GRAMS (wet)*

Concentration (Activity): *pCi/gm wet*

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
700 5.5 MI SSW - FREE SWIMMERS - ATLANTIC OCEAN AT DI	5/22/2009	700.2	K-40	4.99E+00	6.93E-01
700 5.5 MI SSW - FREE SWIMMERS - ATLANTIC OCEAN AT DI	10/22/2009	760.6	BI-214	6.05E-02	3.98E-02
700 5.5 MI SSW - FREE SWIMMERS - ATLANTIC OCEAN AT DI	10/22/2009	760.6	K-40	4.02E+00	6.05E-01
700 5.5 MI SSW - FREE SWIMMERS - ATLANTIC OCEAN AT DI	10/22/2009	760.6	PB-214	5.50E-02	3.87E-02
701 5.5 MI SSW - BOTTOM FEEDER - ATLANTIC OCEAN AT DI	5/22/2009	677.4	K-40	3.38E+00	6.06E-01
701 5.5 MI SSW - BOTTOM FEEDER - ATLANTIC OCEAN AT DI	10/22/2009	708	K-40	4.27E+00	6.10E-01
701 5.5 MI SSW - BOTTOM FEEDER - ATLANTIC OCEAN AT DI	10/22/2009	708	BI-214	1.25E-01	5.13E-02
701 5.5 MI SSW - BOTTOM FEEDER - ATLANTIC OCEAN AT DI	10/22/2009	708	PB-214	1.31E-01	4.65E-02
702 5.5 MI SSW - SH/BO* - ATLANTIC OCEAN AT DISCHARGE	6/2/2009	585.5	BI-214	6.94E-02	4.44E-02
702 5.5 MI SSW - SH/BO* - ATLANTIC OCEAN AT DISCHARGE	6/2/2009	585.5	PB-212	4.65E-02	3.21E-02
702 5.5 MI SSW - SH/BO* - ATLANTIC OCEAN AT DISCHARGE	6/2/2009	585.5	PB-214	8.52E-02	5.09E-02
702 5.5 MI SSW - SH/BO* - ATLANTIC OCEAN AT DISCHARGE	6/2/2009	585.5	K-40	3.08E+00	5.77E-01
702 5.5 MI SSW - SH/BO* - ATLANTIC OCEAN AT DISCHARGE	6/2/2009	585.5	TL-208	2.55E-02	2.09E-02
702 5.5 MI SSW - SH/BO* - ATLANTIC OCEAN AT DISCHARGE	10/22/2009	788.7	K-40	3.63E+00	5.37E-01
702 5.5 MI SSW - SH/BO* - ATLANTIC OCEAN AT DISCHARGE	10/22/2009	788.7	BI-214	5.08E-02	4.43E-02
702 5.5 MI SSW - SH/BO* - ATLANTIC OCEAN AT DISCHARGE	10/22/2009	788.7	PB-214	1.10E-01	3.85E-02
703 FREE SWIMMERS - ATLANTIC OCEAN (CONTROL)	6/2/2009	882.4	PB-214	5.49E-02	2.43E-02
703 FREE SWIMMERS - ATLANTIC OCEAN (CONTROL)	6/2/2009	882.4	RA-226	3.80E-01	2.40E-01
703 FREE SWIMMERS - ATLANTIC OCEAN (CONTROL)	6/2/2009	882.4	K-40	3.72E+00	5.57E-01
703 FREE SWIMMERS - ATLANTIC OCEAN (CONTROL)	10/27/2009	548.1	K-40	3.39E+00	6.33E-01
703 FREE SWIMMERS - ATLANTIC OCEAN (CONTROL)	10/27/2009	548.1	BI-214	6.84E-02	3.85E-02
703 FREE SWIMMERS - ATLANTIC OCEAN (CONTROL)	10/27/2009	548.1	PB-214	9.85E-02	5.20E-02
704 BOTTOM FEEDER - ATLANTIC OCEAN (CONTROL)	6/2/2009	946	BI-214	6.42E-02	2.28E-02
704 BOTTOM FEEDER - ATLANTIC OCEAN (CONTROL)	6/2/2009	946	K-40	3.38E+00	4.85E-01
704 BOTTOM FEEDER - ATLANTIC OCEAN (CONTROL)	6/2/2009	946	PB-214	4.47E-02	3.19E-02
704 BOTTOM FEEDER - ATLANTIC OCEAN (CONTROL)	10/27/2009	570.6	PB-214	2.96E-01	6.18E-02

\* *Shellfish/Benthic Organisms*



## ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

*Media Type: Fish and Invertebrates*

*Quantity: GRAMS (wet)*

*Concentration (Activity): pCi/gm wet*

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Isotope</i></b>	<b><i>Activity</i></b>	<b><i>2 Sigma Error</i></b>	
704	BOTTOM FEEDER - ATLANTIC OCEAN (CONTROL)	10/27/2009	570.6	BI-214	2.11E-01	6.59E-02
704	BOTTOM FEEDER - ATLANTIC OCEAN (CONTROL)	10/27/2009	570.6	K-40	2.83E+00	5.97E-01
705	SH/BO* - ATLANTIC OCEAN (CONTROL)	6/2/2009	562.9	K-40	3.18E+00	5.98E-01
705	SH/BO* - ATLANTIC OCEAN (CONTROL)	6/2/2009	562.9	BI-214	6.54E-02	4.64E-02
705	SH/BO* - ATLANTIC OCEAN (CONTROL)	10/27/2009	592.8	PB-214	4.83E-02	3.87E-02
705	SH/BO* - ATLANTIC OCEAN (CONTROL)	10/27/2009	592.8	PB-212	3.02E-02	2.26E-02
705	SH/BO* - ATLANTIC OCEAN (CONTROL)	10/27/2009	592.8	K-40	2.38E+00	5.04E-01
706	NANCY'S CREEK - FREE SWIMMERS	9/30/2009	1455	K-40	3.94E+00	
707	NANCY'S CREEK - BOTTOM FEEDERS	9/30/2009	1699	K-40	3.49E+00	
708	NANCY'S CREEK - SH/BO*	9/30/2009	2150	K-40	2.20E+00	

# *BSEP Radiological Environmental Monitoring Gamma Isotopic Report*

Media Type: Shoreline Sediment

Quantity: GRAMS (dry)

Concentration (Activity): pCi/gm dry

<i>Sample Point</i>	<i>Sample Date</i>	<i>Quantity</i>	<i>Isotope</i>	<i>Activity</i>	<i>2 Sigma Error</i>
500 5.0 MI SSW - DISCHARGE; BEACH NEAR OD PUMPS	5/21/2009	1384	AC-228	9.88E-02	5.60E-02
500 5.0 MI SSW - DISCHARGE; BEACH NEAR OD PUMPS	5/21/2009	1384	RA-226	4.52E-01	2.71E-01
500 5.0 MI SSW - DISCHARGE; BEACH NEAR OD PUMPS	5/21/2009	1384	PB-214	1.87E-01	4.66E-02
500 5.0 MI SSW - DISCHARGE; BEACH NEAR OD PUMPS	5/21/2009	1384	BI-214	2.06E-01	4.30E-02
500 5.0 MI SSW - DISCHARGE; BEACH NEAR OD PUMPS	5/21/2009	1384	PB-212	1.35E-01	2.92E-02
500 5.0 MI SSW - DISCHARGE; BEACH NEAR OD PUMPS	5/21/2009	1384	TL-208	6.06E-02	2.09E-02
500 5.0 MI SSW - DISCHARGE; BEACH NEAR OD PUMPS	5/21/2009	1384	K-40	3.19E+00	4.30E-01
500 5.0 MI SSW - DISCHARGE; BEACH NEAR OD PUMPS	10/26/2009	1565.7	AC-228	7.12E-02	4.86E-02
500 5.0 MI SSW - DISCHARGE; BEACH NEAR OD PUMPS	10/26/2009	1565.7	TL-208	3.35E-02	1.24E-02
500 5.0 MI SSW - DISCHARGE; BEACH NEAR OD PUMPS	10/26/2009	1565.7	PB-212	1.21E-01	2.46E-02
500 5.0 MI SSW - DISCHARGE; BEACH NEAR OD PUMPS	10/26/2009	1565.7	PB-214	2.89E-01	4.86E-02
500 5.0 MI SSW - DISCHARGE; BEACH NEAR OD PUMPS	10/26/2009	1565.7	K-40	1.73E+00	2.80E-01
500 5.0 MI SSW - DISCHARGE; BEACH NEAR OD PUMPS	10/26/2009	1565.7	BI-214	1.93E-01	4.03E-02
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	1/14/2009	1061.4	BE-7	4.98E-01	1.69E-01
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	1/14/2009	1061.4	K-40	9.97E+00	7.78E-01
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	1/14/2009	1061.4	CS-137	1.44E-01	3.07E-02
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	1/14/2009	1061.4	TL-208	2.04E-01	3.01E-02
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	1/14/2009	1061.4	BI-212	3.22E-01	1.23E-01
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	1/14/2009	1061.4	PB-212	5.66E-01	5.83E-02
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	1/14/2009	1061.4	BI-214	4.27E-01	5.72E-02
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	1/14/2009	1061.4	PB-214	4.67E-01	6.07E-02
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	1/14/2009	1061.4	TH-234	2.07E+00	7.84E-01
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	1/14/2009	1061.4	RA-226	2.04E+00	4.78E-01
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	1/14/2009	1061.4	AC-228	5.69E-01	9.61E-02
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	5/1/2009	761.3	AC-228	4.99E-01	1.78E-01
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	5/1/2009	761.3	RA-226	2.87E+00	8.46E-01

# ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Shoreline Sediment

Quantity: GRAMS (dry)

Concentration (Activity): pCi/gm dry

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Isotope</i></b>	<b><i>Activity</i></b>	<b><i>2 Sigma Error</i></b>
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	5/1/2009	761.3	PB-214	4.92E-01	9.14E-02
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	5/1/2009	761.3	K-40	9.88E+00	1.12E+00
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	5/1/2009	761.3	BI-214	4.67E-01	1.01E-01
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	5/1/2009	761.3	PB-212	5.52E-01	7.76E-02
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	5/1/2009	761.3	BI-212	3.81E-01	2.50E-01
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	5/1/2009	761.3	TH-234	4.08E+00	1.71E+00
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	5/1/2009	761.3	CS-137	2.03E-01	4.31E-02
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	5/1/2009	761.3	TL-208	2.00E-01	5.67E-02
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	12/21/2009	1027.9	BI-214	3.94E-01	7.87E-02
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	12/21/2009	1027.9	K-40	9.43E+00	9.64E-01
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	12/21/2009	1027.9	CS-137	1.48E-01	3.35E-02
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	12/21/2009	1027.9	TL-208	1.70E-01	3.81E-02
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	12/21/2009	1027.9	PB-212	5.86E-01	8.22E-02
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	12/21/2009	1027.9	PB-214	4.45E-01	8.43E-02
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	12/21/2009	1027.9	RA-226	1.61E+00	8.89E-01
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	12/21/2009	1027.9	AC-228	5.04E-01	1.24E-01
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	12/21/2009	1027.9	TH-234	1.52E+00	1.13E+00
501 NANCY'S CREEK ADJACENT TO WP-55 NEAR STORM DR	12/21/2009	1027.9	BI-212	4.75E-01	2.24E-01

# ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/L

<i><b>Sample Point</b></i>		<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>
400	0.6 MI NE - INTAKE CANAL (CONTROL)	1/17/2009	1	PB-212	1.01E+01	2.32E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	1/17/2009	1	TL-208	6.33E+00	2.16E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	1/17/2009	1	BI-214	1.20E+01	4.57E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	1/17/2009	1	PB-214	9.44E+00	3.44E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	1/17/2009	1	RA-226	1.19E+02	3.39E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	1/17/2009	1	TH-234	1.56E+02	6.35E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	1/17/2009	1	K-40	3.41E+02	3.84E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	2/16/2009	1	BI-214	1.11E+01	4.93E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	2/16/2009	1	PB-212	1.58E+01	3.15E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	2/16/2009	1	TL-208	6.71E+00	2.35E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	2/16/2009	1	K-40	6.52E+02	5.24E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	2/16/2009	1	PB-214	8.41E+00	3.42E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	2/16/2009	1	RA-226	1.70E+02	4.75E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	2/16/2009	1	TH-234	2.89E+02	6.56E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	3/17/2009	1	TL-208	3.72E+00	1.54E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	3/17/2009	1	RA-226	2.40E+02	5.10E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	3/17/2009	1	K-40	4.17E+02	3.99E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	3/17/2009	1	PB-212	1.01E+01	2.79E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	3/17/2009	1	BI-214	1.82E+01	4.13E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	3/17/2009	1	PB-214	1.77E+01	5.24E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	3/17/2009	1	TH-234	2.04E+02	7.12E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	4/16/2009	1	RA-226	1.94E+02	4.52E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	4/16/2009	1	PB-214	1.61E+01	4.47E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	4/16/2009	1	PB-212	8.60E+00	3.03E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	4/16/2009	1	TL-208	3.14E+00	1.92E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	4/16/2009	1	BI-214	1.63E+01	4.38E+00

# ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/L

<i><b>Sample Point</b></i>		<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>
400	0.6 MI NE - INTAKE CANAL (CONTROL)	4/16/2009	1	TH-234	2.04E+02	7.05E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	4/16/2009	1	K-40	4.02E+02	4.01E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	5/16/2009	1	TL-208	3.43E+00	1.66E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	5/16/2009	1	AC-228	9.85E+00	7.73E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	5/16/2009	1	K-40	7.21E+02	6.04E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	5/16/2009	1	RA-226	1.32E+02	4.93E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	5/16/2009	1	PB-214	9.10E+00	3.83E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	5/16/2009	1	TH-234	1.02E+02	6.36E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	5/16/2009	1	BI-214	1.19E+01	4.91E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	5/16/2009	1	PB-212	7.90E+00	3.27E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	6/16/2009	1	K-40	7.55E+02	6.23E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	6/16/2009	1	BI-214	2.27E+01	5.30E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	6/16/2009	1	PB-212	7.03E+00	3.39E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	6/16/2009	1	PB-214	1.32E+01	4.69E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	6/16/2009	1	TH-234	1.27E+02	7.13E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	6/16/2009	1	TL-208	3.05E+00	2.46E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	6/16/2009	1	RA-226	1.13E+02	4.43E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	7/16/2009	1	TL-208	5.55E+00	2.10E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	7/16/2009	1	PB-212	1.05E+01	3.30E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	7/16/2009	1	BI-214	1.19E+01	4.37E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	7/16/2009	1	PB-214	1.10E+01	3.84E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	7/16/2009	1	RA-226	1.28E+02	4.53E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	7/16/2009	1	AC-228	8.00E+00	5.93E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	7/16/2009	1	TH-234	1.21E+02	7.05E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	7/16/2009	1	K-40	7.77E+02	6.28E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	8/16/2009	1	K-40	7.99E+02	6.78E+01

# ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/L

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>
400 0.6 MI NE - INTAKE CANAL (CONTROL)	8/16/2009	1	TH-234	1.69E+02	7.75E+01
400 0.6 MI NE - INTAKE CANAL (CONTROL)	8/16/2009	1	RA-226	1.03E+02	4.94E+01
400 0.6 MI NE - INTAKE CANAL (CONTROL)	8/16/2009	1	BI-214	1.07E+01	3.65E+00
400 0.6 MI NE - INTAKE CANAL (CONTROL)	8/16/2009	1	TL-208	4.20E+00	2.14E+00
400 0.6 MI NE - INTAKE CANAL (CONTROL)	8/16/2009	1	PB-212	8.87E+00	3.56E+00
400 0.6 MI NE - INTAKE CANAL (CONTROL)	9/16/2009	1	RA-226	1.40E+02	4.38E+01
400 0.6 MI NE - INTAKE CANAL (CONTROL)	9/16/2009	1	BI-214	1.14E+01	4.39E+00
400 0.6 MI NE - INTAKE CANAL (CONTROL)	9/16/2009	1	TH-234	1.16E+02	7.15E+01
400 0.6 MI NE - INTAKE CANAL (CONTROL)	9/16/2009	1	K-40	7.42E+02	6.24E+01
400 0.6 MI NE - INTAKE CANAL (CONTROL)	9/16/2009	1	TL-208	6.07E+00	2.50E+00
400 0.6 MI NE - INTAKE CANAL (CONTROL)	9/16/2009	1	PB-212	1.12E+01	3.68E+00
400 0.6 MI NE - INTAKE CANAL (CONTROL)	10/16/2009	1	PB-212	7.99E+00	3.27E+00
400 0.6 MI NE - INTAKE CANAL (CONTROL)	10/16/2009	1	K-40	7.94E+02	6.55E+01
400 0.6 MI NE - INTAKE CANAL (CONTROL)	10/16/2009	1	TL-208	7.63E+00	2.49E+00
400 0.6 MI NE - INTAKE CANAL (CONTROL)	10/16/2009	1	TH-234	1.77E+02	7.06E+01
400 0.6 MI NE - INTAKE CANAL (CONTROL)	10/16/2009	1	BI-214	1.41E+01	4.30E+00
400 0.6 MI NE - INTAKE CANAL (CONTROL)	10/16/2009	1	RA-226	1.41E+02	5.35E+01
400 0.6 MI NE - INTAKE CANAL (CONTROL)	10/16/2009	1	PB-214	6.94E+00	3.99E+00
400 0.6 MI NE - INTAKE CANAL (CONTROL)	11/16/2009	1	BI-214	1.17E+01	4.10E+00
400 0.6 MI NE - INTAKE CANAL (CONTROL)	11/16/2009	1	TH-234	1.67E+02	7.09E+01
400 0.6 MI NE - INTAKE CANAL (CONTROL)	11/16/2009	1	AC-228	1.38E+01	8.37E+00
400 0.6 MI NE - INTAKE CANAL (CONTROL)	11/16/2009	1	RA-226	1.39E+02	4.51E+01
400 0.6 MI NE - INTAKE CANAL (CONTROL)	11/16/2009	1	PB-214	1.30E+01	4.95E+00
400 0.6 MI NE - INTAKE CANAL (CONTROL)	11/16/2009	1	PB-212	9.48E+00	3.86E+00
400 0.6 MI NE - INTAKE CANAL (CONTROL)	11/16/2009	1	K-40	7.78E+02	6.66E+01
400 0.6 MI NE - INTAKE CANAL (CONTROL)	11/16/2009	1	TL-208	2.94E+00	2.03E+00

# ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/L

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	
400	0.6 MI NE - INTAKE CANAL (CONTROL)	12/16/2009	1	PB-214	5.84E+00	4.38E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	12/16/2009	1	BI-214	9.31E+00	4.50E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	12/16/2009	1	PB-212	9.36E+00	3.59E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	12/16/2009	1	TL-208	7.66E+00	2.22E+00
400	0.6 MI NE - INTAKE CANAL (CONTROL)	12/16/2009	1	K-40	6.58E+02	5.61E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	12/16/2009	1	RA-226	1.05E+02	4.96E+01
400	0.6 MI NE - INTAKE CANAL (CONTROL)	12/16/2009	1	TH-234	1.02E+02	7.09E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	1/17/2009	1	K-40	9.59E+02	8.43E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	1/17/2009	1	TL-208	4.75E+00	2.85E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	1/17/2009	1	PB-212	9.06E+00	4.39E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	1/17/2009	1	BI-214	1.02E+01	6.27E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	1/17/2009	1	RA-226	7.10E+01	5.93E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	2/16/2009	1	PB-214	6.64E+00	5.17E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	2/16/2009	1	BI-214	1.04E+01	4.33E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	2/16/2009	1	RA-226	1.64E+02	5.69E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	2/16/2009	1	PB-212	1.21E+01	3.63E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	2/16/2009	1	TL-208	6.08E+00	2.30E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	2/16/2009	1	K-40	7.40E+02	6.11E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	2/16/2009	1	TH-234	1.50E+02	7.78E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	3/17/2009	1	K-40	7.05E+02	5.91E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	3/17/2009	1	TL-208	3.47E+00	2.02E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	3/17/2009	1	PB-212	8.41E+00	3.68E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	3/17/2009	1	BI-214	9.68E+00	4.98E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	3/17/2009	1	PB-214	8.59E+00	4.26E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	3/17/2009	1	RA-226	1.21E+02	4.56E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	3/17/2009	1	AC-228	1.41E+01	6.94E+00

# ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/L

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	3/17/2009	1	TH-234	1.06E+02	5.71E+01
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	4/16/2009	1	RA-226	2.02E+02	4.62E+01
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	4/16/2009	1	TL-208	4.75E+00	1.92E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	4/16/2009	1	BI-212	1.39E+01	1.35E+01
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	4/16/2009	1	PB-212	1.39E+01	3.01E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	4/16/2009	1	PB-214	1.06E+01	4.12E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	4/16/2009	1	K-40	5.85E+02	4.94E+01
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	4/16/2009	1	TH-234	2.60E+02	7.06E+01
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	4/16/2009	1	BI-214	9.87E+00	4.18E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	5/16/2009	1	TH-234	2.07E+02	7.08E+01
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	5/16/2009	1	RA-226	1.72E+02	3.85E+01
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	5/16/2009	1	PB-214	1.24E+01	3.81E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	5/16/2009	1	BI-214	1.01E+01	3.92E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	5/16/2009	1	PB-212	1.04E+01	2.98E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	5/16/2009	1	TL-208	3.61E+00	1.70E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	5/16/2009	1	K-40	4.32E+02	4.50E+01
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	6/16/2009	1	BI-214	2.14E+01	4.25E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	6/16/2009	1	K-40	4.86E+02	4.39E+01
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	6/16/2009	1	TH-234	1.99E+02	6.36E+01
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	6/16/2009	1	PB-214	1.85E+01	4.33E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	6/16/2009	1	PB-212	1.03E+01	3.06E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	6/16/2009	1	TL-208	5.04E+00	2.55E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	6/16/2009	1	RA-226	1.74E+02	4.35E+01
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	7/16/2009	1	BI-214	1.88E+01	4.15E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	7/16/2009	1	TH-234	2.45E+02	7.89E+01
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	7/16/2009	1	PB-214	1.63E+01	4.52E+00



# ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/L

<i><b>Sample Point</b></i>	<i><b>Sample Date</b></i>	<i><b>Quantity</b></i>	<i><b>Isotope</b></i>	<i><b>Activity</b></i>	<i><b>2 Sigma Error</b></i>	
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	7/16/2009	1	PB-212	1.26E+01	3.06E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	7/16/2009	1	TL-208	3.74E+00	1.96E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	7/16/2009	1	K-40	5.34E+02	4.99E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	7/16/2009	1	RA-226	2.05E+02	4.58E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	8/16/2009	1	PB-212	7.77E+00	3.23E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	8/16/2009	1	K-40	5.48E+02	4.60E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	8/16/2009	1	TL-208	3.18E+00	1.71E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	8/16/2009	1	TH-234	1.79E+02	7.11E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	8/16/2009	1	RA-226	2.01E+02	3.90E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	8/16/2009	1	PB-214	1.28E+01	3.59E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	8/16/2009	1	BI-214	1.50E+01	4.85E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	9/16/2009	1	RA-226	1.68E+02	4.44E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	9/16/2009	1	TL-208	5.57E+00	2.14E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	9/16/2009	1	PB-212	1.13E+01	3.00E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	9/16/2009	1	PB-214	7.55E+00	3.59E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	9/16/2009	1	TH-234	2.23E+02	6.57E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	9/16/2009	1	BI-214	1.29E+01	4.59E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	9/16/2009	1	K-40	7.05E+02	5.62E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	10/16/2009	1	PB-214	1.20E+01	3.98E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	10/16/2009	1	K-40	4.84E+02	4.54E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	10/16/2009	1	TL-208	3.50E+00	1.81E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	10/16/2009	1	BI-214	1.25E+01	4.08E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	10/16/2009	1	RA-226	2.18E+02	4.50E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	10/16/2009	1	TH-234	1.99E+02	7.00E+01
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	10/16/2009	1	PB-212	1.07E+01	3.05E+00
401	4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	11/16/2009	1	RA-226	1.74E+02	4.56E+01

# ***BSEP Radiological Environmental Monitoring Gamma Isotopic Report***

Media Type: Surface Water

Quantity: Liters

Concentration (Activity): pCi/L

<b><i>Sample Point</i></b>	<b><i>Sample Date</i></b>	<b><i>Quantity</i></b>	<b><i>Isotope</i></b>	<b><i>Activity</i></b>	<b><i>2 Sigma Error</i></b>
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	11/16/2009	1	K-40	4.57E+02	4.30E+01
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	11/16/2009	1	TH-234	1.81E+02	6.40E+01
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	11/16/2009	1	PB-214	1.49E+01	5.02E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	11/16/2009	1	BI-214	1.92E+01	4.14E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	11/16/2009	1	TL-208	3.18E+00	1.79E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	11/16/2009	1	PB-212	8.61E+00	2.53E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	12/16/2009	1	TH-234	2.32E+02	7.68E+01
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	12/16/2009	1	RA-226	2.13E+02	4.41E+01
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	12/16/2009	1	PB-214	8.16E+00	3.89E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	12/16/2009	1	BI-214	9.29E+00	3.84E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	12/16/2009	1	PB-212	6.96E+00	2.72E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	12/16/2009	1	TL-208	4.62E+00	1.81E+00
401 4.9 MI SSW - DISCHARGE CANAL @ OD PUMPS	12/16/2009	1	K-40	3.90E+02	3.92E+01