



Brunswick Nuclear Plant
P.O. Box 10429
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May 10, 2017

Serial: BSEP 17-0038

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
Annual Radiological Environmental Operating Report - 2016

Ladies and Gentlemen:

In accordance with Technical Specification (TS) 5.6.2 for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2, Duke Energy Progress, LLC, is submitting the enclosed Radiological Environmental Operating Report for 2016.

No regulatory commitments are contained in this submittal. Please refer any questions regarding this submittal to Mr. Lee Grzeck, Manager - Regulatory Affairs, at (910) 457-2487.

Sincerely,

A handwritten signature in blue ink that reads "Bryan B. Wooten".

Bryan B. Wooten
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Brunswick Steam Electric Plant

MAT/mat

Enclosure: Annual Radiological Environmental Operating Report - 2016

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Annual Radiological Environmental Operating
Report - 2016



ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

**DUKE ENERGY PROGRESS, LLC
BRUNSWICK STEAM ELECTRIC PLANT**

2016



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LIST OF ACRONYMS USED IN THIS TEXT *(in alphabetical order)*

A	Annually
ADM	Archer-Daniels-Midland Chemical Company
AP	Air Particulate
AR	Air Radioiodine = Air Cartridge
AREOR	Annual Radiological Environmental Operating Report
BO	Benthic Organisms
BSEP	Brunswick Steam Electric Plant
C	Control
CR	Condition Report - Corrective Action Program
ERA	Environmental Resource Associates
EZA	Eckert & Ziegler Analytics, Inc.
FSS	Fleet Scientific Services
GEL	General Engineering Laboratories, LLC.
GPS	Global Positioning System
GW	Ground water
I	Indicator
IR	Inner Ring - TLDs
ISFSI	Independent Spent Fuel Storage Installation
LLD	Lower Limit of Detection
M	Monthly
MDA	Minimum Detectable Activity
mrem	Millirem
MSL	Mean sea level
MWe	megawatts (electrical)
NIST	National Institute of Standards and Technology
NRC	Nuclear Regulatory Commission
OD	Ocean discharge
ODCM	Offsite Dose Calculation Manual
OR	Outer Ring - TLDs
pCi/kg	picocurie per kilogram
pCi/l	picocurie per liter
pCi/m ³	picocurie per cubic meter
PMAC	Projected Maximum Annual Concentration
Q	Quarterly
REMP	Radiological Environmental Monitoring Program
SA	Semiannually
SDSP	Storm Drain Stabilization Pond
SH	Shellfish
SI	Special Interest - TLDs
SW	Surface Water
TLD	Thermoluminescent Dosimeter
W	Weekly

1.0 EXECUTIVE SUMMARY

The Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2, is operated by Duke Energy Progress, LLC under licenses granted by the Nuclear Regulatory Commission (NRC). Provisions of the Nuclear Regulatory Commission's Regulatory Guide 4.8, BSEP Plant Technical Specifications 5.6.2, and the BSEP Offsite Dose Calculation Manual (ODCM) establish the requirements of the Radiological Environmental Monitoring Program (REMP). This report describes the BSEP REMP and the program results for January 1, 2016, through December 31, 2016.

Included in the report are the identification of sampling locations, descriptions of environmental sampling and analysis procedures, comparisons of present environmental radioactivity levels and pre-operational environmental data, analysis of trends in environmental radiological data as potentially affected by plant operations, and a summary of environmental radiological sampling results. Quality assurance practices, sampling deviations, unavailable samples, and program changes are also discussed.

Sampling activities were conducted as prescribed by the BSEP ODCM. Required analyses were performed and detection capabilities were met for the collected samples required by the ODCM, other than that stated in Appendix D - Analytical Deviations (NCR # 02076456). Two thousand thirty-six samples were analyzed comprising 2,036 test results in order to compile data for the 2016 BSEP Annual Radiological Environmental Operating Report (AREOR). Based on the annual BSEP land use census, the current number of sampling sites for BSEP is sufficient.

Concentrations observed in the environment in 2016 for plant related radionuclides were within the ranges of concentrations observed in the past. Inspection of the data showed that radioactivity concentrations were as expected and positively identified measurements attributable to plant operation were within limits as specified in the BSEP ODCM.

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

2.0 INTRODUCTION

2.1 SITE DESCRIPTION AND SAMPLE LOCATIONS

Duke Energy's Brunswick Steam Electric Plant (BSEP) consists of two boiling water reactors with a design rating of 2923 megawatts (MWe) 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, North Carolina. 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.

The Cape Fear River is east of the plant and cooling water is drawn from the river through a canal. The cooling water and plant liquid effluents are both 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 Capital Power, Inc. This coal-fired station is composed of two units rated at 55 MWe each.

Although the contribution to background radiation is small, Duke Energy Progress, LLC has established the Radiological Environmental Monitoring Program to measure the exposure pathways to man. An exposure pathway describes the source of the radiological exposure. The primary forms of radiological emissions from the plant are airborne and liquid discharge. The following pathways are monitored: external dose, ingestion of radioactive materials, and the inhalation of radioactive material. Specific methods and different environmental media are required to assess each pathway.

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 the operation of the plant. Figures 2.1-1 through 2.1-14 are maps depicting the BSEP sampling locations and the BSEP

Thermoluminescent Dosimeter (TLD) monitoring locations. The location numbers shown on these maps correspond to those listed in Tables 2.1-A and 2.1-B.

2.2 SCOPE AND REQUIREMENTS OF THE REMP

The Radiological Environmental Monitoring Program (REMP) was established in 1973 at the Brunswick Steam Electric Plant (BSEP). Radiation and radioactivity in various environmental media have been monitored for 43 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 allows comparison of data collected at locations near the BSEP which could potentially be impacted by its operations.

This monitoring program is based on NRC guidance as reflected in the BSEP Offsite Dose Calculation Manual (ODCM), with regards to sample media, sampling locations, sampling frequency and analytical sensitivity requirements. Indicator and control locations were established for comparison purposes to distinguish radioactivity of plant origin from natural or other “man-made” environmental radioactivity. The environmental monitoring program also verifies projected and anticipated radionuclide concentrations in the environment and related exposures from releases of radionuclides from BSEP. This program satisfies the requirements of Section IV.B.2 of Appendix I to 10 CFR 50 and provides surveillance of all appropriate critical exposure pathways to man and protects vital interests of the company, public and state and federal agencies concerned with the environment. Reporting levels for activity found in environmental samples are listed in Table 2.2-A. Table 2.2-B lists the REMP analysis and frequency schedule.

The Annual Land Use Census, required by the BSEP ODCM, is performed to ensure that changes in the use of areas at or beyond the site boundary are identified and that modifications to the REMP are made if required by changes in the land use. This census satisfies the requirements of Section IV.B.3 of Appendix I to 10 CFR 50. Results are shown in Table 3.8-A and 3.8-B.

Participation in an interlaboratory comparison program is performed in fulfillment of BSEP ODCM Operational Requirement provides for independent checks on the precision and accuracy of measurements of radioactive material in REMP sample matrices. Such checks are performed as part of the quality assurance program for environmental monitoring in order to demonstrate that the results are valid for the purposes of Section IV.B.2 of Appendix I to 10 CFR 50. A summary of the results obtained as part of this comparison program are in Section 4 of this annual report.

2.3 STATISTICAL AND CALCULATIONAL METHODOLOGY

2.3.1 ESTIMATION OF THE MEAN VALUE

There was one (1) basic statistical calculation performed on the raw data resulting from the environmental sample analysis program. The calculation involved the determination of the mean value for the indicator and the control samples for each sample medium. The mean is a widely used statistic. This value was used in the reduction of the data generated by the sampling and analysis of the various media in the Radiological Environmental Monitoring Program. "Net activity (or concentration)" is the activity (or concentration) determined to be present in the sample. No "Minimum Detectable Activity", "Lower Limit of Detection", "Less Than Level", or negative activities or concentrations are included in the calculation of the mean. The following equation was used to estimate the mean (reference 6.8):

$$\bar{x} = \frac{\sum_{i=1}^N x_i}{N}$$

Where:

\bar{x} = estimate of the mean,

i = individual sample,

N = total number of samples with a net activity (or concentration),

x_i = net activity (or concentration) for sample i .

2.3.2 LOWER LIMIT OF DETECTION AND MINIMUM DETECTABLE ACTIVITY

The Lower Limit of Detection (LLD) and Minimum Detectable Activity (MDA) are used throughout the REMP.

LLD - The LLD, as defined in the Offsite Dose Calculation Manual (ODCM), is the smallest concentration of radioactive material in an unknown sample that will yield a net count, above the system background, that will be detected with 95% probability with a 5% probability of falsely concluding that a blank observation represents a "real" signal. The LLD is an *a priori* lower limit of detection. The actual LLD is dependent upon the standard deviation of the background counting rate, the counting efficiency, the sample size (mass or volume), the radiochemical yield and the radioactive decay of the sample between sample collection and counting. The "required" LLD's for each sample medium and selected radionuclides are given in the ODCMs and are listed in Table 2.2-C.

MDA - The MDA is the net counting rate (sample after subtraction of background) that must be surpassed before a sample is considered to contain a scientifically measurable amount of a radioactive material exceeding background amounts. The MDA is calculated using a sample background and may be thought of as an "actual" LLD for a particular sample measurement. Certain gross counting measurements display a calculated negative value, indicating background is greater than sample activity.

2.3.3 TREND IDENTIFICATION

One of the purposes of an environmental monitoring program is to determine if there is a buildup of radionuclides in the environment due to the operation of the nuclear station. Visual inspection of tabular or graphical presentations of data (including preoperational) is used to determine if a trend exists. A decrease in a particular radionuclide's concentration in an environmental medium does not indicate that reactor operations are removing radioactivity from the environment but that reactor operations are not adding that radionuclide to the environment in quantities exceeding the preoperational level and that the normal removal processes (radioactive decay, deposition, resuspension, etc.) are influencing the concentration.

Substantial increases or decreases in the amount of a particular radionuclide's release from the nuclear plant will greatly affect the resulting environmental levels; therefore, a knowledge of the release of a radionuclide from the nuclear plant is necessary to completely interpret the trends, or lack of trends, determined from the environmental data. Factors that may affect environmental levels of radionuclides include prevailing weather conditions (periods of drought, solar cycles or heavier than normal precipitation), construction in or around either the nuclear plant or the sampling location, and addition or deletion of other sources of radioactive materials (such as the 1986 Chernobyl accident and the 2011 Japan earthquake and tsunami, which triggered the Fukushima Dai-ichi Nuclear Power Plant incident). Some of these factors may be obvious while others are sometimes unknown. Therefore, how trends are identified will include some judgment by plant personnel.

Figure 2.1-1

**BSEP Radiological Environmental Sampling Locations
(Distant from Plant)**



Figure 2.1-2

**BSEP Radiological Environmental Sampling Locations
(Nearest Plant)**



This is an expanded view of Figure 2.1-1.

Figure 2.1-3

**BSEP Radiological Environmental Sampling Locations
Independent Spent Fuel Storage Installation (ISFSI) TLDs**



Figure 2.1-4

Radiological Environmental Sampling Locations

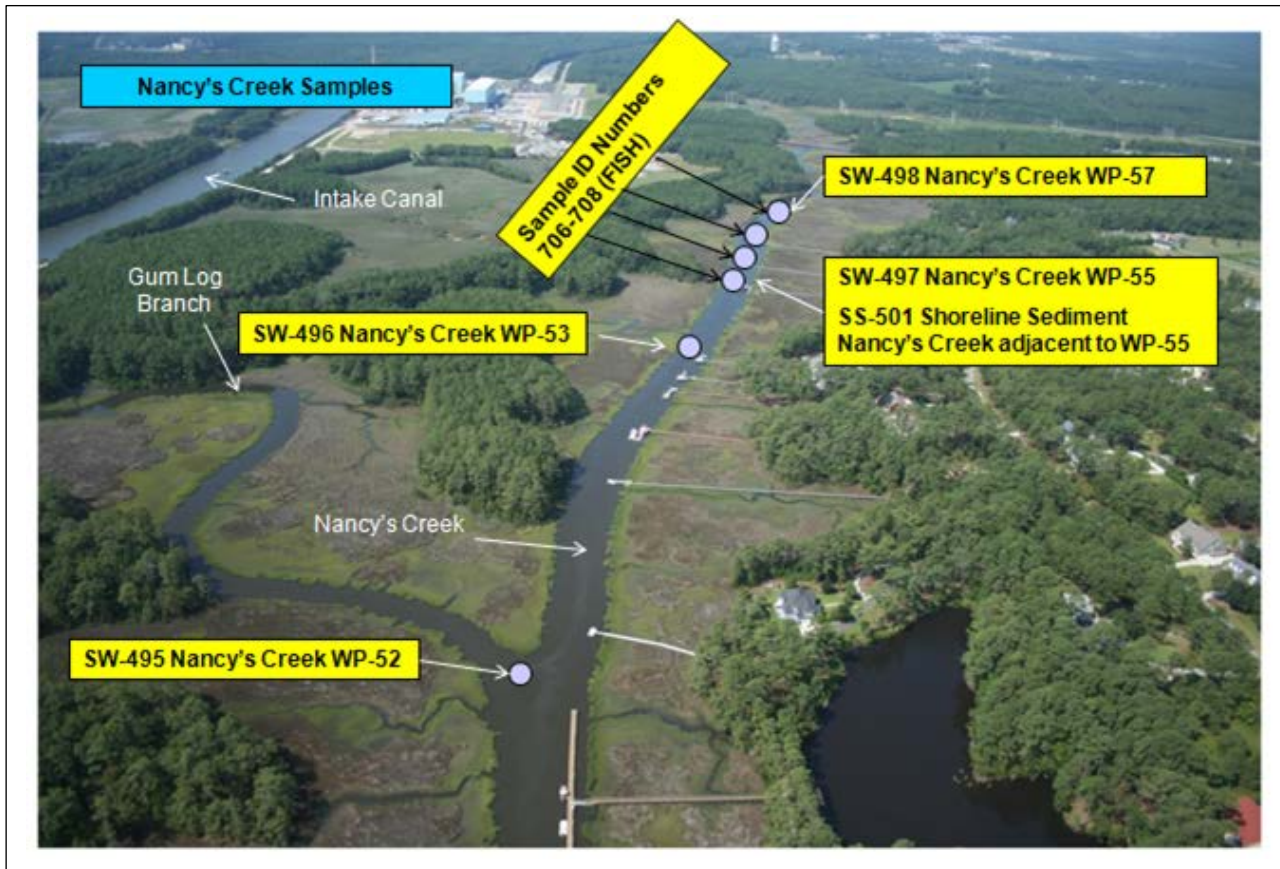


Figure 2.1-5

Radiological Environmental Sampling Locations (Continued)

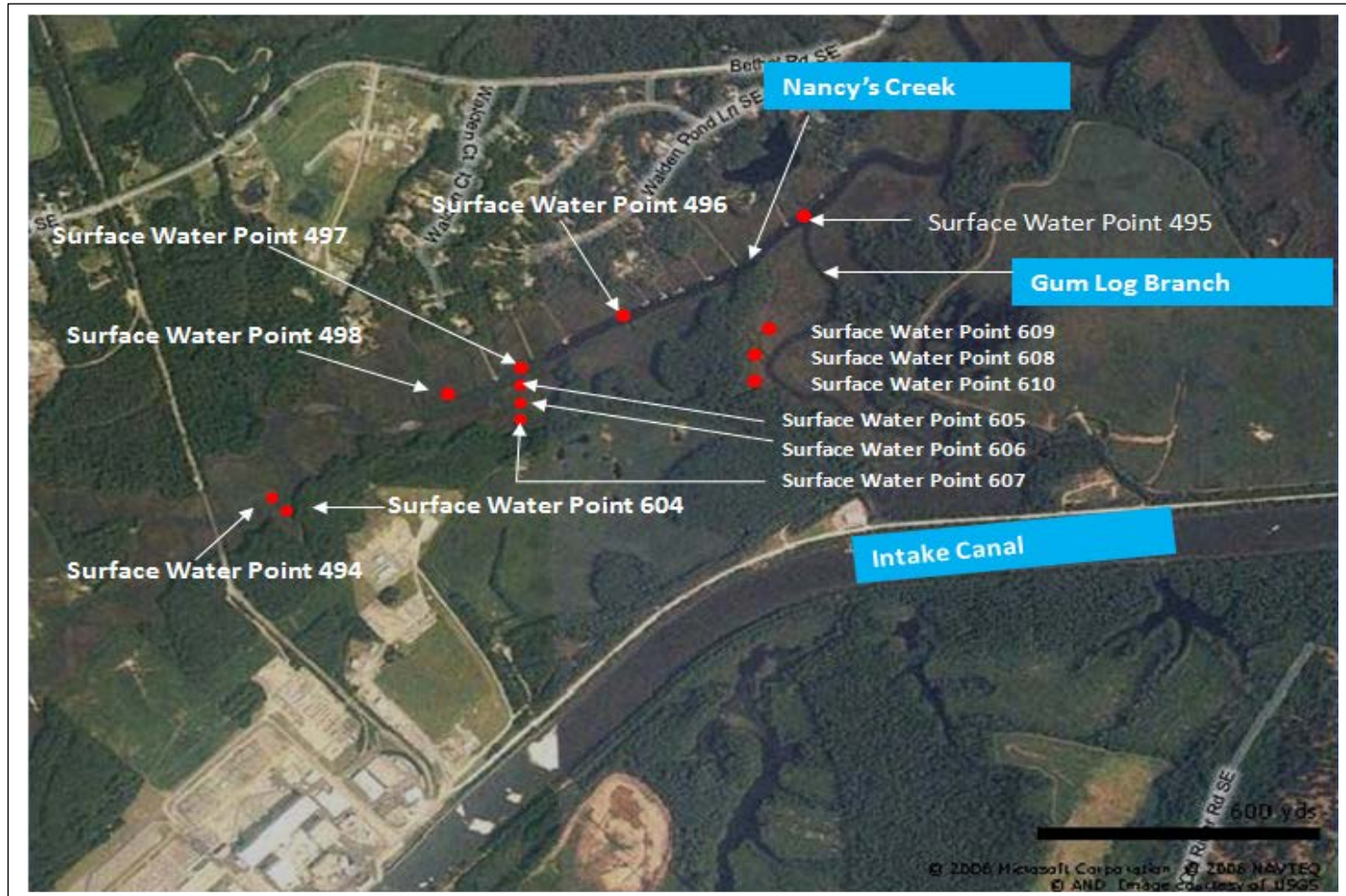


Figure 2.1-6

Radiological Environmental Sampling Locations (Continued)

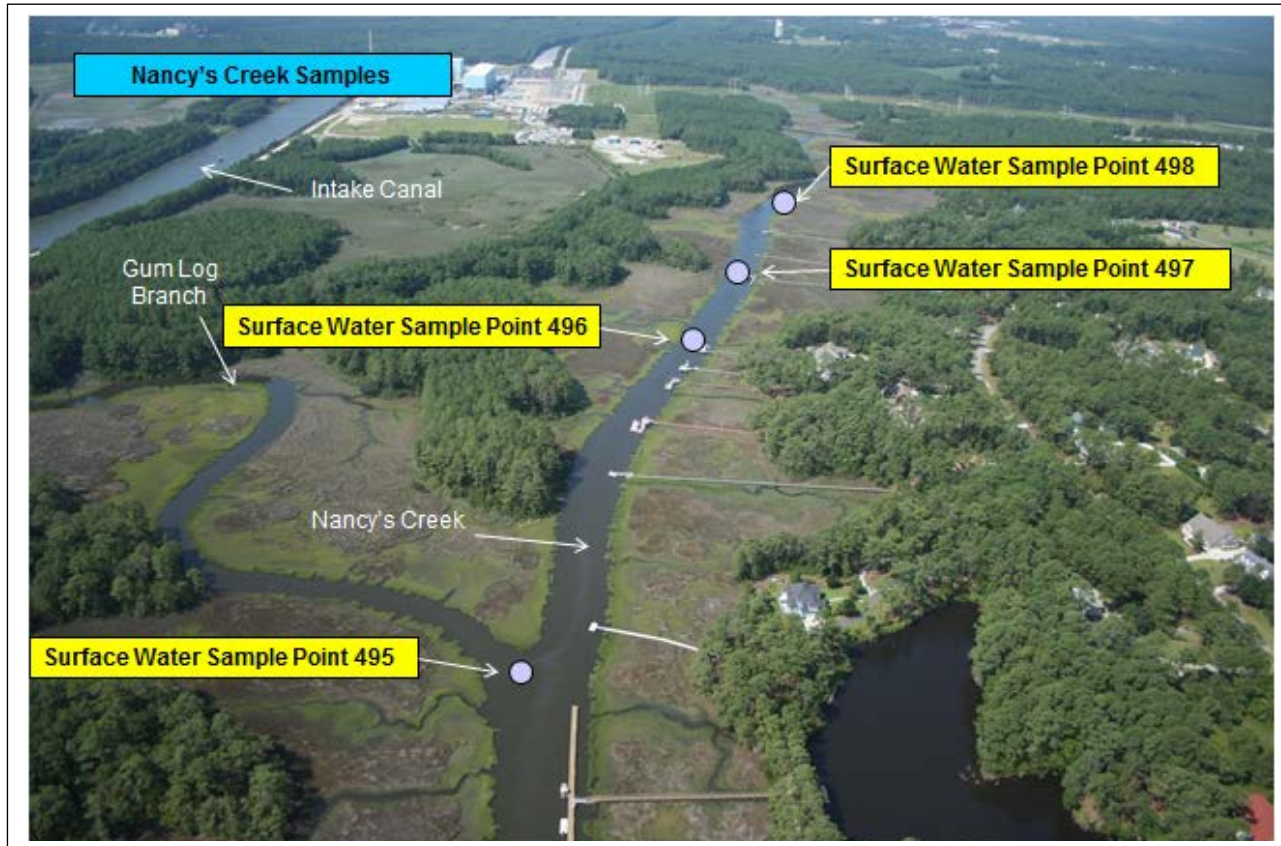


Figure 2.1-7

Radiological Environmental Sampling Locations (Continued)



Figure 2.1-8

Radiological Environmental Sampling Locations (Continued)

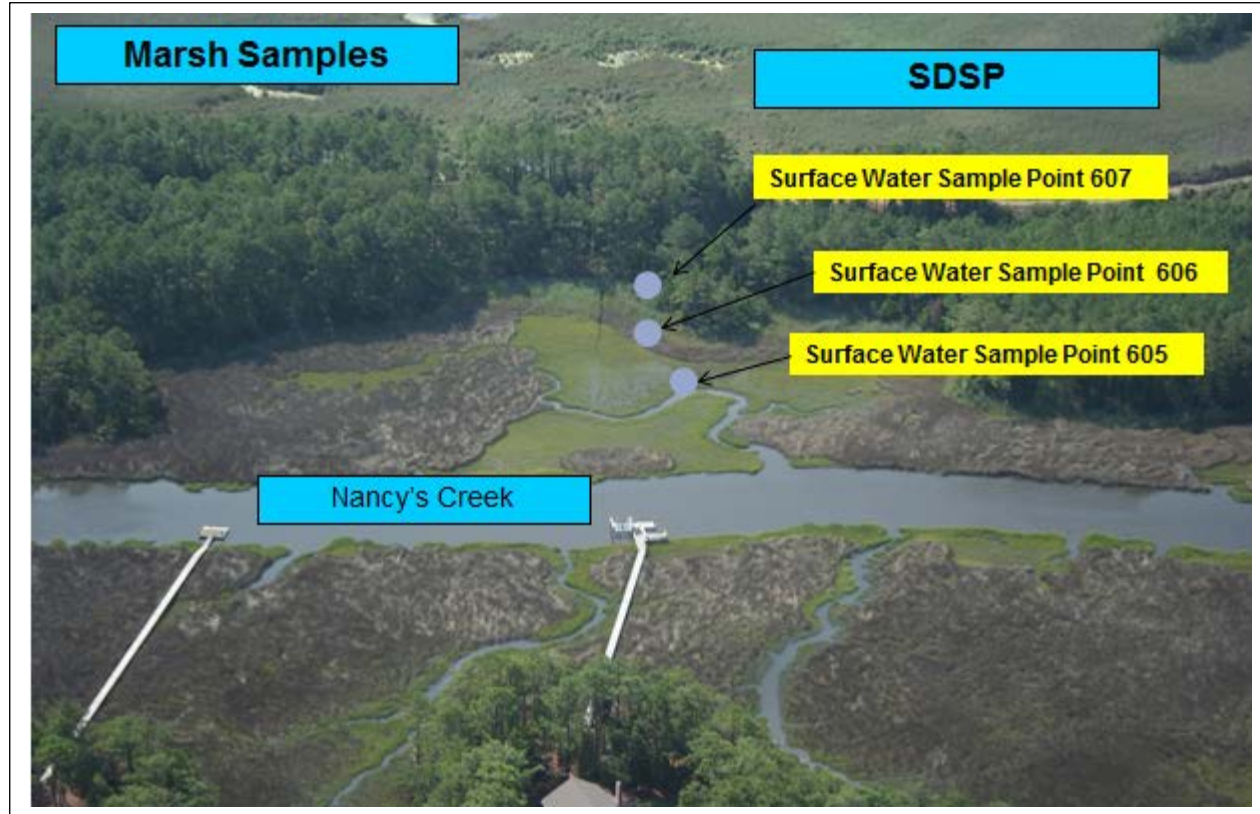


Figure 2.1-9

Radiological Environmental Sampling Locations (Continued)

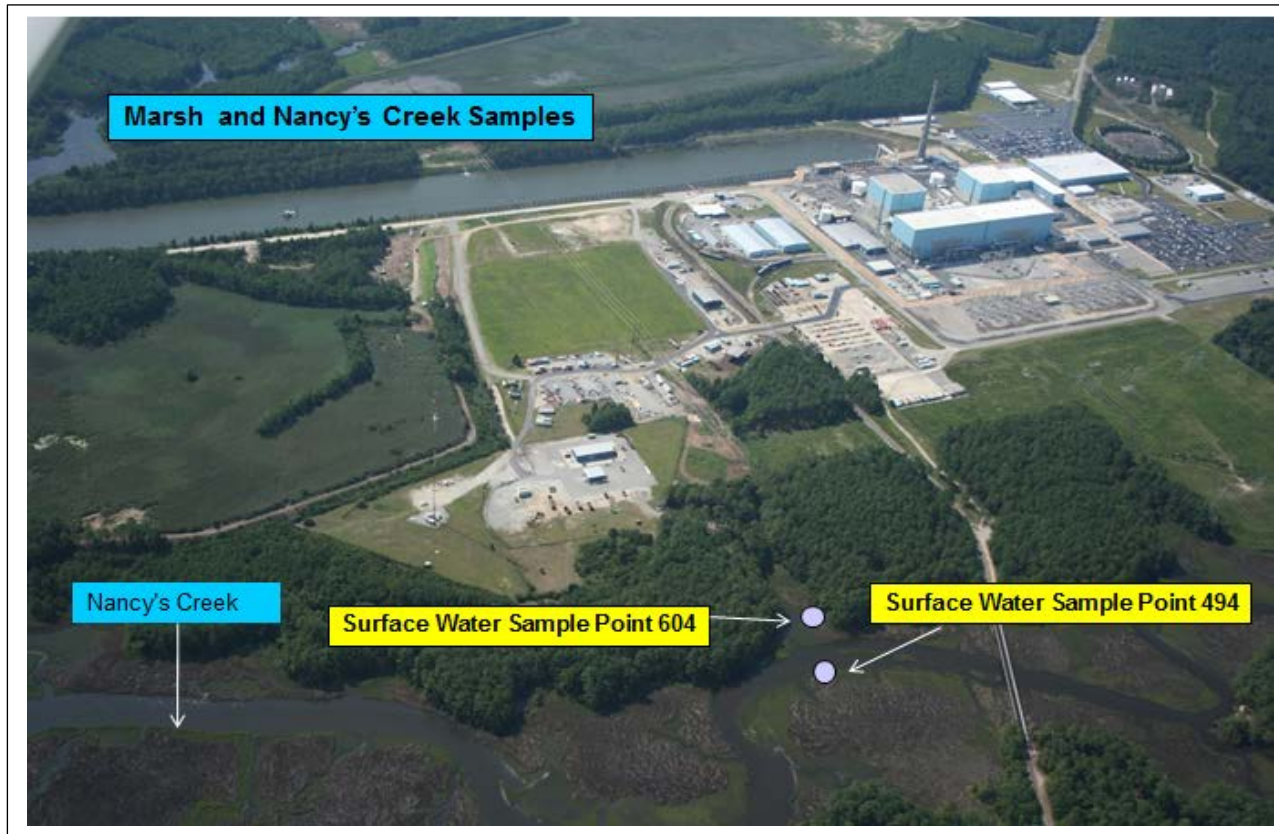


Figure 2.1-10

Radiological Environmental Sampling Locations (Continued)



SDSP: Storm Drain Stabilization Pond

Figure 2.1-11

Radiological Environmental Sampling Locations - Wells

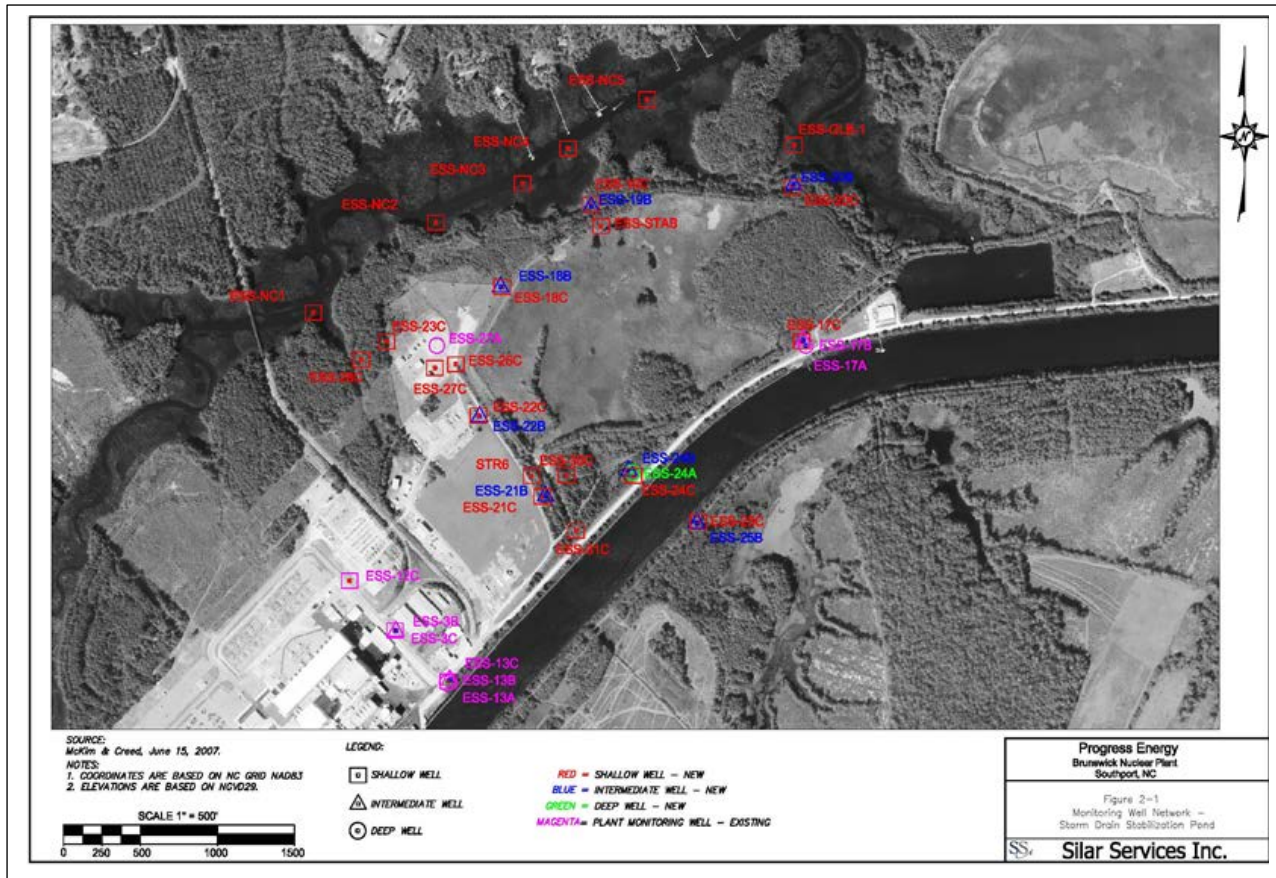


Figure 2.1-12

Radiological Environmental Sampling Locations – Wells (Continued)

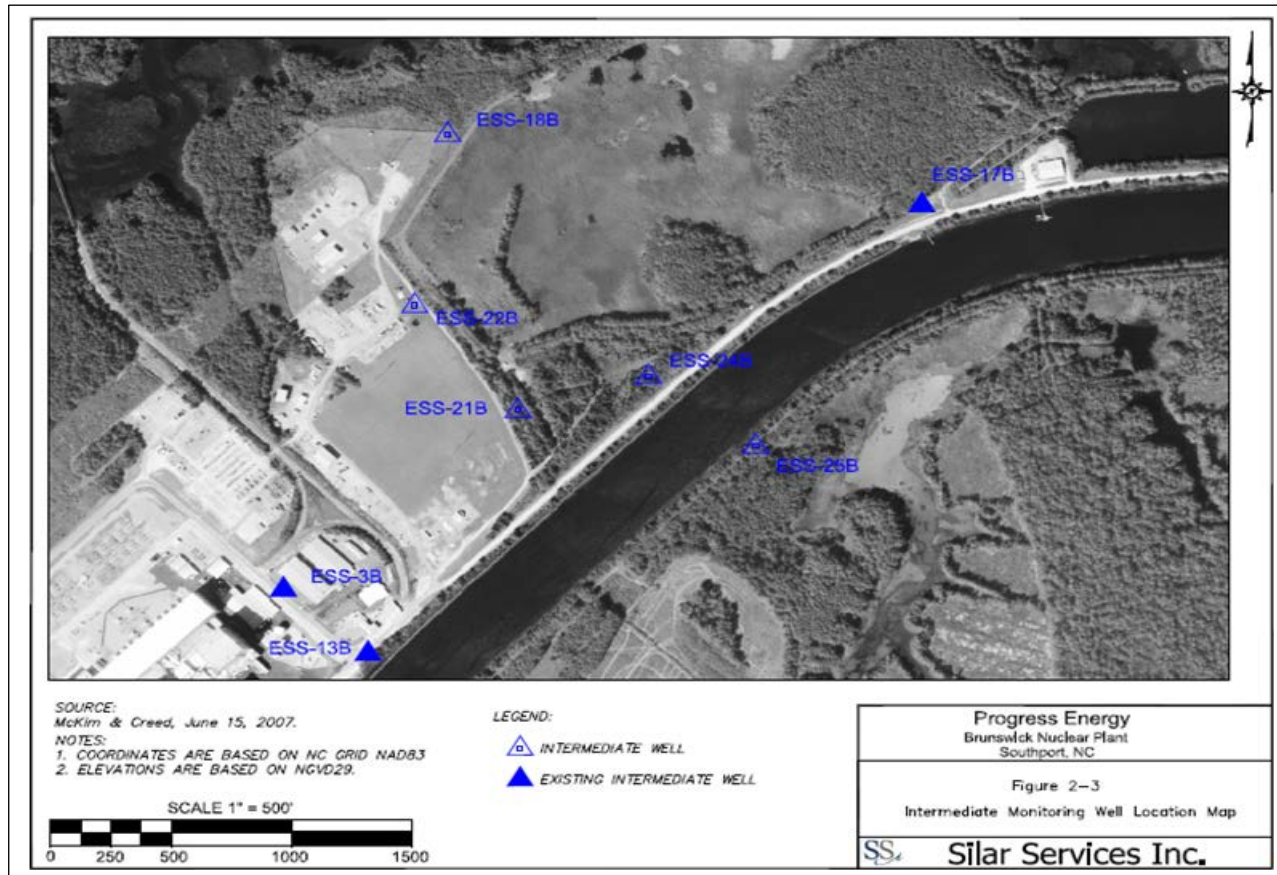


Figure 2.1-14

Radiological Environmental Sampling Locations – Wells (Continued)

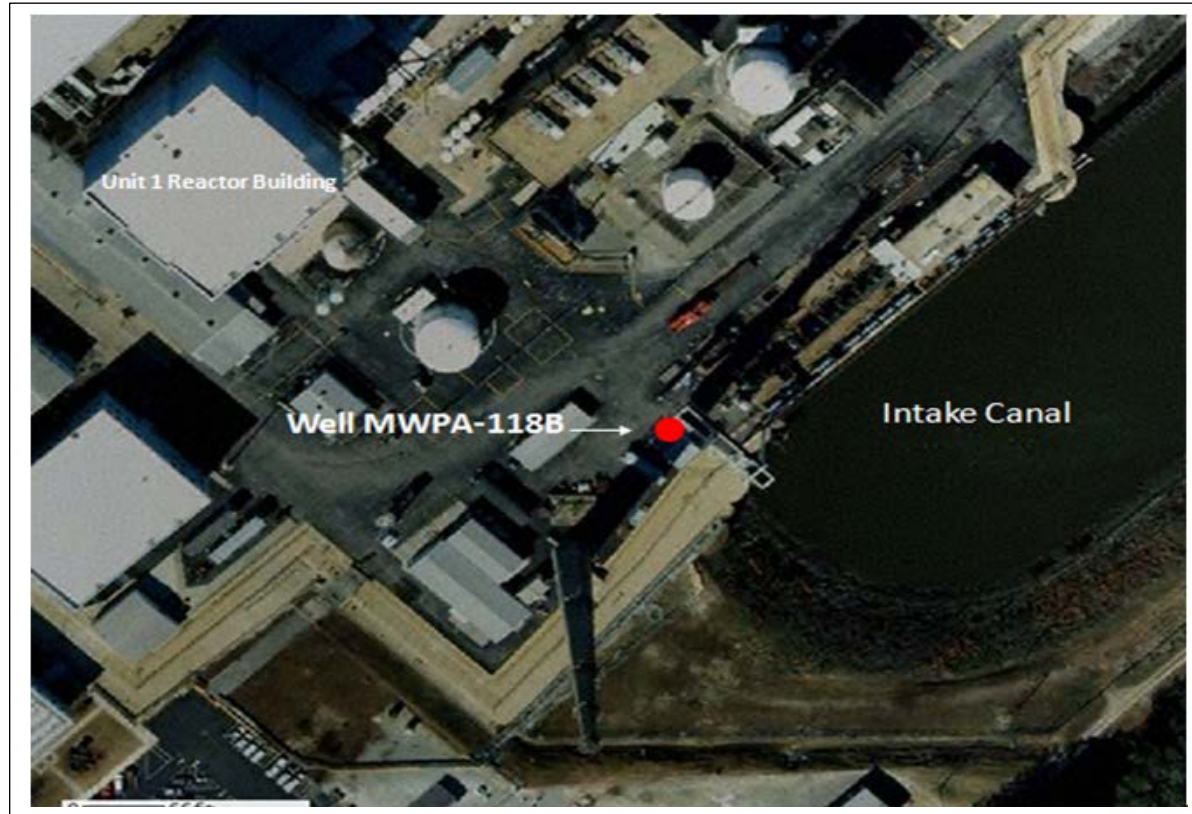


TABLE 2.1-A

**BRUNSWICK STEAM ELECTRIC PLANT (BSEP)
RADIOLOGICAL MONITORING PROGRAM SAMPLING LOCATIONS**

Table 2.1-A Codes			
W	Weekly	SA	Semiannually
M	Monthly	A	Annually
Q	Quarterly		
C	Control	I	Indicator

Site #	Type	Location Description*	Air Radiiodine & Air Particulate	Surface Water	Shoreline Sediment	Fish (FI)	Broadleaf Vegetation	Ground Water
200	I	1.0 miles WSW – Visitors Center	W/Q					
201	I	0.5 miles NE – Bio Lab Rd. – Projected Maximum Annual Concentration (PMAC)	W/Q					
202	I	1.0 mile S – Substation, Construction Rd.	W/Q					
203	I	2.0 miles SSW – Southport Substation	W/Q					
204	C	22.4 miles NNE – Sutton Plant (Historical Control)	W/Q					
205	I	0.6 miles SSE – Spoil Pond	W/Q					
206	C	11.3 miles NW – Brunswick County Complex	W/Q					
400	C	0.6 miles NE – Intake Canal		M				
401	I	4.9 miles SSW – Discharge Canal @ OD Pumps		M				
404	I	0.16 miles SW, Monitoring Well ESS-1B						Q/SA
407	I	0.06 miles ENE, Monitoring Well ESS-13B						Q/SA
409	I	0.65 miles NE, Monitoring Well ESS-17A						Q/SA
410	I	0.65 miles NE, Monitoring Well ESS-17B						Q/SA
418	I	Monitoring Well ESS-21B, Near SDSP						Q/SA
423	I	Monitoring Well ESS-24A, Near SDSP						Q/SA
424	I	Monitoring Well ESS-24B, Near SDSP						Q/SA
426	I	Monitoring Well ESS-25B, Near SDSP						Q/SA
429	I	Monitoring Well ESS-27A, Near SDSP						Q/SA
494	I	Nancy’s Creek Marsh Area – WP-106**		W				
495	I	Nancy’s Creek – WP-52		W/M				
496	I	Nancy’s Creek – WP-53		W/M				
497	I	Nancy’s Creek – WP-55		W/M				
498	I	Nancy’s Creek – WP-57		W/M				
499	C	Cape Fear River – WP-61		W/M				
500	I	5.0 miles SSW – Discharge – Beach near OD Pumps			SA			
501	I	Nancy’s Creek, Adjacent to WP-55, Near SDSP			A			
604	I	Nancy’s Creek Marsh Area – WP-92**		W				
605	I	Nancy’s Creek Marsh Area – WP-72**		W				
606	I	Nancy’s Creek Marsh Area – WP-74**		W				
607	I	Nancy’s Creek Marsh Area – WP-76**		W				
608	I	Nancy’s Creek Marsh Area – WP-82**		W				
609	I	Nancy’s Creek Marsh Area – WP-84**		W				
610	I	Nancy’s Creek Marsh Area – WP-88**		W				
612	I	Monitoring Well ESS MWPA-118B, Near Intake Canal and Plant Stack						Q/SA
700	I	5.5 miles SSW – Atlantic Ocean @ discharge (Free Swimmer)				SA ^{(b)(c)}		
701	I	5.5 miles SSW – Atlantic Ocean @ discharge (Bottom Feeders)				SA ^{(b)(c)}		
702	I	5.5 miles SSW – Atlantic Ocean @ discharge (Shellfish/Invertebrates)				SA ^{(b)(c)}		
703	C	Atlantic Ocean; location not specified (Free Swimmer)				SA ^{(b)(c)}		
704	C	Atlantic Ocean; location not specified (Bottom Feeder)				SA ^{(b)(c)}		
705	C	Atlantic Ocean; location not specified (Shellfish/Invertebrates)				SA ^{(b)(c)}		

TABLE 2.1-A (Continued)

Site #	Type	Location Description*	Air Radiiodine & Air Particulate	Surface Water	Shoreline Sediment	Fish (FI)	Broadleaf Vegetation	Ground Water
706	I	Nancy's Creek; location not specified (Free Swimmer)				A ^(b)		
707	I	Nancy's Creek; location not specified (Bottom Feeder)				A ^(b)		
708	I	Nancy's Creek; location not specified (Shellfish/Invertebrates)				A ^(b)		
800	I	0.7 miles NE – Intake Canal					M ^(a)	
801	I	0.8 miles SW – Discharge Canal					M ^(a)	
802	C	10.1 miles – Location not Specified					M ^(a)	
803	I	0.6 miles SSE – Spoil Pond					M ^(a)	
804	I	0.7 miles S – Leonard Street plant exit adjacent to RR tracks					M ^(a)	

(a) When Available

(b) Edible Portions

(c) When in Season

* GPS data reflect approximate accuracy to within 2-5 meters. GPS field measurements were taken as close as possible to the item of interest.

SDSP: Storm Drain Stabilization Pond

** Refers to SW-494, 604 – 610 and how composited weekly as indicated below for gamma analysis and Sample ID number in Appendix E..

ODCM Sample and Description	Composite Frequency/Analysis/Data ID
SW-494 (Nancy's Creek Marsh Area – WP-106)	Composited weekly as Waypoint Comp / Gamma analysis / Sample ID #1067 in data section – Appendix E
SW-604 (Nancy's Creek Marsh Area – WP-92)	
SW-605 (Nancy's Creek Marsh Area – WP-72)	Composited weekly as Waypoint Comp (70) / Gamma analysis / Sample ID #1065 in data section – Appendix E
SW-606 (Nancy's Creek Marsh Area – WP-74)	
SW-607 (Nancy's Creek Marsh Area – WP-76)	
SW-608 (Nancy's Creek Marsh Area – WP-82)	Composited weekly as Waypoint Comp (80) / Gamma analysis / Sample ID #1066 in data section – Appendix E
SW-609 (Nancy's Creek Marsh Area – WP-84)	
SW-610 (Nancy's Creek Marsh Area – WP-88)	

TABLE 2.1-B**BRUNSWICK STEAM ELECTRIC PLANT (BSEP)****RADIOLOGICAL MONITORING PROGRAM SAMPLING LOCATIONS (TLD SITES)**

Table 2.1-B Codes			
IR	Inner Ring	OR	Outer Ring
ISFSI	Independent Spent Fuel Storage Installation		
C	Control	SI	Special Interest

Site #	Measure Type	Location*	Distance (miles)	Sector	Site #	Measure Type	Location*	Distance (miles)	Sector
1	IR	1.1 miles E	1.1	E	27	OR	5.1 miles NNW	5.1	NNW
2	IR	0.9 miles ESE	0.9	ESE	28	OR	4.2 miles NW	4.2	NW
3	IR	0.9 miles SE	0.9	SE	29	IR	2.6 miles SSW	2.6	SSW
4	IR	1.1 miles SSE	1.1	SSE	30	IR	2.0 miles NE	2.0	NE
5	IR	1.1 miles S	1.1	S	31	IR	2.5 miles ENE	2.5	ENE
6	IR	1.6 miles SSW	1.6	SSW	32	OR	5.8 miles ENE	5.8	ENE
7	IR	1.1 miles SW	1.1	SW	33	OR	4.1 miles E	4.1	E
8	IR	1.2 miles W	1.2	W	34	OR	5.4 miles E	5.4	E
9	IR	1.0 miles WNW	1.0	WNW	35	OR	7.3 miles SSE	7.3	SSE
10	IR	0.8 miles NW	0.8	NW	36	OR	8.9 miles NE	8.9	NE
11	IR	0.9 miles NNW	0.9	NNW	37	OR	5.5 miles NW	5.5	NW
12	IR	1.1 miles N	1.1	N	38	OR	11.0 miles W	11.0	W
13	IR	1.2 miles NNE	1.2	NNE	39	OR	5.3 miles SW	5.3	SW
14	IR	0.5 miles NE	0.5	NE	40	OR	6.9 miles WSW	6.9	WSW
15	IR	0.9 miles ENE	0.9	ENE	75	OR	4.7 miles S	4.7	S
16	IR	1.0 miles WSW	1.0	WSW	76	OR	4.8 miles SSW	4.8	SSW
17	IR	1.4 miles ESE	1.4	ESE	77	OR	5.4 miles S	5.4	S
18	IR	1.7 miles	1.7		78	OR	9.9 miles NNE	9.9	NNE
20	IR	2.1 miles S	2.1	S	79	OR	9.5 miles N	9.5	N
21	IR	2.9 miles SSW	2.9	SSW	81	C	9.9 miles WNW	9.9	WNW
22	OR	5.3 miles SW	5.3	SW	82	ISFSI	0.17 miles NNE @ SW corner of ISFSI	0.17	NNE
23	OR	4.6 miles WSW	4.6	WSW	83	ISFSI	0.27 miles NE @ NW corner ISFSI	0.27	NE
24	IR	3.0 miles W	3.0	W	84	ISFSI	0.27 miles NE @ NE corner of ISFSI	0.27	NE
25	OR	8.6 miles WNW	8.6	WNW	85	ISFSI	0.09 miles ENE @ SE corner of ISFSI	0.09	ENE
26	OR	5.9 miles NW	5.9	NW					

* GPS data reflect approximate accuracy to within 2-5 meters. GPS field measurements were taken as close as possible to the item of interest.

TABLE 2.2-A

**REPORTING LEVELS FOR RADIOACTIVITY
CONCENTRATIONS IN ENVIRONMENTAL SAMPLES**

Analysis	Water (pCi/liter)	Airborne Particulate and Gases (pCi/m ³)	Fish (pCi/kg, wet)	Milk (pCi/liter)	Broadleaf Vegetation (pCi/kg)
H-3	30,000				
Mn-54	1,000		30,000		
Fe-59	400		10,000		
Co-58	1,000		30,000		
Co-60	300		10,000		
Zn-65	300		20,000		
Zr-Nb-95	400				
I-131	2	0.9		3	100
Cs-134	30	10	1,000	60	1,000
Cs-137	50	20	2,000	70	2,000
Ba-La-140	200			300	

TABLE 2.2-B

REMP ANALYSIS FREQUENCY

Sample Medium	Analysis Schedule	Gamma Isotopic	Tritium	Gross Beta	TLD
Air Radioiodine	Weekly	X			
Air Particulate	Weekly			X	
	Quarterly	X			
Direct Radiation (TLD)	Quarterly				X
Surface Water	Monthly Composite (400 & 401)	X	X		
	Weekly Grab (495 – 499)		X		
	Monthly Comp. of Weekly Grab	X			
	Weekly Grab (494, 604 – 610)	X	X		
Ground Water	Quarterly Grab		X		
	Semiannual Grab	X			
Shoreline Sediment	Semiannually (500)	X			
	Annually (501)	X			
Fish and Shellfish/Invertebrates ^(a)	Semiannually (700 – 705)	X			
	Annually (706 – 708)	X	X		
Broadleaf Vegetation ^(b)	Monthly ^(b)	X			

(a) Edible portions

(b) When available

TABLE 2.2-C

DETECTION CAPABILITIES FOR THE *A PRIORI* LOWER LIMIT OF DETECTION^{(a)(b)(d)}

Analysis	Water (pCi/liter)	Airborne Particulates or Gases (pCi/m ³)	Fish (pCi/kg, wet)	Milk (pCi/liter)	Broadleaf Vegetation (pCi/kg, wet)	Sediment (pCi/kg, dry)
Gross Beta	4	0.01				
H-3	3000					
Mn-54	15		130			
Fe-59	30		260			
Co-58, 60	15		130			
Zn-65	30		260			
Zr-Nb-95	15					
I-131	1 ^(c)	0.07		1	60	
Cs-134	15	0.05	130	15	60	150
Cs-137	18	0.06	150	18	80	180
Ba-La-140	15			15		

- (a) This list does not mean that only these nuclides are to be considered. Other peaks that are identifiable, together with these of the above nuclides, shall be analyzed and reported in the AREOR.
- (b) The LLD is defined in the BSEP ODCM.
- (c) LLD for drinking water samples. If no drinking water pathway exists, a value of 15 pCi/L may be used.
- (d) The LLD for each analysis is specified, with the exception of the Nancy's Creek Marsh Area principal gamma isotopic and I-131. The LLD for the Nancy's Creek Marsh Area gamma isotopic is 5×10^{-7} μ Ci/ml for Principal Gamma Emitters and 1×10^{-6} μ Ci/ml for I-131.

3.0 INTERPRETATION OF RESULTS

The following section depicts and explains the review of the REMP results conducted during 2016 for the Brunswick Steam Electric Plant (BSEP) and fulfills the reporting requirements of Technical Specifications 5.6.2, BSEP ODCM 7.4.1, and applicable procedures. Review of the 2016 REMP analysis results was performed to identify changes in environmental levels as a result of BSEP operations. Sample data for 2016 was compared to preoperational and historical data. Summary tables containing 2016 information required by Technical Specification 5.6.2 are located in Appendix B.

Evaluation for significant trends was performed for radionuclides that are listed as required within BSEP ODCM. The radionuclides include: H-3, Mn-54, Fe-59, Co-58, Co-60, Zn-65, Zr-95, Nb-95, I-131, Cs-134, Cs-137, Ba-140 and La-140. Gross beta analysis results were trended for air particulates and tritium results for surface water samples.

BSEP ODCM addresses actions to be taken if radionuclides other than those required are detected in samples collected. The occurrences of these radionuclides could be the result of BSEP liquid effluents which contained the radionuclides.

Review of the 2016 data presented in this section supports the conclusion that there were no significant changes in environmental sample radionuclide concentrations of samples collected and analyzed from BSEP and surrounding areas that were attributable to plant operations. The radiological environmental data for 2016 indicates that radioactivity concentrations were not higher than expected and all positively identified measurements attributable to BSEP operations in 2016 were within limits as specified in the BSEP ODCM, thus presenting no significant impact on the environment or public health and safety.

A statistical summary of the BSEP data for 2016 has been compiled and summarized in Appendix B along with any plant-derived activity detected within the scope of the REMP.

3.1 AIRBORNE RADIOIODINE AND PARTICULATES

The 364 air cartridge/radioiodine (AR) samples from the indicator (260 samples) and the control (104 samples) stations had I-131 concentrations less than the ODCM LLD of $7.00E-2$ pCi/m³. The air samplers operated for a total of 99.81% availability for the 2016 year. No I-131 activity due to BSEP operations was identified in any indicator or control samples in 2016 (refer to Table 3.1-2 and Appendix B). Iodine - 131 (I-131) was detected in air samples following the Fukushima Dai-ichi Nuclear Power Plant incident after the March 11, 2011, earthquake and tsunami (NCR # 0456564).

For the period of January 1, 2016, to December 31, 2016, the gross beta activity was detectable in the airborne particulate (AP) samples, with acceptable runtime, from the

five indicator locations and the two control locations. The 260 indicator samples had an average concentration of $1.66\text{E-}2$ pCi/m³ (a value lower than the preoperational data) and the average gross beta concentration measured in 104 AP samples collected at control stations during 2016 was $1.63\text{E-}2$ pCi/m³. The preoperational (1973 – 1974) average concentration was $8.2\text{E-}2$ pCi/m³. The airborne concentrations of gross beta activity in 2016 are indicative of natural background and do not indicate any activities originating from the nuclear operations at BSEP. Figure 3.1 and Table 3.1-1 provide individual sample gross beta results for the highest annual mean indicator location and the control locations concentration since 1999 to 2016 (refer to Appendix B). The two sample locations' results are similar in concentration and have negligible variance. No plant-related gamma activity was observed for any air particulate filters analyzed during 2016. Natural gamma concentrations identified are typical of the natural environment and are not attributed to plant operations. Refer to Appendix C or Appendix D for deviations and unavailable samples in the 2016 collection year.

No plant-related gamma activity was detected in quarterly composite filter samples from either the indicator or control locations during 2016. BSEP ODCM LLDs and reporting levels for air particulates are contained in Section 2.0 in Table 2.2-C and 2.2-A respectively.

Figure 3.1

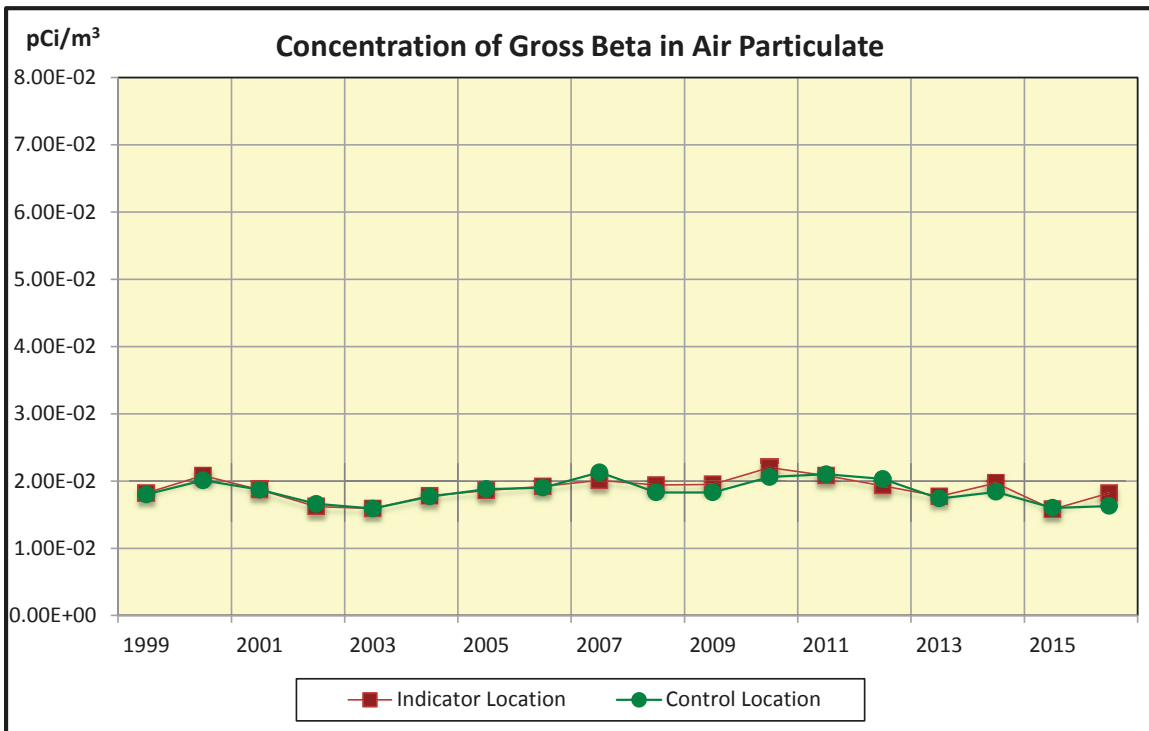


Table 3.1-1 Mean Concentration of Gross Beta in Air Particulate

Year	Indicator Location (pCi/m ³)	Control Location (pCi/m ³)
1999	1.82E-2	1.80E-2
2000	2.08E-2	2.01E-2
2001	1.87E-2	1.87E-2
2002	1.62E-2	1.66E-2
2003	1.59E-2	1.59E-2
2004	1.78E-2	1.77E-2
2005	1.86E-2	1.88E-2
2006	1.92E-2	1.90E-2
2007	2.01E-2	2.13E-2
2008	1.94E-2	1.83E-2
2009	1.95E-2	1.83E-2
2010	2.20E-2	2.06E-2
2011	2.08E-2	2.10E-2
2012	1.93E-2	2.03E-2
2013	1.77E-2	1.74E-2
2014	1.97E-2	1.84E-2
2015	1.58E-2	1.60E-2
2016	1.82E-2	1.63E-2

Table 3.1-2 Mean Concentration of Air Radioiodine (I-131)

Year	Indicator Location (pCi/m ³)	Control Location (pCi/m ³)
1999	0.00E+0	0.00E+0
2000	0.00E+0	0.00E+0
2001	0.00E+0	0.00E+0
2002	0.00E+0	0.00E+0
2003	0.00E+0	0.00E+0
2004	0.00E+0	0.00E+0
2005	0.00E+0	0.00E+0
2006 ⁽¹⁾	5.31E-2	0.00E+0
2007	0.00E+0	0.00E+0
2008	0.00E+0	0.00E+0
2009	0.00E+0	0.00E+0
2010	0.00E+0	0.00E+0
2011 ⁽²⁾	1.31E-1	1.00E-1
2012	0.00E+0	0.00E+0
2013	0.00E+0	0.00E+0
2014 ⁽³⁾	0.00E+0	0.00E+0
2015	0.00E+0	0.00E+0
2016	0.00E+0	0.00E+0

0.00E+0 indicates no detectable measurements

(1) 2006 concentration affected by plant conditions (NCR # 0211934).

(2) 2011 concentrations affected by Fukushima Dai-ichi

(3) 2014 Gamma spectroscopy system was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995).

3.2 SURFACE WATER

Surface water (SW) is sampled monthly from the intake and discharge canal, while Nancy's Creek samples and Nancy's Creek Marsh Area samples are sampled weekly. These samples are analyzed for gamma-emitting radionuclides and for tritium. Tritium analysis is performed weekly on the Nancy's Creek samples. Sampling and compositing, of the Nancy's Creek samples, for gamma emitters is weekly and the gamma analysis is performed monthly on the samples composited weekly. The current BSEP ODCM (Revision 37) effective date of October 29, 2013, states for the Nancy's Creek Marsh Area that samples are collected weekly and are analyzed weekly for tritium, while ODCM sample location 494 and 604 are composited weekly and the composite (Waypoint Comp – sample ID # 1067) are analyzed weekly for gamma emitters. Nancy's Creek Marsh Area surface water samples 605, 606, and 607 are collected weekly and composited (Waypoint Comp (70) – sample ID # 1065) for gamma analysis along with surface water samples 608, 609, and 610 (Waypoint Comp (80) – sample ID # 1066). The gamma analyses indicated that no detectable concentrations of gamma emitting radionuclides relating to plant effluents appeared in any of the surface water indicator or control samples. None of the control samples (SW-400 or 499) indicated the presence of tritium. However, 29 out of 636 indicator samples indicated the presence of tritium in 2016. The predominate indicator locations indicating tritium in 2016 were at Nancy's Creek Marsh Area and the discharge canal. Five (5) of the twelve samples from the historical discharge canal indicated the presence of tritium, while 24 out of 624 samples from Nancy's Creek Marsh Area indicated the presence of tritium. The tritium activity detected in SW-401 (the discharge canal composite sample) had an average tritium concentration of $3.23\text{E}+2$ pCi/L, which was expected due to plant operations at the time of sampling. The indicator samples from Nancy's Creek and Nancy's Creek Marsh Area had a maximum concentration of $1.32\text{E}+3$ pCi/L of tritium activity. The reporting limit for tritium in environmental samples is $3.00\text{E}+4$ pCi/L (30,000 pCi/L); therefore, per BSEP's ODCM requirements (7.13.15 c and d), all of the detected values are below the reportable limit. The total level of radioactivity as the result of plant effluents in each environmental sampling medium at a required location shall be less than the limit specified when averaged over the calendar quarter. Figure 3.2-1 depicts the observed tritium concentrations for SW-400 (control) and SW-401 (indicator) in 2016. Figure 3.2-2 displays the tritium results for the highest annual mean indicator and control annual locations' concentrations since 1999 to 2016. Table 3.2 lists the highest annual mean concentrations for indicator and control locations. Refer to Appendix B for additional surface water results.

Figure 3.2-1

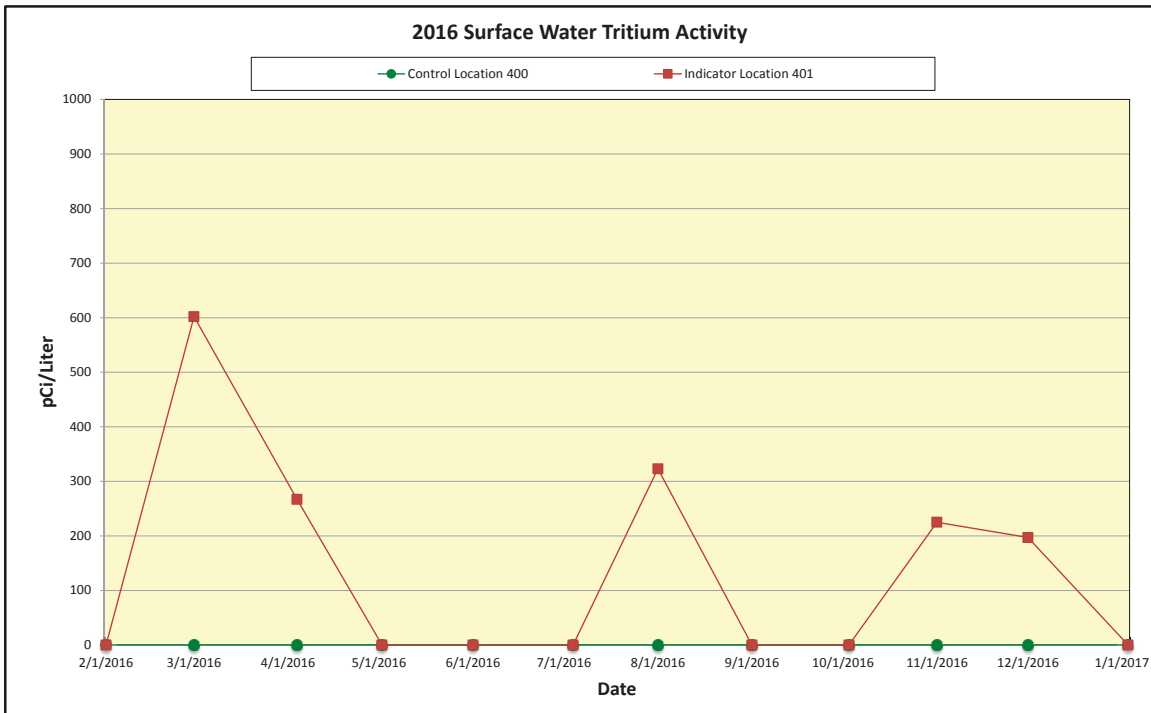
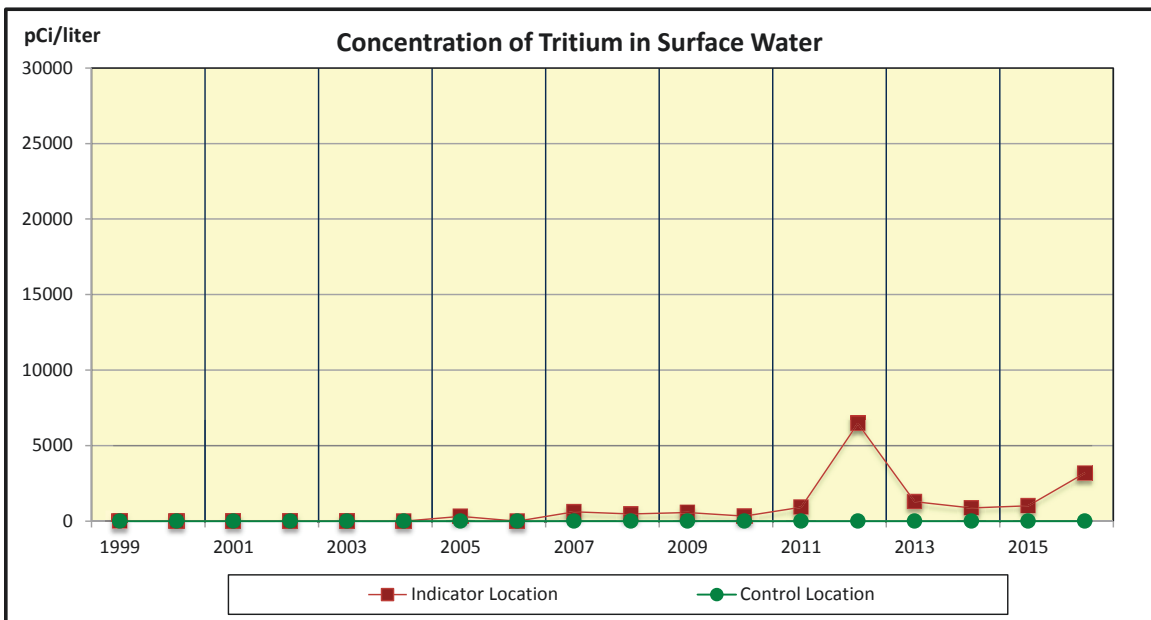


Figure 3.2-2



There is no reporting level for tritium in surface water; however, if no drinking water pathway exists, a value of 30,000 pCi/l may be used.

Table 3.2 Mean Concentration of Tritium in Surface Water

Year	Indicator Location (pCi/l)	Control Location (pCi/l)
1999	0.00E+0	0.00E+0
2000	0.00E+0	0.00E+0
2001	0.00E+0	0.00E+0
2002	0.00E+0	0.00E+0
2003	0.00E+0	0.00E+0
2004	0.00E+0	0.00E+0
2005	3.22E+2	0.00E+0
2006	0.00E+0	0.00E+0
2007	6.30E+2	0.00E+0
2008	4.85E+2	0.00E+0
2009	5.75E+2	0.00E+0
2010	3.39E+2	0.00E+0
2011	9.28E+2	0.00E+0
2012	6.47E+3	0.00E+0
2013	1.29E+3	0.00E+0
2014	8.80E+2	0.00E+0
2015	1.02E+3	0.00E+0
2016	3.18E+3	0.00E+0

0.00E+0 indicates no detectable measurements

3.3 GROUND WATER

Groundwater (GW) is sampled quarterly and semiannually from 10 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 in 2016. The tritium analyses indicated that no detectable concentration of tritium appeared in any of the indicator samples analyzed in 2016. Ten (10) ground water samples collected in 2016 per BSEP ODCM Table 7.3.15-1 were not analyzed by BSEP laboratory in the required timeframe stated in the BSEP ODCM (NCR # 02076456). This is not a reportable event per verification with BSEP Regulatory Affairs. Refer to Appendix D, Analytical Deviations for additional information. Table 3.3 lists the tritium results for the highest annual mean concentrations for indicator and control locations since 1999 to 2016.

Table 3.3 Mean Concentration of Tritium in Ground Water

Year	Indicator Location (pCi/l)	Control Location (pCi/l)
1999	N/A	N/A
2000	N/A	N/A
2001	N/A	N/A
2002	N/A	N/A
2003	N/A	N/A
2004	N/A	N/A
2005	N/A	N/A
2006	N/A	N/A
2007	N/A	N/A
2008	1.50E+6	No Control
2009	6.48E+5	No Control
2010	5.66E+5	No Control
2011	3.10E+2	No Control
2012	4.00E+2	No Control
2013	4.66E+2	No Control
2014	6.54E+2	No Control
2015	4.02E+2	No Control
2016	0.00E+0	No Control

0.00E+0 indicates no detectable measurements

N/A indicates that Ground Water samples were not part of the BSEP REMP until 2008.

3.4 MILK/BROADLEAF VEGETATION

No milk (milch) sampling locations are currently identified in BSEP environs; therefore, no sampling of this media was available in 2016.

Food crops were not grown in the vicinity of the plant in 2016 and this media was represented by indigenous vegetation samples consisting primarily of wax myrtle leaves. Forty-eight (48) samples were collected from indicator locations and twelve (12) samples from the control location. No detectable activities relating to plant effluents were detected in any of the indicator or control broadleaf vegetation sample media in 2016. No other gamma activity was detected in any sample other than naturally occurring gamma activity. Figure 3.4 displays the highest annual mean indicator and control location concentrations for Cs-137 in broadleaf vegetation since 1999 to 2016. Table 3.4 lists the highest annual mean concentrations for indicator and control locations for Cs-134, Cs-137, Co-60, and I-131 in broadleaf vegetation since 1999 to 2016.

Figure 3.4

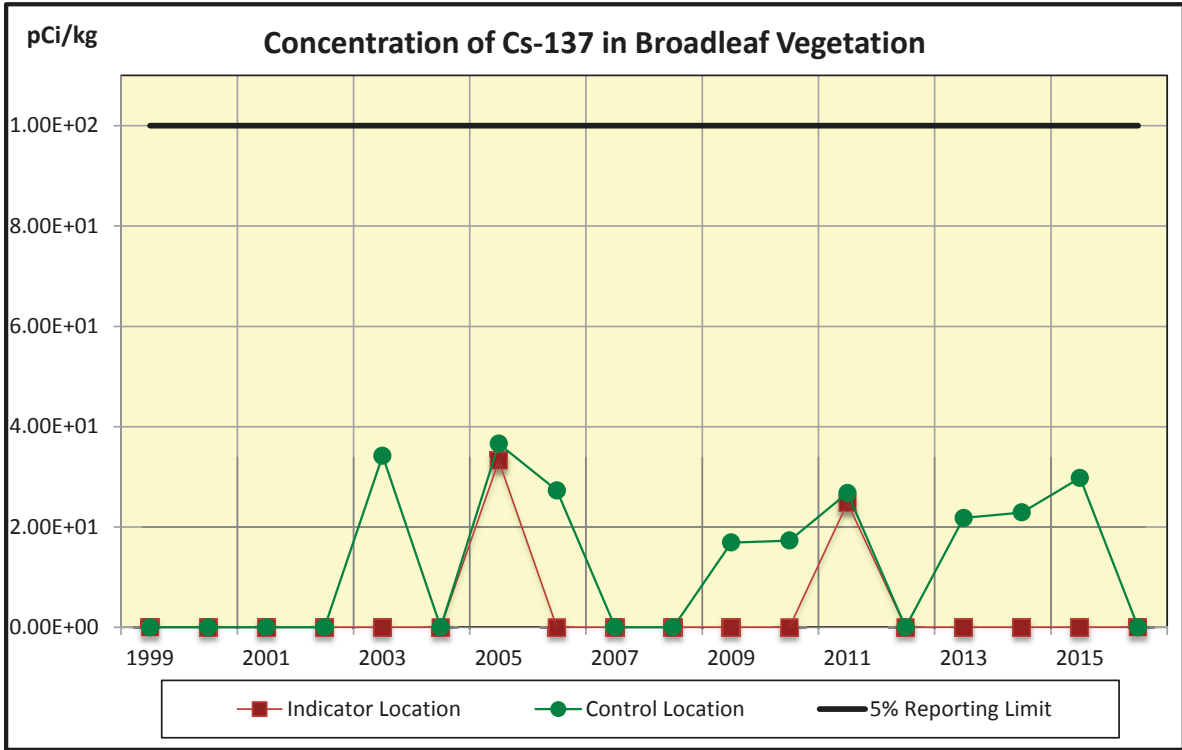


Table 3.4 Mean Concentrations of Radionuclides in Broadleaf Vegetation (pCi/kg)

Year	Cs-134 Indicator	Cs-134 Control	Cs-137 Indicator	Cs-137 Control	Co-60 Indicator	Co-60 Control	I-131 Indicator	I-131 Control
1999	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2000	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2001	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2002	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2003	0.00E+0	0.00E+0	0.00E+0	3.42E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2004	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2005	0.00E+0	0.00E+0	3.32E+1	3.66E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2006	0.00E+0	0.00E+0	0.00E+0	2.73E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2007	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2008	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2009	0.00E+0	0.00E+0	0.00E+0	1.69E+1	4.94E+1	0.00E+0	0.00E+0	0.00E+0
2010	0.00E+0	0.00E+0	0.00E+0	1.73E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2011 ⁽¹⁾	2.60E+1	1.64E+1	2.48E+1	2.68E+1	0.00E+0	0.00E+0	2.20E+2	1.48E+2
2012	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2013	0.00E+0	0.00E+0	0.00E+0	2.18E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2014 ⁽²⁾	0.00E+0	0.00E+0	0.00E+0	2.29E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2015	0.00E+0	0.00E+0	0.00E+0	2.98E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2016	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0

0.00E+0 indicates no detectable measurements

(1) 2011 concentration affected by Fukushima Dai-ichi

(2) 2014 Gamma spectroscopy system was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995).

3.5 FISH and INVERTEBRATES

Fish (free swimmers and bottom feeders), invertebrate (SH), and benthic organism (BO) samples are collected semiannually from three 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 (3) annually from three locations on Nancy's Creek (Figure 2.1-4). No detectable activities relating to plant effluents were detected in 2016.

REMP fish and invertebrates (shrimp) from Nancy's Creek, which are collected annually per the BSEP ODCM do not require a tritium analysis; however, for the past eight years the samples have been analyzed for tritium. No tritium activity has been detected in these samples for eight years; therefore, the BSEP REMP owner determined that the BSEP REMP fish and invertebrate samples collected November 2016 from the Nancy's Creek sample location did not require tritium analysis for that collection period or future collections.

3.6 SHORELINE SEDIMENT

Four shoreline sediments were collected in 2016. All of the radionuclides indicative of plant effluents were determined to be less than the respective LLDs for gamma-emitting radionuclides in both samples from the beach area near the pumping station location at Caswell Beach and one sample from the Nancy's Creek area. Two shoreline sediment samples in 2016 were drawn from Nancy's Creek adjacent to WP-55 near the Storm Drain Stabilization Pond (SDSP), where one of the indicator samples contained Cesium (Cs)-137 activity (Single Value: 1.32E+2 pCi/kg, dry). Both of the samples were analyzed for Iron (Fe)-55, Strontium (Sr)-89, Strontium (Sr)-90, and one for Nickel (Ni)-63 by General Engineering Laboratories, LLC (GEL). Both were less than the respective LLDs. Per BSEP ODCM revision 37; if plant activity is detected, then Sr-89, 90, and Fe-55 analyses are to be performed on the shoreline sediment sample and the frequency of sampling for the shoreline sediment sample from Nancy's Creek will increase to semi-annually for the next sampling year.

Table 3.6 Mean Concentration of Radionuclides in Shoreline Sediment

YEAR	Cs-137 Indicator (pCi/kg)
1999	0.00E+0
2000	0.00E+0
2001	0.00E+0
2002	0.00E+0
2003	0.00E+0
2004	0.00E+0
2005	0.00E+0
2006	0.00E+0
2007	0.00E+0
2008	0.00E+0
2009	1.65E+2
2010	1.57E+2
2011	1.77E+2
2012	1.69E+2
2013	7.13E+1
2014 ⁽¹⁾	1.26E+2
2015	1.32E+2
2016	1.32E+2

0.00E+0 indicates no detectable measurements

There is no control location for Shoreline Sediments.

(1) 2014 Gamma spectroscopy system was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995).

3.7 DIRECT GAMMA RADIATION

3.7.1 ENVIRONMENTAL TLD

In 2016, 178 TLDs were analyzed, 174 at indicator locations and 4 at the control location. TLDs are collected and analyzed quarterly.

Thermoluminescent dosimeters (TLDs) were used to monitor ambient radiation exposures in the plant environs. The environmental data on external radiation exposure for 2016 was essentially unchanged from 1989-2015, with an average exposure for all of 2016 indicator locations of 9.95 mR per std. 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 3.7-3 provides a comparison of recent data with the preoperational and historical data.

The average quarterly exposure at the indicator and control locations was 9.95 mR/Std. Qtr. and 10.3 mR/Std. Qtr. respectively. The highest indicator location was 5.3 miles SW of the plant and its average was 14.7 mR/Std. Qtr. The differences among these locations are attributed to variations in soils, local geology, and are not the result of plant operations. There were two (2) missing

TLDs during the BSEP 2016 collection period, refer to Appendix C for information.

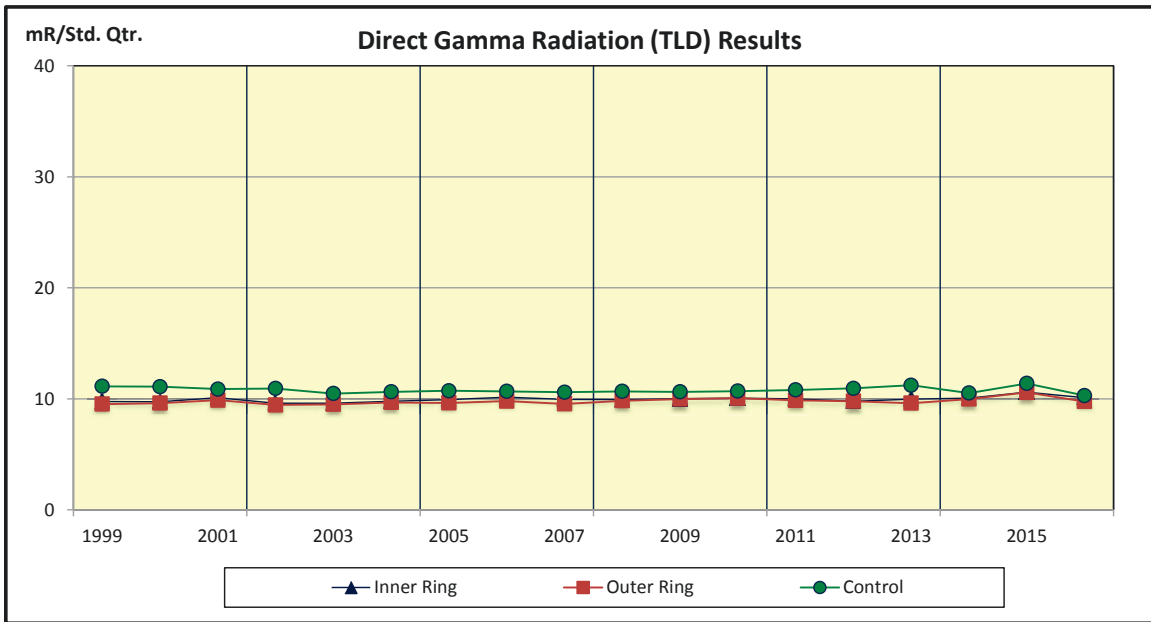
Comparison of the average annual TLD exposure between the inner and outer ring TLD data and the control TLD data for 1999 to 2016 is presented in Figure 3.7 and Table 3.7-1.

TLD averages per Appendix B do include a separate line for the four (4) ISFSI TLDs that were added to the program as of 3rd Quarter 2010. These TLDs are not indicative of the plant's environmental monitoring program's TLDs, so they will be handled separately. The ISFSI TLD data is included with the environmental data results as a separate section. Comparison of the 2016 ISFSI TLD data after loaded fuel with preoperational data (2008 – 3rd Quarter 2010) indicates that the average pre-op TLD dose levels were about the same as the average after fuel was loaded (See Table 3.7-2. Dry fuel storage radiation measurements have been monitored since 2008 and additional information can be found in the BSEP 2016 Annual Release Report.

As of first quarter 2014, the environmental TLDs that are placed in the field for REMP are Harshaw TLDs. Panasonic TLDs were the type of environmental TLDs for BSEP REMP monitoring prior to 2014. This change was a merger initiative in order to achieve fleet standardization of the TLD program. This change in environmental TLDs for the REMP indicates a step change in activity as mentioned in NCR # 01982479 between the Panasonic TLD readings prior to 2014 and the Harshaw TLD readings from 2014 to present. There are three factors that can be attributed to the step increase that was observed: (1) the annealing method levels employed were lower for the Panasonic TLDs, (2) transit control subtraction differences, and (3) the calculation/method of fade correction (fixed fade control - vs - actual in field TLDs). Starting in 2016, enhanced analytical methods will be evaluated for future implementation when sufficient data is available. The new methods will improve data transparency and interpretation.

A TLD Intercomparison Program is conducted as part of the quality assurance program. Results of this program are included in Section 4.9.

Figure 3.7



There is no reporting level for Direct Radiation (TLD)

Table 3.7-1 Direct Gamma Radiation (TLD) Results

Year	Inner Ring Average (mR/Std. Qtr.)	Outer Ring Average (mR/Std. Qtr.)	Control Average (mR/Std. Qtr.)
1999	9.76E+0	9.53E+0	1.11E+1
2000	9.75E+0	9.61E+0	1.11E+1
2001	1.01E+1	9.88E+0	1.09E+1
2002	9.65E+0	9.45E+0	1.09E+1
2003	9.60E+0	9.51E+0	1.05E+1
2004	9.78E+0	9.68E+0	1.06E+1
2005	9.94E+0	9.64E+0	1.07E+1
2006	1.02E+1	9.80E+0	1.07E+1
2007	9.96E+0	9.55E+0	1.06E+1
2008	9.93E+0	9.83E+0	1.07E+1
2009	1.00E+1	9.98E+0	1.06E+1
2010	1.01E+1	1.01E+1	1.07E+1
2011	1.00E+1	9.86E+0	1.08E+1
2012	9.78E+0	9.79E+0	1.10E+1
2013	9.98E+0	9.61E+0	1.12E+1
2014	1.01E+1	9.98E+0	1.05E+1
2015	1.06E+1	1.06E+1	1.14E+1
2016	1.01E+1	9.76E+0	1.03E+1

Table 3.7-2

ISFSI TLD Dose (mR/Std. Qtr.)

	TLD # 82	TLD # 83	TLD # 84	TLD # 85
Average Pre-Op (1 st Qtr. 2008 to 3 rd Qtr. 2010)	30.1 ± 3.1	22.4 ± 2.1	16.7 ± 1.6	53.2 ± 7.6
Average after Fuel Loaded (4 th Qtr. 2010 to 4 th Qtr. 2016)	30.9	24.4	18.3	43.1

Table 3.7-3

**Brunswick Steam Electric Plant
HISTORICAL TLD RESULTS (1972-2016)**

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)
2010	10.1 (mR per quarter)
2011	9.9 (mR per quarter)
2012	9.8 (mR per quarter)
2013	9.8 (mR per quarter)
2014	10.0 (mR per quarter)
2015	10.7 (mR per quarter)
2016	10. (mR per quarter)

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

3.8 LAND USE CENSUS

The 2016 BSEP Annual Land Use Census was conducted during June of 2016 as required by the BSEP ODCM. Table 3.8-A summarizes the 2016 census results. No environmental program changes were required as a result of the 2016 Land Use Census.

3.8.1 PURPOSE OF 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 (8 kilometer) distance of the plant is completed during the growing season each year. This information is used for dose assessment and to identify changes to the stations sampled and the type of samples. These results ensure that the Radiological Environmental Monitoring Program (REMP) is based upon current data regarding human activity in the vicinity of the plant. Therefore, the purpose of the land use census is to ensure the monitoring program is current, as well as provide data for the calculation of estimated radiation exposure.

The pathways evaluated are:

- Ingestion Pathway – Results from eating food crops that may have radioactive materials deposited on them, incorporated radioactive materials from the soil or atmosphere. Another pathway is through drinking milk from local cows or goats, if these are present. The grass used to feed these animals may have had radioactive materials deposited on them, that can then 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.

3.8.2 METHODOLOGY

The following must be identified within the five-mile (8 kilometer) radius of the plant for each of the sixteen meteorological sectors (compass direction the winds may blow, for example NNE [North North East]):

- The nearest resident
- The nearest garden of greater than 500 square feet, producing broadleaf 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 the roadside within the five (5) 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. Distances from the plant are accurate to within one tenth of a mile.

3.8.3 LAND USE CENSUS RESULTS

The 2015 and 2016 results of the survey for the nearest resident, garden, milk and meat animals in each sector are compared in Table 3.8-A.

The resident portion of the census conducted in June of 2016 did not identify any new residents closer to the plant; therefore, no changes from the 2015 land use census. The garden portion of the census identified changes in the distance of the nearest garden in five sectors during the 2016 census.

The nearest garden locations changed in the North (N) sector from 1.0 mile to 1.0 mile, the S sector from 1.8 miles to 1.7 miles, SSW from 1.9 miles to 1.7 miles, SW from 1.4 miles to 2.2 miles, and in the WNW sector from 1.0 mile to 1.0 mile (address/location of the garden changed, but distance remained the same). No milk animals were located within 5 miles of the plant in 2016.

The 2016 Garden Census was conducted within three (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 3.8-B.

Results of the 2016 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 3.8-A

Brunswick Steam Electric Plant

Land Use Census Comparison (2015 – 2016)

Nearest Pathway (Miles)

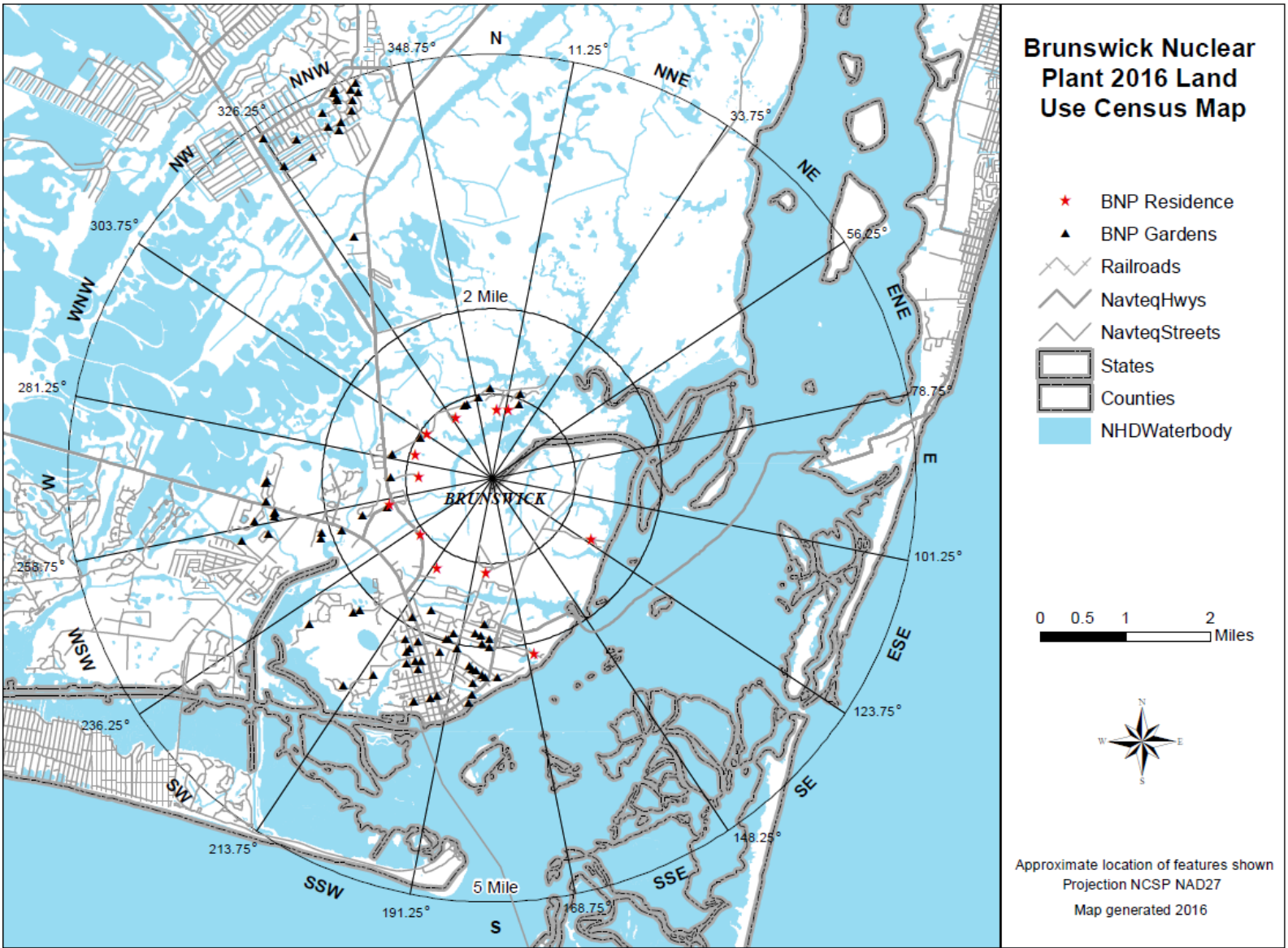
SECTOR	RESIDENT		GARDEN		MILK/MEAT ANIMALS	
	2015	2016	2015	2016	2015	2016
N	0.7	0.7	1.1	1.0*	None	None
NNE	0.8	0.8	0.9	0.9	None	None
NE	None	None	None	None	None	None
ENE	None	None	None	None	None	None
E	None	None	None	None	None	None
ESE	1.4	1.4	None	None	None	None
SE	None	None	None	None	None	None
SSE	2.1	2.1	None	None	None	None
S	1.1	1.1	1.8	1.7*	None	None
SSW	1.2	1.2	1.9	1.7*	None	None
SW	1.1	1.1	1.4	2.2*	None	None
WSW	1.2	1.2	1.3	1.3	None	None
W	0.9	0.9	1.2	1.2	None	None
WNW	0.9	0.9	1.0	1.0*	None	None
NW	0.9	0.9	4.9	4.9	None	None
NNW	0.8	0.8	0.9	0.9	None	None

* Represents a change from the previous year.
Sector and distance determined by Global Positioning System.

Table 3.8-B
Brunswick Steam Electric Plant
Garden Census – 2016

SECTOR	DISTANCE (miles)		SECTOR	DISTANCE (miles)
N	1.0		SSW	2.7
N	1.1		SSW	2.8
NNE	0.9		SSW	2.8
NNE	1.0		SW	2.2
NE	None		SW	2.3
ENE	None		SW	2.8
E	None		SW	3.0
ESE	None		WSW	1.3
SE	None		WSW	1.6
SSE	None		WSW	1.9
S	1.7		WSW	2.1
S	1.8		WSW	2.1
S	1.9		WSW	2.7
S	1.9		WSW	3.0
S	2.0		W	1.2
S	2.0		W	2.6
S	2.2		W	2.6
S	2.3		W	2.6
S	2.3		W	2.7
S	2.3		W	2.7
S	2.3		W	2.7
S	2.3		W	2.9
S	2.4		WNW	1.0
S	2.6		WNW	1.2
S	2.7		NW	4.9
SSW	1.7		NNW	0.9
SSW	1.9		NNW	0.9
SSW	1.9		NNW	3.3
SSW	2.0		NNW	4.3
SSW	2.0		NNW	4.4
SSW	2.1		NNW	4.5
SSW	2.1		NNW	4.6
SSW	2.1		NNW	4.6
SSW	2.2		NNW	4.6
SSW	2.2		NNW	4.8
SSW	2.3		NNW	4.8
SSW	2.3		NNW	4.8
SSW	2.3		NNW	4.8
SSW	2.4		NNW	4.8
SSW	2.4		NNW	4.9
SSW	2.7		NNW	4.9
SSW	2.7		NNW	4.9
SSW	2.7		NNW	4.9

Figure 3.8-1



4.0 QUALITY ASSURANCE

4.1 SAMPLE COLLECTION

Environmental sample collection at BSEP was performed by BSEP Chemistry personnel in 2016 along with the Environmental Water Resources Group as specified by approved sample collection procedures.

4.2 SAMPLE ANALYSIS

EnRad Laboratories performed the environmental sample analyses as specified by approved analysis procedures. EnRad Laboratories is located in Huntersville, North Carolina, at Duke Energy's Environmental Center. The ground water samples and most of the surface water samples requiring gamma and tritium analyses are analyzed by the BSEP laboratory. The shoreline sediment samples requiring hard-to-detects (Fe-55, Ni-63, and Sr-89/90) during 2016, were analyzed by a vendor laboratory; General Engineering Laboratory, LLC (GEL); as specified by approved analysis procedures.

4.3 DOSIMETRY ANALYSIS

The Radiation Dosimetry and Records group performed the environmental dosimetry measurements as specified by approved dosimetry analysis procedures.

4.4 LABORATORY EQUIPMENT QUALITY ASSURANCE

4.4.1 DAILY QUALITY CONTROL

BSEP and EnRad Laboratories all have an internal quality assurance program which monitors each type of instrumentation for reliability and accuracy. Quality control checks are performed to ensure that instruments are in proper working order and these checks are used to monitor instrument performance.

4.4.2 CALIBRATION VERIFICATION

National Institute of Standards and Technology (NIST) standards that represent counting geometries are analyzed as unknowns at various frequencies ranging from weekly to annually to verify that efficiency calibrations are valid. The frequency is dependent upon instrument use and performance. Investigations are performed and documented should calibration verification data fall outside of the acceptable limits.

4.4.3 BATCH PROCESSING

Method quality control samples are analyzed with sample analyses that are processed in batches. These include tritium analyses in ground water and surface water samples.

4.5 DUKE ENERGY INTERLABORATORY COMPARISON PROGRAM

In 2016 Duke Energy Environmental Laboratory (EnRad) participated in interlaboratory programs to satisfy Radiological Environmental Monitoring Program requirements in Duke Energy nuclear plant Offsite Dose Calculation Manuals and Selected Licensee Commitments Manuals, as applicable. In addition, EnRad Laboratory participated in the ERA RadCheMTM Proficiency Testing program to satisfy North Carolina state drinking water radiochemistry certification requirements.

EnRad Laboratory participated in three interlaboratory programs: Eckert & Ziegler Analytics (EZA), ERA, and Fleet Scientific Services (FSS). EZA results were evaluated against IP 84750 acceptance criteria stated in EnRad Procedure 515, Cross Check Program Administration. ERA evaluated reported results based on National Environmental Laboratory Accreditation Conference (NELAC) Field of Proficiency Testing criteria. FSS results were evaluated as prescribed in the Duke Energy Nuclear Generation Procedure SRPMP 9-2.

4.5.1 DUKE ENERGY INTERLABORATORY PROGRAM

EnRad Laboratories participated in the Duke Energy Fleet Scientific Services (FSS) Interlaboratory Program during 2016. Interlaboratory cross check samples including mixed gamma in water (Marinelli beakers), low-level I-131 in water, gross beta in water, and tritium in water samples were analyzed during 2016. A summary of the EnRad Laboratory program results for 2016 is documented in Table 4.0-A.

Interlaboratory cross checks were distributed by Fleet Scientific Services (FSS) staff in accordance with SRPMP 9-2. One media type, water, was analyzed for mixed gamma, tritium, beta, and LLI-131. Table 4.0-A lists results for specific analyses. One-hundred and seventy-four results were reported of which 164 (94.3%) were in agreement.

NCR #02072622 was written by FSS staff due to five out of nine third quarter alpha nuclide results from the FSS cross check samples Alpha/Beta in Water (Q163ABW1, Q163ABW2 and Q163ABW3) showed non-agreement, three other results showed warning limit evaluations.

In the third quarter of 2016, one data set of the three analyzed for FSS Tritium in Water Sample Q163TWR3 showed a low bias when compared to the known value. NCR #02074856 was initiated to investigate why this sample set was lower than expected.

4.5.2 ECKERT & ZIEGLER ANALYTICS CROSS CHECK PROGRAM

EnRad Laboratories participated in the Eckert & Ziegler Analytics Cross Check Program during 2016. Cross check samples including air filters (single and composites), air cartridges, gross alpha and beta in water, various mixed gamma samples in Marinelli beakers (soil, vegetation, milk, and water), tritium in water,

and Iodine in milk and water samples were analyzed at various times of the year. A summary of the EnRad Laboratory program results for 2016 is documented in Table 4.0-B.

Interlaboratory cross check samples from EZA were received and analyzed in all four quarters of 2016. Table 4.0-B lists the performance for specific samples. Seventy-nine results were reported of which 79 (100%) met the acceptance criteria based on IP 84750. Five EZA cross check samples did exhibit either a high or low bias in at least one nuclide of interest and EnRad proactively initiated NCRs to investigate these biases. The first bias was found in the second quarter gross alpha/beta in water sample (E11527), where a high alpha activity bias was evident in the sample set. NCR # 02052857 was written to investigate the high alpha activity bias in the water samples.

In the third quarter of 2016, the Gamma in Composite Filter cross check (E11590) showed a low activity bias for the Cr-51 nuclide, the other eight reported nuclides were all found to be in trend. NCR #02080821 was initiated to track the actions for investigating the Cr-51 activity bias. The Gamma in Water cross check (E11588), which was also analyzed in the third quarter of 2016 showed a high activity bias for the Fe-59 isotope. The remaining nine isotopes of sample E11588 were all found to be within trend, NCR #02074444 was written to investigate the high Fe-59 activity bias.

NCR #02027474 was written to document and track the associated actions of an overall high activity bias in the LLI-131 in Milk cross check samples (E11472) analyzed in the first quarter of 2016. In the second quarter of 2016, LLI-131 in Water cross check samples (E11526) also showed an overall high bias within the sample set. NCR #02045683 was initiated to investigate this continued LLI-131 bias since the samples are analyzed the same and the simulated milk matrix is similar to that of the water. In the third quarter of 2016, cross check E11592, LLI-131 in Milk was analyzed and no activity bias was evident.

The BSEP Chemistry Laboratory participated in the Analytical Environmental Cross Check Program administered by Eckert & Ziegler Analytics, Inc. during 2016. Cross check samples including tritium in water, gammas in solids, and other sample media were analyzed in 2016. A summary of the applicable BSEP Laboratory program results for 2016 is documented in Table 4.0-F. BSEP cross check results not appearing in Table 4.0-F will be supplied upon request.

4.5.3 ERA PROFICIENCY TESTING

EnRad Laboratories performed method proficiency testing through a program administered by Environmental Resource Associates (ERA) of Arvada, CO. ERA supplied requested method proficiency samples for analysis and nuclide concentration determination. ERA reported proficiency test results to the North Carolina Department of Health and Human Services, North Carolina Public Health Drinking Water Laboratory Certification Program. A summary of these proficiency test data for 2016 is documented in Table 4.0-C.

Proficiency samples were distributed in the second and fourth quarters of 2016. Table 4.0-C summarizes the results and evaluation. Fourteen results were reported of which 14 (100%) were in agreement.

Two NCRs were proactively written to investigate nuclide activity biases seen in ERA Proficiency Samples. NCR #02032824 was written to investigate a high activity bias in the Zn-65 nuclide of Proficiency Sample RAD-105, Gamma Emitters in Water, which was analyzed in the second quarter of 2016. The remaining four identified nuclides in sample RAD-105 were within trend. In the fourth quarter of 2016, NCR #02081918 was written to document and track the actions of an overall high bias in the sample set for Proficiency Sample RAD-107, I-131 in Water. However, during review of data for AREOR preparations, it was found that the closure for NCR #02081918 was insufficient to explain the event, so NCR #02103716 was generated to better document the possible cause of the I-131 bias.

4.6 STATE OF NORTH CAROLINA INTERCOMPARISON PROGRAM

EnRad Laboratories routinely participates with the North Carolina Department of Health and Human Services in an intercomparison program. EnRad Laboratories sends BSEP Radiological Environmental Monitoring Program air, surface water, fish, and shoreline sediment samples to the North Carolina Department of Health and Human Services, Division of Public Health for intercomparison analysis.

4.7 TLD INTERCOMPARISON PROGRAM

4.7.1 NUCLEAR TECHNOLOGY SERVICES INTERCOMPARISON PROGRAM

Radiation Dosimetry and Records participates in a quarterly TLD intercomparison program administered by Nuclear Technology Services, Inc. of Roswell, GA. Nuclear Technology Services irradiates environmental dosimeters quarterly and sends them to the Radiation Dosimetry and Records group for analysis of the unknown estimated delivered exposure. A summary of the 2016 Nuclear Technology Services Intercomparison Report is documented in Table 4.0-D.

The individual measurements were evaluated and results falling outside the acceptable ratio criteria had an evaluation performed to identify any recommended remedial actions and to reduce anomalous errors. During third and fourth quarters of 2016 an environmental external TLD cross check failed and NCR # 02106779 was written to document the failures. To prevent recurrence, the two TLDs were pulled and visually inspected for abnormalities in the elements and overall integrity of the TLDs and no abnormalities were found. The two TLDs were then annealed and irradiated to 100 GU, then read 7 days later. Both TLDs over responded on E3 or E4 and were outside of the 10% acceptance criteria per procedure RD/0/B/4000/13, Environmental Monitoring. TLD # 103523 and 103511 were both removed from Environmental TLD inventory and removed from

service. Complete documentation of any evaluation will be available and provided to the NRC upon request.

4.8 GENERAL ENGINEERING LABORATORY, LLC (GEL)

General Engineering Laboratory, LLC (GEL) participated in various Quality Assurance Programs for Inter-laboratory, Intra-laboratory, Third Party Cross Check programs, and a number of proficiency testing programs during 2016. A summary of the GEL quality assurance program results for the sample media types sent to GEL during 2016 is documented in Table 4.0-E. GEL Quality Assurance Program results not appearing in Table 4.0-E will be supplied upon request.

TABLE 4.0-A

DUKE ENERGY

INTERLABORATORY COMPARISON PROGRAM

2016 EnRad Fleet Scientific Services Cross Check Performance Summary

Interlaboratory cross checks were distributed by Fleet Scientific Services (FSS) staff in accordance with SRPMP 9-2. One media type, water, was analyzed for mixed gamma, tritium, beta, and LLI-131. Table 4.0-A lists results for specific analyses. One-hundred and seventy-four results were reported of which 164 (94.3%) were in agreement.

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	GO Value	EnRad/GO Ratio	Evaluation
Gamma in Water	Q161GWR 1.0 L	Mn-54	1	pCi/L	7540	6890	1.09	Agreement
			1	pCi/L	7500	6890	1.09	Agreement
			1	pCi/L	7540	6890	1.09	Agreement
		Co-57	1	pCi/L	4960	4880	1.02	Agreement
			1	pCi/L	5060	4880	1.04	Agreement
			1	pCi/L	5070	4880	1.04	Agreement
		Co-60	1	pCi/L	4400	4370	1.01	Agreement
			1	pCi/L	4760	4370	1.09	Agreement
			1	pCi/L	4530	4370	1.04	Agreement
		Zn-65	1	pCi/L	11900	10600	1.12	Agreement
			1	pCi/L	12200	10600	1.15	Agreement
			1	pCi/L	11800	10600	1.11	Agreement
		Y-88	1	pCi/L	3170	3310	0.96	Agreement
			1	pCi/L	3460	3310	1.04	Agreement
			1	pCi/L	3270	3310	0.99	Agreement
		Sn-113	1	pCi/L	9800	9190	1.07	Agreement
			1	pCi/L	9720	9190	1.06	Agreement
			1	pCi/L	9700	9190	1.06	Agreement
		Cs-134	1	pCi/L	6970	7750	0.90	Agreement
			1	pCi/L	7020	7750	0.91	Agreement
			1	pCi/L	6980	7750	0.90	Agreement
		Cs-137	1	pCi/L	5240	4930	1.06	Agreement
			1	pCi/L	5340	4930	1.08	Agreement
			1	pCi/L	5230	4930	1.06	Agreement

TABLE 4.0-A (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	GO Value	EnRad/GO Ratio	Evaluation
Gamma in Water	Q161GWR 3.5 L	Mn-54	1	pCi/L	7640	6890	1.11	Agreement
			1	pCi/L	7680	6890	1.12	Agreement
			1	pCi/L	7690	6890	1.12	Agreement
		Co-57	1	pCi/L	5110	4880	1.05	Agreement
			1	pCi/L	5240	4880	1.07	Agreement
			1	pCi/L	5210	4880	1.07	Agreement
		Co-60	1	pCi/L	4750	4370	1.09	Agreement
			1	pCi/L	4710	4370	1.08	Agreement
			1	pCi/L	4630	4370	1.06	Agreement
		Zn-65	1	pCi/L	11900	10600	1.12	Agreement
			1	pCi/L	12000	10600	1.13	Agreement
			1	pCi/L	11800	10600	1.11	Agreement
		Y-88	1	pCi/L	3360	3310	1.01	Agreement
			1	pCi/L	3490	3310	1.05	Agreement
			1	pCi/L	3380	3310	1.02	Agreement
		Sn-113	1	pCi/L	9970	9190	1.08	Agreement
			1	pCi/L	9970	9190	1.08	Agreement
			1	pCi/L	9860	9190	1.07	Agreement
		Cs-134	1	pCi/L	7410	7750	0.96	Agreement
			1	pCi/L	7390	7750	0.95	Agreement
			1	pCi/L	7350	7750	0.95	Agreement
		Cs-137	1	pCi/L	5340	4930	1.08	Agreement
			1	pCi/L	5420	4930	1.10	Agreement
			1	pCi/L	5250	4930	1.06	Agreement

TABLE 4.0-A (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	GO Value	EnRad/GO Ratio	Evaluation
Gamma in Water	Q163GWR 0.25 L	Cr-51	3	pCi/L	30400	26400	1.15	Agreement
			3	pCi/L	28800	26400	1.09	Agreement
			3	pCi/L	28600	26400	1.08	Agreement
		Mn-54	3	pCi/L	26700	21800	1.23	Agreement
			3	pCi/L	25300	21800	1.16	Agreement
			3	pCi/L	24900	21800	1.14	Agreement
		Co-58	3	pCi/L	23100	20200	1.14	Agreement
			3	pCi/L	21700	20200	1.07	Agreement
			3	pCi/L	21500	20200	1.06	Agreement
		Fe-59	3	pCi/L	19100	14900	1.28	Warning ¹
			3	pCi/L	18100	14900	1.21	Agreement
			3	pCi/L	18000	14900	1.20	Agreement
		Co-60	3	pCi/L	38100	31400	1.21	Agreement
			3	pCi/L	35600	31400	1.13	Agreement
			3	pCi/L	35600	31400	1.13	Agreement
		Zn-65	3	pCi/L	52500	40000	1.31	Warning ¹
			3	pCi/L	49200	40000	1.23	Agreement
			3	pCi/L	49100	40000	1.23	Agreement
		Cs-134	3	pCi/L	32100	31300	1.03	Agreement
			3	pCi/L	30200	31300	0.97	Agreement
			3	pCi/L	29700	31300	0.95	Agreement
		Cs-137	3	pCi/L	25900	22100	1.17	Agreement
			3	pCi/L	24500	22100	1.11	Agreement
			3	pCi/L	24100	22100	1.09	Agreement
		Ce-141	3	pCi/L	16900	14700	1.15	Agreement
			3	pCi/L	15800	14700	1.08	Agreement
			3	pCi/L	16100	14700	1.10	Agreement

1) Warnings were caused by expected double humped coincidence summing and the FSS cross check provider did not request an investigation and does not constitute a non-agreement.

TABLE 4.0-A (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	GO Value	EnRad/GO Ratio	Evaluation
Gamma in Water	Q163GWR 0.5 L	Cr-51	3	pCi/L	27200	26400	1.03	Agreement
			3	pCi/L	27200	26400	1.03	Agreement
			3	pCi/L	26900	26400	1.02	Agreement
		Mn-54	3	pCi/L	23700	21800	1.09	Agreement
			3	pCi/L	23900	21800	1.10	Agreement
			3	pCi/L	24000	21800	1.10	Agreement
		Co-58	3	pCi/L	20400	20200	1.01	Agreement
			3	pCi/L	20700	20200	1.02	Agreement
			3	pCi/L	20700	20200	1.02	Agreement
		Fe-59	3	pCi/L	16800	14900	1.12	Agreement
			3	pCi/L	17100	14900	1.14	Agreement
			3	pCi/L	17200	14900	1.15	Agreement
		Co-60	3	pCi/L	33500	31400	1.07	Agreement
			3	pCi/L	34200	31400	1.09	Agreement
			3	pCi/L	34000	31400	1.08	Agreement
		Zn-65	3	pCi/L	46100	40000	1.15	Agreement
			3	pCi/L	47000	40000	1.17	Agreement
			3	pCi/L	46900	40000	1.17	Agreement
		Cs-134	3	pCi/L	30900	31300	0.99	Agreement
			3	pCi/L	28800	31300	0.92	Agreement
			3	pCi/L	28800	31300	0.92	Agreement
		Cs-137	3	pCi/L	22900	22100	1.04	Agreement
			3	pCi/L	23300	22100	1.05	Agreement
			3	pCi/L	23200	22100	1.05	Agreement
		Ce-141	3	pCi/L	15000	14700	1.02	Agreement
			3	pCi/L	15300	14700	1.04	Agreement
			3	pCi/L	15300	14700	1.04	Agreement

TABLE 4.0-A (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	GO Value	EnRad/GO Ratio	Evaluation
Gamma in Water	Q163GWR 3.5 L	Cr-51	3	pCi/L	27700	26400	1.05	Agreement
			3	pCi/L	27600	26400	1.04	Agreement
			3	pCi/L	27400	26400	1.04	Agreement
		Mn-54	3	pCi/L	23600	21800	1.08	Agreement
			3	pCi/L	23800	21800	1.09	Agreement
			3	pCi/L	23700	21800	1.09	Agreement
		Co-58	3	pCi/L	20600	20200	1.02	Agreement
			3	pCi/L	20800	20200	1.03	Agreement
			3	pCi/L	20700	20200	1.02	Agreement
		Fe-59	3	pCi/L	16500	14900	1.10	Agreement
			3	pCi/L	16700	14900	1.12	Agreement
			3	pCi/L	16500	14900	1.10	Agreement
		Co-60	3	pCi/L	34100	31400	1.09	Agreement
			3	pCi/L	34100	31400	1.09	Agreement
			3	pCi/L	34000	31400	1.08	Agreement
		Zn-65	3	pCi/L	45600	40000	1.14	Agreement
			3	pCi/L	45900	40000	1.15	Agreement
			3	pCi/L	45500	40000	1.14	Agreement
		Cs-134	3	pCi/L	32700	31300	1.05	Agreement
			3	pCi/L	30100	31300	0.96	Agreement
			3	pCi/L	29900	31300	0.96	Agreement
		Cs-137	3	pCi/L	23100	22100	1.05	Agreement
			3	pCi/L	23400	22100	1.06	Agreement
			3	pCi/L	23200	22100	1.05	Agreement
		Ce-141	3	pCi/L	15400	14700	1.05	Agreement
			3	pCi/L	15700	14700	1.07	Agreement
			3	pCi/L	15500	14700	1.06	Agreement

TABLE 4.0-A (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	GO Value	EnRad/GO Ratio	Evaluation
Tritium in Water	Q161TWR1	H-3	1	pCi/L	4880	4730	1.03	Agreement
			1	pCi/L	4810	4730	1.02	Agreement
			1	pCi/L	4770	4730	1.01	Agreement
	Q161TWR2	H-3	1	pCi/L	80200	81200	0.99	Agreement
			1	pCi/L	80100	81200	0.99	Agreement
			1	pCi/L	79700	81200	0.98	Agreement
	Q161TWR3	H-3	1	pCi/L	488	471	1.04	Agreement
			1	pCi/L	478	471	1.02	Agreement
			1	pCi/L	479	471	1.02	Agreement
Tritium in Water	Q163TWR1	H-3	3	pCi/L	1230	1250	0.98	Agreement
			3	pCi/L	1170	1250	0.93	Agreement
			3	pCi/L	1220	1250	0.97	Agreement
	Q163TWR2	H-3	3	pCi/L	134000	134000	1.00	Agreement
			3	pCi/L	134000	134000	1.00	Agreement
			3	pCi/L	132000	134000	0.99	Agreement
	Q163TWR3	H-3	3	pCi/L	380	387	0.98	Agreement ²
			3	pCi/L	388	387	1.00	Agreement ²
			3	pCi/L	413	387	1.07	Agreement ²

2) NCR # 02074856

TABLE 4.0-A (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	GO Value	EnRad/GO Ratio	Evaluation
LLI-131 in Water	Q162LIW4	I-131	2	pCi/L	84.7	79.6	1.06	Agreement
			2	pCi/L	85.6	79.6	1.07	Agreement
			2	pCi/L	84.4	79.6	1.06	Agreement
	Q162LIW5	I-131	2	pCi/L	2030	1850	1.10	Agreement
			2	pCi/L	1950	1850	1.05	Agreement
			2	pCi/L	2000	1850	1.08	Agreement
	Q162LIW6	I-131	2	pCi/L	403	380	1.06	Agreement
			2	pCi/L	396	380	1.04	Agreement
			2	pCi/L	391	380	1.03	Agreement
Alpha Beta in Water	Q163ABW1	Am-241	3	pCi/L	603	470	1.28	Warning ³
			3	pCi/L	591	470	1.26	Warning ³
			3	pCi/L	588	470	1.25	Agreement
		Cs-137	3	pCi/L	293	289	1.01	Agreement
			3	pCi/L	293	289	1.01	Agreement
			3	pCi/L	288	289	1.00	Agreement
	Q163ABW2	Am-241	3	pCi/L	381	271	1.41	Non-Agreement ³
			3	pCi/L	380	271	1.40	Non-Agreement ³
			3	pCi/L	377	271	1.39	Non-Agreement ³
		Cs-137	3	pCi/L	262	258	1.02	Agreement
			3	pCi/L	260	258	1.01	Agreement
			3	pCi/L	270	258	1.05	Agreement
	Q163ABW3	Am-241	3	pCi/L	321	238	1.35	Non-Agreement ³
			3	pCi/L	326	238	1.37	Non-Agreement ³
			3	pCi/L	308	238	1.29	Warning ³
		Cs-137	3	pCi/L	489	493	0.99	Agreement
			3	pCi/L	486	493	0.99	Agreement
			3	pCi/L	483	493	0.98	Agreement

3) NCR # 02072622

TABLE 4.0-B

ECKERT & ZIEGLER ANALYTICS

CROSS CHECK PROGRAM

2016 Cross Check Results for EnRad Laboratories

Interlaboratory cross check samples from EZA were received and analyzed in all four quarters of 2016. Results are reported directly to Eckert & Ziegler Analytics. Environmental cross check samples were analyzed in replicate, and the result closest to the mean is reported to Eckert & Ziegler Analytics. The acceptance criteria for the program was based on the NRC Inspection Manual Procedure 84750 (IP 84750). Table 4.0-B lists the performance for specific samples. Seventy-nine results were reported of which 79 (100%) met the acceptance criteria based on IP 84750.

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Beta Filter in Planchet	E11474A	Cs-137	1	pCi	139	134	1.05	Agreement
	E11591	Cs-137	3	pCi	55.5	56.7	0.98	Agreement
	E11665A	Cs-137	4	pCi	225	228	0.99	Agreement
Gamma in Soil	E11529	Ce-141	2	pCi/g	0.19	0.21	0.92	Agreement
		Cr-51	2	pCi/g	0.41	0.42	0.98	Agreement
		Cs-134	2	pCi/g	0.26	0.27	0.97	Agreement
		Cs-137	2	pCi/g	0.25	0.26	0.94	Agreement
		Co-58	2	pCi/g	0.20	0.22	0.91	Agreement
		Mn-54	2	pCi/g	0.20	0.19	1.02	Agreement
		Fe-59	2	pCi/g	0.19	0.19	1.04	Agreement
		Zn-65	2	pCi/g	0.37	0.36	1.04	Agreement
		Co-60	2	pCi/g	0.25	0.26	0.96	Agreement
LLI-131 in Water	E11526	I-131	2	pCi/L	109	99.8	1.09	Agreement ¹
Gross Alpha/Beta in Water	E11527	Am-241	2	pCi/L	83.6	74.9	1.12	Agreement ²
		Cs-137	2	pCi/L	251	250	1.00	Agreement ²
Gamma in Vegetation (Coffee Grounds)	E11528	Ce-141	2	pCi/g	0.23	0.23	1.01	Agreement
		Cr-51	2	pCi/g	0.44	0.45	0.98	Agreement
		Cs-134	2	pCi/g	0.27	0.29	0.94	Agreement
		Cs-137	2	pCi/g	0.20	0.20	1.00	Agreement
		Co-58	2	pCi/g	0.22	0.23	0.96	Agreement
		Mn-54	2	pCi/g	0.21	0.21	1.00	Agreement
		Fe-59	2	pCi/g	0.20	0.20	1.00	Agreement
		Zn-65	2	pCi/g	0.45	0.39	1.17	Agreement
		Co-60	2	pCi/g	0.28	0.28	0.98	Agreement

1) NCR #02045683

2) NCR #02052857

TABLE 4.0-B (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Gamma in Composite Filter	E11471	Ce-141	1	pCi	80.1	75.6	1.06	Agreement
		Cr-51	1	pCi	213	187	1.14	Agreement
		Cs-134	1	pCi	102	99.9	1.02	Agreement
		Cs-137	1	pCi	119	124	0.96	Agreement
		Co-58	1	pCi	86.9	90.2	0.96	Agreement
		Mn-54	1	pCi	92.9	89.6	1.04	Agreement
		Fe-59	1	pCi	110	101	1.09	Agreement
		Zn-65	1	pCi	139	137	1.01	Agreement
		Co-60	1	pCi	195	187	1.04	Agreement
Gamma in Composite Filter	E11590	Ce-141	3	pCi	76.0	70.3	1.08	Agreement
		Cr-51	3	pCi	183	178	1.03	Agreement ³
		Cs-134	3	pCi	102	102	1.00	Agreement
		Cs-137	3	pCi	88.3	89.4	0.99	Agreement
		Co-58	3	pCi	72.1	73.4	0.98	Agreement
		Mn-54	3	pCi	115	115	1.00	Agreement
		Fe-59	3	pCi	63.5	68.4	0.93	Agreement
		Zn-65	3	pCi	143	135	1.06	Agreement
		Co-60	3	pCi	104	102	1.02	Agreement
Gamma in Water	E11588	I-131	3	pCi/L	50.3	49.0	1.03	Agreement
		Ce-141	3	pCi/L	89.5	85.2	1.05	Agreement
		Cr-51	3	pCi/L	230	215	1.07	Agreement
		Cs-134	3	pCi/L	112	124	0.90	Agreement
		Cs-137	3	pCi/L	112	108	1.03	Agreement
		Co-58	3	pCi/L	88.9	89.0	1.00	Agreement
		Mn-54	3	pCi/L	149	139	1.07	Agreement
		Fe-59	3	pCi/L	97.4	82.8	1.18	Agreement ⁴
		Zn-65	3	pCi/L	180	163	1.10	Agreement
		Co-60	3	pCi/L	131	123	1.06	Agreement

3) NCR # 02080821

4) NCR # 02074444

TABLE 4.0-B (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Gamma in Filter (Falcon)	E11589	Ce-141	3	pCi	84.6	72.9	1.16	Agreement
		Cr-51	3	pCi	209	184	1.13	Agreement
		Cs-134	3	pCi	123	106	1.16	Agreement
		Cs-137	3	pCi	99.8	92.7	1.08	Agreement
		Co-58	3	pCi	75.8	76.1	1.00	Agreement
		Mn-54	3	pCi	123	119	1.03	Agreement
		Fe-59	3	pCi	79.7	70.9	1.12	Agreement
		Zn-65	3	pCi	171	140	1.22	Agreement
		Co-60	3	pCi	116	105	1.10	Agreement
Gamma in Milk	E11475	I-131	1	pCi/L	86.5	82.2	1.05	Agreement
		Ce-141	1	pCi/L	101	98.4	1.03	Agreement
		Cr-51	1	pCi/L	243	243	1.00	Agreement
		Cs-134	1	pCi/L	121	130	0.93	Agreement
		Cs-137	1	pCi/L	175	161	1.09	Agreement
		Co-58	1	pCi/L	117	117	1.00	Agreement
		Mn-54	1	pCi/L	127	117	1.09	Agreement
		Fe-59	1	pCi/L	143	131	1.09	Agreement
		Zn-65	1	pCi/L	186	179	1.04	Agreement
		Co-60	1	pCi/L	266	244	1.09	Agreement
Gross Alpha/Beta in Water	E11668	Am-241	4	pCi/L	135	146	0.92	Agreement
		Cs-137	4	pCi/L	270	293	0.92	Agreement
LLI-131 in Milk	E11472	I-131	1	pCi/L	102	92	1.11	Agreement ⁵
	E11592	I-131	3	pCi/L	82.6	81.5	1.01	Agreement
Tritium in Water	E11530	H-3	2	pCi/L	12200	12000	1.01	Agreement
	E11666	H-3	4	pCi/L	11900	11900	1.00	Agreement
I-131 in Charcoal Cartridge	E11473	I-131	1	pCi	90	89	1.01	Agreement
	E11587	I-131	3	pCi	61.9	58.6	1.06	Agreement

5) NCR # 02027474

TABLE 4.0-C

ENVIRONMENTAL RESOURCE ASSOCIATES (ERA)

PROFICIENCY TESTING

2016 Proficiency Test Results for EnRad Laboratories

North Carolina Department of Health and Human Services Laboratory Certification

EnRad Laboratories

Proficiency test samples are received, prepared, and analyzed in second and fourth quarters of 2016. Results are reported directly to Environmental Resource Associates as described in the instruction package within the study period. Proficiency test data are reported to ERA for evaluation. The acceptance criteria for the program was based on the National Environmental Laboratory Accreditation Conference (NELAC) Field of Proficiency Testing criteria. Fourteen results were reported of which 14 (100 %) met the acceptance criteria. ERA reports proficiency test results to the North Carolina Department of Health and Human Services, North Carolina Public Drinking Water Laboratory Certification Program. This testing is to satisfy the North Carolina state drinking water radiochemistry certification requirements.

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	ERA Value	Acceptance Limits	Evaluation
Gamma Emitters in Water	RAD-105	Ba-133	2	pCi/L	56.6	58.8	48.7-64.9	Agreement
		Cs-134	2	pCi/L	42.8	43.3	34.6-47.6	Agreement
		Cs-137	2	pCi/L	86.3	78.4	70.6-88.9	Agreement
		Co-60	2	pCi/L	101	102	91.8-114	Agreement
		Zn-65	2	pCi/L	244	214	193-251	Agreement ¹
	RAD-107	Ba-133	4	pCi/L	54	54.9	45.4-60.7	Agreement
		Cs-134	4	pCi/L	77.4	81.8	67.0-90.0	Agreement
		Cs-137	4	pCi/L	210	210	189-233	Agreement
		Co-60	4	pCi/L	68.9	64.5	58.0-73.4	Agreement
		Zn-65	4	pCi/L	280	245	220-287	Agreement
Tritium in Water	RAD-105	H-3	2	pCi/L	7940	7840	6790-8620	Agreement
	RAD-107	H-3	4	pCi/L	9670	9820	8540-10800	Agreement
Iodine-131 in Water	RAD-105	I-131	2	pCi/L	28.1	26.6	22.1-31.3	Agreement
	RAD-107	I-131	4	pCi/L	30.7	26.3	21.9-31.0	Agreement ²

1) NCR # 02032824

2) NCR #02081918

TABLE 4.0-D

2016 ENVIRONMENTAL DOSIMETER CROSS-CHECK RESULTS

Nuclear Technology Services

Radiation Dosimetry and Records participates in a quarterly TLD intercomparison program administered by Nuclear Technology Services, Inc. of Roswell, GA. Nuclear Technology Services irradiates environmental dosimeters quarterly and sends them to Radiation Dosimetry and Records group for analysis of the unknown estimated delivered exposure. The individual measurements were evaluated and results falling outside the acceptable ratio criteria had an evaluation performed to identify any recommended remedial actions and to reduce anomalous errors. Complete documentation of any evaluation will be available and provided to the NRC upon request.

1st Quarter 2016						2nd Quarter 2016					
TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
102234	90.33	88.74	1.79	<+/-15%	Pass	103685	16.86	15.90	6.04	<+/-15%	Pass
102082	87.38	88.74	-1.53	<+/-15%	Pass	103686	17.24	15.90	8.43	<+/-15%	Pass
103299	90.78	88.74	2.30	<+/-15%	Pass	103704	15.76	15.90	-0.88	<+/-15%	Pass
103287	95.55	88.74	7.67	<+/-15%	Pass	103705	16.21	15.90	1.95	<+/-15%	Pass
103752	92.49	88.74	4.23	<+/-15%	Pass	103714	17.45	15.90	9.75	<+/-15%	Pass
Average Bias (B)			2.89			Average Bias (B)			5.06		
Standard Deviation (S)			3.38			Standard Deviation (S)			4.45		
Measure Performance B +S			6.27	<15%	Pass	Measure Performance B +S			9.51	<15%	Pass
3rd Quarter 2016						4th Quarter 2016					
TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
102058	73.65	69.8	5.58	<+/-15%	Pass	100527	81.50	75.3	8.23	<+/-15%	Pass
103540	76.65	69.8	9.88	<+/-15%	Pass	100345	80.56	75.3	6.99	<+/-15%	Pass
103523	82.05	69.8	17.62	<+/-15%	Fail ¹	101386	82.55	75.3	9.63	<+/-15%	Pass
100795	74.03	69.8	6.12	<+/-15%	Pass	100123	81.17	75.3	7.80	<+/-15%	Pass
100355	71.79	69.8	2.91	<+/-15%	Pass	103511	87.26	75.3	15.88	<+/-15%	Fail ¹
Average Bias (B)			8.42			Average Bias (B)			9.71		
Standard Deviation (S)			5.71			Standard Deviation (S)			3.58		
Measure Performance B +S			14.13	<15%	Pass	Measure Performance B +S			13.29	<15%	Pass

1) NCR # 02106779 generated for 3rd and 4th Quarter 2016 failures

TABLE 4.0-E

2016 ANNUAL QUALITY ASSURANCE REPORT

for the RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

for GEL Laboratories, LLC (GEL)

Sample	Nuclide	Quarter	Units	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
HTD in Soil							
MAPEP-16-MaS34	Fe-55	2 nd	Bq/Kg	197	428	300 - 556	Non-agreement
(2Q 2016)	Ni-63	2 nd	Bq/Kg	1240	1250	875 - 1625	Agreement
	Sr-90	2 nd	Bq/Kg	-3.40		False Pos Test	Agreement
MAPEP-16-MaS35							
	Fe-55	4 th	Bq/kg	-337	0	False Pos Test	Agreement
(4Q 2016)	Ni-63	4 th	Bq/kg	1090	990	693 - 1287	Agreement
	Sr-90	4 th	Bq/kg	770	894	626 - 1162	Agreement
I-131 in Milk with EZA							
4Q 2015 E11414	I-131	4 th	pCi/L	101	91.2	1.11	Agreement
1Q 2016 E11447	I-131	1 st	pCi/L	94.1	82.2	1.15	Agreement
2Q 2016 E11575	I-131	2 nd	pCi/L	97.7	94.5	1.03	Agreement
3Q 2016 E11607	I-131	3 rd	pCi/L	75.3	71.9	1.05	Agreement
4Q 2016 E11676	I-131	4 th	pCi/L	108	97.4	1.11	Agreement
Transuranics in Water							
MAPEP-16-MaW34	Plutonium - 238	2 nd	Bq/L	1.14	1.244	0.871 - 1.617	Agreement
(2Q 2016)	Plutonium - 239/240	2 nd	Bq/L	0.586	0.641	0.449 - 0.833	Agreement
	Uranium - 234/233	2 nd	Bq/L	1.37	1.48	1.04 - 1.92	Agreement
	Uranium - 238	2 nd	Bq/L	1.43	1.53	1.07 - 1.99	Agreement
MAPEP-16-MaW35							
	Plutonium - 238	4 th	Bq/L	1.09	1.13	0.79 - 1.47	Agreement
(4Q 2016)	Plutonium - 239/240	4 th	Bq/L	0.024	0.013	Sens. Eval.	Agreement
	Uranium - 234/233	4 th	Bq/L	1.85	1.86	1.30 - 2.42	Agreement
	Uranium - 238	4 th	Bq/L	1.89	1.92	1.34 - 2.50	Agreement

Note: * HTD refers to Hard-to-detect radionuclides

TABLE 4.0-E (Cont.)

Sample	Nuclide	Quarter	Units	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
Transuranics in Water	Plutonium - 238	2 nd	pCi/L	126	138	102 - 172	Agreement
	Plutonium - 239	2 nd	pCi/L	88.2	98.7	76.6 - 124	Agreement
	Uranium - 234	2 nd	pCi/L	59.3	52.7	39.6 - 68.0	Agreement
MRAD - 24 (2Q 2016)	Uranium - 234	2 nd	pCi/L	49.9	52.7	39.6 - 68.0	Agreement
	Uranium - 234	2 nd	pCi/L	49.8	52.7	39.6 - 68.0	Agreement
	Uranium - 238	2 nd	pCi/L	54.1	52.3	39.9 - 64.2	Agreement
	Uranium - 238	2 nd	pCi/L	53.7	52.3	39.9 - 64.2	Agreement
	Uranium - 238	2 nd	pCi/L	49.1	52.3	39.9 - 64.2	Agreement
	Uranium - Total	2 nd	pCi/L	110.7	107	78.6 - 138	Agreement
	Uranium - Total	2 nd	pCi/L	158	107	78.6 - 138	Non-agreement
	Uranium - Total	2 nd	pCi/L	106.4	107	78.6 - 138	Agreement
	Uranium - Total	2 nd	pCi/L	103.9	107	78.6 - 138	Agreement
MRAD - 25 (4Q 2016)	Plutonium - 238	4 th	pCi/L	85.6	112	82.9 - 139	Agreement
	Plutonium - 239	4 th	pCi/L	125	157	122 - 198	Agreement
	Uranium - 234	4 th	pCi/L	106	105	78.9 - 135	Agreement
	Uranium - 234	4 th	pCi/L	108	105	78.9 - 135	Agreement
	Uranium - 234	4 th	pCi/L	103	105	78.9 - 135	Agreement
	Uranium - 238	4 th	pCi/L	98.4	104	79.3 - 128	Agreement
	Uranium - Total	4 th	pCi/L	209	213	157 - 275	Agreement
	Uranium - Total	4 th	pCi/L	225	213	157 - 275	Agreement
	Uranium - Total	4 th	pCi/L	214	213	157 - 275	Agreement
	Uranium - Total	4 th	pCi/L	211	213	157 - 275	Agreement

Other GEL 2016 Annual Environmental Quality Assurance Report results will be supplied upon request.

TABLE 4.0-F

ECKERT & ZIEGLER ANALYTICS

CROSS CHECK PROGRAM

2016 Cross Check Results for BSEP Laboratories

Sample	Nuclide	Quarter	Units	BSEP Value	EZA Value	BSEP/EZA Ratio	Evaluation
Tritium in Water							
A31708 1Q	H-3	1 st	μCi/cc	7.78E-04	7.40E-04	1.05	Agreement
Gamma Solid							
	Ce-141	3 rd	μCi	3.15E-02	3.04E-02	1.04	Agreement
A31966 3Q	Cr-51	3 rd	μCi	8.99E-02	8.69E-02	1.03	Agreement
	Cs-134	3 rd	μCi	2.09E-02	2.21E-02	0.95	Agreement
	Cs-137	3 rd	μCi	1.94E-02	1.87E-02	1.03	Agreement
	Co-58	3 rd	μCi	2.19E-02	2.14E-02	1.02	Agreement
	Mn-54	3 rd	μCi	2.80E-02	2.59E-02	1.08	Agreement
	Fe-59	3 rd	μCi	2.62E-02	2.43E-02	1.08	Agreement
	Zn-65	3 rd	μCi	3.54E-02	3.10E-02	1.14	Agreement
	Co-60	3 rd	μCi	2.23E-02	2.15E-02	1.04	Agreement
	Ce-141	4 th	μCi	3.72E-02	3.65E-02	1.02	Agreement
A32248 4Q	Cr-51	4 th	μCi	8.60E-02	7.92E-02	1.09	Agreement
	Cs-134	4 th	μCi	2.55E-02	2.63E-02	0.97	Agreement
	Cs-137	4 th	μCi	1.87E-02	1.82E-02	1.02	Agreement
	Co-58	4 th	μCi	2.74E-02	2.75E-02	1.00	Agreement
	Mn-54	4 th	μCi	2.09E-02	1.98E-02	1.06	Agreement
	Fe-59	4 th	μCi	2.91E-02	2.73E-02	1.06	Agreement
	Zn-65	4 th	μCi	3.94E-02	3.79E-02	1.04	Agreement
	Co-60	4 th	μCi	2.64E-02	2.58E-02	1.02	Agreement
	Ce-141	4 th	μCi	1.39E-02	1.21E-02	1.15	Agreement
A32249 4Q	Cr-51	4 th	μCi	3.25E-02	2.62E-02	1.24	Agreement
	Cs-134	4 th	μCi	9.20E-03	8.69E-03	1.06	Agreement
	Cs-137	4 th	μCi	6.96E-03	6.02E-03	1.16	Agreement
	Co-58	4 th	μCi	1.02E-02	9.09E-03	1.13	Agreement
	Mn-54	4 th	μCi	7.54E-03	6.54E-03	1.15	Agreement
	Fe-59	4 th	μCi	1.05E-02	9.04E-03	1.16	Agreement
	Zn-65	4 th	μCi	1.53E-02	1.25E-02	1.22	Agreement
	Co-60	4 th	μCi	9.73E-03	8.55E-03	1.14	Agreement

APPENDIX A

ENVIRONMENTAL SAMPLING
&
ANALYSIS PROCEDURES

APPENDIX A

ENVIRONMENTAL SAMPLING AND ANALYSIS PROCEDURES

Adherence to established procedures for sampling and analysis of environmental media at the Brunswick Steam Electric Plant (BSEP) was required to ensure compliance with provisions of the Nuclear Regulatory Commission's Regulatory Guide 4.8, BSEP Technical Specifications, and the BSEP Offsite Dose Calculation Manual (ODCM). Analytical procedures were employed to ensure that the ODCM detection capabilities were achieved at all laboratories (BSEP, EnRad, and GEL).

Environmental sampling was performed by BSEP and Environmental Water Resources Group; while the analyses were performed by BSEP, EnRad Laboratories, General Engineering Laboratory, LLC (GEL) (for special analyses), and Dosimetry and Records.

This appendix describes the environmental sampling frequencies and analysis procedures by media type that each laboratory conducted in 2016.

I. CHANGE OF SAMPLING PROCEDURES

REMP air filter orientation was changed during 2016 by inward facing the scrim side (shiny side or fuzzy side) and outward facing the crosshatch side (dull side or paper side) as indicated by manufacturer recommendation (NCR # 02026783, 02088360).

II. DESCRIPTION OF ANALYSIS PROCEDURES

Gamma spectroscopy analyses are performed using high purity germanium gamma detectors and Canberra analytical software. Designated sample volumes are transferred to appropriate counting geometries and analyzed by gamma spectroscopy. Perishable samples such as fish, invertebrates, and broadleaf vegetation are ground to achieve a homogeneous mixture and then transferred to an appropriate counting geometry. Soil and sediment samples are dried, sifted to remove foreign objects (rocks, clams, glass, etc.), and then transferred to an appropriate counting geometry container. Once prepared for counting, EnRad's samples (fish, invertebrates, broadleaf vegetation, soils, and sediments) are analyzed by gamma spectroscopy.

Tritium analyses are performed monthly by EnRad using low-level environmental liquid scintillation analysis technique on a Perkin-Elmer 2900TR liquid scintillation system or a Perkin-Elmer 3100TR liquid scintillation system. Tritium samples are distilled and batch processed with a laboratory fortified blank, matrix spike, matrix spike duplicate, and blank to verify instrument performance and sample preparation technique are acceptable.

Gross beta analysis is performed weekly on air particulate filter samples by Tennelec XLB Series 5 gas-flow proportional counters. Samples are batch processed with a blank to ensure sample contamination has not occurred.

BSEP and GEL Laboratories follow their facility approved procedures to meet the required BSEP ODCM LLDs.

III. CHANGE OF ANALYSIS PROCEDURES

REMP air filter orientation was changed during 2016 by inward facing the scrim side (shiny side or fuzzy side) and outward facing the crosshatch side (dull side or paper side) as indicated by manufacturer recommendation (NCR # 02026783, 02088360). Calibration standards using the new configuration were implemented during 2016.

REMP fish and invertebrates (shrimp) from Nancy's Creek, which are collected annually per the BSEP ODCM do not require a tritium analysis; however, for the past eight years the samples have been analyzed for tritium. No tritium activity has been detected in these samples for eight years; therefore, the BSEP REMP owner determined that the BSEP REMP fish and invertebrate samples collected November 2016 from the Nancy's Creek sample location did not require tritium analysis for that collection period or future collections.

IV. SAMPLING AND ANALYSIS PROCEDURES

A.1 AIRBORNE PARTICULATE AND RADIOIODINE

Air particulate and air cartridge/air radioiodine samples at each of seven locations were composited continuously by means of continuous air samplers. Air particulates were collected on a particulate filter and radioiodines were collected in a charcoal cartridge positioned behind the filter in the sample head. The samplers are designed to operate at a constant flow rate (in order to compensate for any filter loading) and are set to sample approximately 2 cubic feet per minute. Filters and cartridges were collected weekly. A separate weekly gamma analysis was performed on each charcoal cartridge. A weekly gross beta analysis was performed on each filter and then the filters were composited to produce quarterly samples for gamma analysis. The continuous composite samples were collected from the locations listed below.

Location 200	=	1.0 miles WSW Visitors Center
Location 201	=	0.5 miles NE Bio Lab Rd. – Projected Maximum Annual Concentration (PMAC)
Location 202	=	1.0 miles S Substation, Construction Rd.
Location 203	=	2.0 miles SSW Southport substation
Location 204	=	22.4 miles NNE Sutton Plant (Historical Control)

Location 205	=	0.6 miles SSE Spoil Pond
Location 206	=	11.3 miles NW Brunswick County Complex (Control)

A.2 SURFACE WATER

A total of fifteen (15) Surface Water samples are collected at different intervals as stated in the BSEP ODCM. Monthly composite surface water samples were collected from two locations (SW-400 and 401) for gamma and tritium analyses. Weekly and Monthly grab samples were collected from five locations (SW-495 – 499). The weekly grab samples were analyzed for tritium, while the monthly grab samples were analyzed for gamma emitters. Weekly grab samples were collected from eight locations (SW-494, 604 – 610) and analyzed for tritium and ODCM specific sample combination composite samples for gamma analysis. The samples are collected from the locations listed below.

Location 400	=	0.6 miles NE – Intake Canal (Control)
Location 401	=	4.9 miles SSW – Discharge Canal @ OD Pumps
Location 494	=	Nancy’s Creek Marsh Area – WP-106
Location 495	=	Nancy’s Creek – WP-52
Location 496	=	Nancy’s Creek – WP-53
Location 497	=	Nancy’s Creek – WP-55
Location 498	=	Nancy’s Creek – WP-57
Location 499	=	Nancy’s Creek – WP-61 (Control)
Location 604	=	Nancy’s Creek Marsh Area – WP-92
Location 605	=	Nancy’s Creek Marsh Area – WP-72
Location 606	=	Nancy’s Creek Marsh Area – WP-74
Location 607	=	Nancy’s Creek Marsh Area – WP-76
Location 608	=	Nancy’s Creek Marsh Area – WP-82
Location 609	=	Nancy’s Creek Marsh Area – WP-84
Location 610	=	Nancy’s Creek Marsh Area – WP-88
Location 1065	=	Waypoint Composite (70) of Locations 605, 606, 607
Location 1066	=	Waypoint Composite (80) of Locations 608, 609, 610
Location 1067	=	Waypoint Composite of Locations 494 and 604

A.3 GROUND WATER

Grab samples were collected quarterly and semiannually from ground water wells at ten (10) locations. A tritium analysis was performed quarterly and a gamma analysis was performed semiannually on each sample. The samples were collected from the locations listed below.

Location 404	=	Monitoring Well ESS-1B - 0.16 miles SW
Location 407	=	Monitoring Well ESS-13B - 0.06 miles ENE
Location 409	=	Monitoring Well ESS-17A - 0.65 miles NE
Location 410	=	Monitoring Well ESS-17B - 0.65 miles NE
Location 418	=	Monitoring Well ESS-21B – Near SDSP
Location 423	=	Monitoring Well ESS-24A – Near SDSP

Location 424	=	Monitoring Well ESS-24B – Near SDSP
Location 426	=	Monitoring Well ESS-25B – Near SDSP
Location 429	=	Monitoring Well ESS-27A – Near SDSP
Location 612	=	Monitoring Well ESS MWPA-118B – Near Intake Canal & Plant Stack

Note: SDSP = Storm Drain Stabilization Pond

A.4 BROADLEAF VEGETATION

Monthly samples were collected at each of five locations during 2016. A gamma analysis was performed on each sample. The samples were collected from the locations listed below.

Location 800	=	0.7 miles NE – Intake Canal
Location 801	=	0.8 miles SW – Discharge Canal
Location 802	=	10.1 miles – location not specified (Control)
Location 803	=	0.6 miles SSE – Spoil Pond
Location 804	=	0.7 miles S – Leonard Street plant exit adjacent to RR tracks

A.5 FISH and INVERTEBRATES

Fish (free swimmers and bottom feeders) and Invertebrates (shell fish and/or benthic organisms) samples are collected semiannually from two locations (near the Atlantic Ocean discharge pipe at Caswell Beach and a control location in the Atlantic Ocean not influenced by plant operations) and annually from three locations on Nancy's Creek (see Figure 2.1-4). A gamma analysis was performed on the edible portions of each sample. The samples were collected from the locations listed below.

Location 700	=	5.5 miles SSW - Atlantic Ocean @ discharge (free swimmers)
Location 701	=	5.5 miles SSW – Atlantic Ocean @ discharge (bottom feeders)
Location 702	=	5.5 miles SSW – Atlantic Ocean @ discharge (shellfish/ Invertebrates)
Location 703	=	Atlantic Ocean; location not specified (free swimmer) – (Control)
Location 704	=	Atlantic Ocean; location not specified (bottom feeders) – (Control)
Location 705	=	Atlantic Ocean; location not specified (shellfish/ Invertebrates)
Location 706	=	Nancy's Creek; location not specified (free swimmer)
Location 707	=	Nancy's Creek; location not specified (bottom feeders)
Location 708	=	Nancy's Creek; location not specified (shellfish/ Invertebrates)

A.6 SHORELINE SEDIMENT

Semiannual samples were collected at one location (SS-500), while an annual sample was collected at another location (SS-501). A gamma analysis was performed on each sample following the drying and removal of rocks and clams. If activity attributed to plant operations is detected in the annual shoreline sediment gamma analysis for SS-501, then the sample is analyzed for Hard-to-detect radionuclides (Fe-55 and Sr-89, 90) by a vendor laboratory (GEL) and the sample frequency is increased to semiannually. The samples were collected from the locations listed below.

Location 500	=	5.0 miles SSW – Discharge; Beach near Ocean Discharge (OD) pumps
Location 501	=	Nancy’s Creek, Adjacent to WP-55, Near Storm Drain Stabilization Pond

A.7 DIRECT GAMMA RADIATION (TLD)

Thermoluminescent dosimeters (TLD) were collected quarterly at forty-five locations and four quarterly ISFSI TLDs. A gamma exposure rate was determined for each TLD. TLD locations are listed in Table 2.1-B. The TLDs were placed as indicated below.

- * An inner ring of 24 TLDs, one in each meteorological sector in the general area of the site boundary.
- * An outer ring of 20 TLDs, one in each meteorological sector at 8 kilometers or greater from the site (NCR # 01962757).
- * The remaining TLDs were placed in special interest areas such as population centers, residential areas, schools, and at one control location.

A.8 ANNUAL LAND USE CENSUS

An Annual Land Use Census was conducted to identify within a distance of 5.0 miles (8 kilometers) from the plant, the nearest location from the site boundary in each of the sixteen meteorological sectors, the following:

- The Nearest Residence
- The Nearest Garden greater than 50 square meters or 500 square feet, producing broadleaf vegetation
- The Nearest Milk-giving Animal (cow, goat, etc.)

The Annual Land Use Census must also identify (for elevated releases) within the three-mile (4.8 kilometer) radius of the plant (a garden census) for each of the 16 meteorological sectors for the following:

- The location of all milk animals
- The location of all gardens of greater than 500 square feet (or 50 square meters), producing broadleaf vegetation.

The census was conducted during the growing season from June 27 through 29, 2016. Results are shown in Tables 3.8-A and 3.8-B. No changes were made to the sampling procedures during 2016 as a result of the 2016 BSEP census.

APPENDIX B

**RADIOLOGICAL
ENVIRONMENTAL MONITORING
PROGRAM**

SUMMARY OF RESULTS

2016

**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: 2016

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Lower Limit of Detection (LLD) ⁽¹⁾	All Indicator Locations Mean ⁽²⁾⁽³⁾ Range ⁽²⁾	Location w/Highest Annual Mean ⁽²⁾		Control Locations Mean ⁽²⁾⁽³⁾ Range ⁽²⁾	No. of Non-Routine Report Meas.
				Name, Distance, and Direction	Mean ⁽²⁾⁽³⁾ Range ⁽²⁾		
Air Particulate (pCi/m ³)	Gross Beta 364 ⁽⁴⁾	See Table 2.2-C	1.66E-2 (260/260) 5.52E-3 – 4.12E-2	Loc. # 203 Southport Substation 2.0 miles SSW	1.82E-2 (52/52) 9.91E-3 – 4.12E-2	Loc. # 204 & 206 1.63E-2 (104/104) 9.25E-3 – 3.52E-2	0
	Gamma ⁽⁵⁾ 28	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Air Radioiodine (pCi/m ³)	I-131 364 ⁽⁴⁾	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Broadleaf Vegetation (pCi/kg, wet)	Gamma ⁽⁴⁾⁽⁵⁾ 60	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Fish and Invertebrates (pCi/kg, wet)	Gamma ⁽⁵⁾ 15	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Sediments -- Shoreline (pCi/kg, dry)	Gamma ⁽⁵⁾ 4 Cs-137	See Table 2.2-C	1.32E+2 (1/4) Single Value	Loc. # 501 Nancy's Creek adjacent to WP-55 near SDSP	1.32E+2 (1/2) Single Value	No Control ⁽⁹⁾	0
	Hard-to-detects (Fe-55, Ni-63, Sr-89/90) 7	-----	All less than LLD	----	----	No Control	0

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

Brunswick Steam Electric Plant
Brunswick County, North Carolina

Docket Numbers: 50-324 and 325
Calendar Year: 2016

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Lower Limit of Detection (LLD) ⁽¹⁾	All Indicator Locations Mean ⁽²⁾⁽³⁾ Range ⁽²⁾	Location w/Highest Annual Mean ⁽²⁾		Control Locations Mean ⁽²⁾⁽³⁾ Range ⁽²⁾	No. of Non-Routine Report Meas.
				Name, Distance, and Direction	Mean ⁽²⁾⁽³⁾ Range ⁽²⁾		
Surface Water (pCi/l)	Gamma ⁽⁵⁾ 240	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
	Tritium 700	3,000 ⁽⁷⁾	1.15E+3 (29/636) 1.97E+2 – 6.41E+3	Loc. # 494 Nancy's Creek Marsh Area WP-106	3.18E+3 (1/52) Single Value	All less than LLD	0
Ground Water (pCi/l)	Gamma ⁽⁵⁾ 20	See Table 2.2-C	All less than LLD	----	----	No Control	0
	Tritium 40	3,000 ⁽⁷⁾	All less than LLD	----	----	No Control	0
Direct Radiation (TLD) (mR per std. quarter) ⁽⁶⁾	TLD Readout 178 ⁽⁴⁾	----	9.95E+0 (174/174) 3.14E+0 – 1.76E+1	Loc. # 39 5.3 miles SW	1.47E+1 (4/4) 1.22E+1 – 1.76E+1	Loc. #81 1.03E+1 (4/4) 8.49E+0 – 1.14E+1	0
Direct Radiation ISFSI (TLD - ISFSI) (mR per std. quarter) ⁽⁶⁾	TLD Readout 16	----	2.32E+1 (16/16) 1.65E+1 – 2.88E+1	Loc. # 85 SE Corner of ISFSI 0.09 miles ENE	2.47E+1 (4/4) 2.06E+1 – 2.88E+1	No Control	0

Footnotes to Appendix B

1. The Lower Limit of Detection (LLD) is the smallest concentration of radioactive material in a sample that will yield a net count above system background which will be detected with 95 percent probability and with only 5 percent probability of falsely concluding that a blank observation represents a "real" signal. Due to counting statistics and varying volumes, occasionally lower LLDs are achieved. Refer to Section 2.3.2 for an explanation of how LLD values were derived.
2. Mean and range are based on detectable measurements only.
3. The fractions of all samples with detectable activities at specific locations are indicated in parentheses.
4. Missing samples or surveillances are discussed in Appendix C or Appendix D.
5. 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.
6. TLD exposure is reported in milliroentgen (mR) per standard quarter (91 days).
7. Tritium Lower Limit of Detection (LLD) is approximately $2.50E+2$ pCi/L for samples that typically demonstrate activity less than the LLD. The LLD was lowered in order to maintain comparable LLD values with the NC Department of Health and Human Services (NCDHHS), Division of Public Health - State Lab of Public Health.
8. The tritium reporting limit for Fish per General Engineering Laboratories (GEL) is $4.0E+3$ pCi/kilogram.
9. Shoreline Sediment background samples were collected in 2016, but are not an ODCM sample; therefore, are not recorded in the data (gamma and Hard-to-detects [Fe-55, Ni-63, Sr-89, and Sr-90]).

APPENDIX C

**SAMPLING DEVIATIONS
&
UNAVAILABLE ANALYSES**

APPENDIX C

BRUNSWICK NUCLEAR PLANT SAMPLING DEVIATIONS & UNAVAILABLE ANALYSES

DEVIATIONS & UNAVAILABLE REASON CODES					
BF	Blown Fuse	OT	Other	SM	Motor / Rotor Seized
CN	Construction	PI	Power Interrupt	SU	Seasonal Unavailability
FZ	Sample Frozen	PM	Preventative Maintenance	TF	Torn Filter
IV	Insufficient Volume	PO	Power Outage	VN	Vandalism
IW	Inclement Weather	PS	Power out of service / Undergoing Repair		
LC	Line Clog to Sampler	SL	Sample Loss / Lost due to Lab Accident		

C.1 SAMPLING DEVIATIONS

Air Particulate and Air Radioiodines

Any REMP weekly air samples (Air Cartridge or Air Radioiodine) that experience any downtime during a surveillance period will be reported as a Deviation and will be classified as a “Sampling Deviation”. However, the sample will be counted and the data reported, whereas a Deviation with no available sample will be classified as an “Unavailable Analyses” and will not have any data reported. The air samplers operated for a total of 99.81% availability in 2016.

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
201	6/14/16 – 6/21/16	PI	14.5 hrs. downtime due to GFI outlet tripped during thunderstorms in the area.	NCR # 02038923
201	7/05/16 – 7/12/16	PI	5.5 hrs. downtime due to power interruption caused by thunderstorms in the area.	NCR # 02043982
201	7/05/16 – 7/12/16	PI	6.4 hrs. downtime due to power interruption caused by thunderstorms in the area.	NCR # 02044447
201	7/19/16 – 7/26/16	PI	9.0 hrs. downtime due to power interruption caused by thunderstorms in the area.	NCR # 02047077
201	8/02/16 – 8/09/16	PI	5.6 hrs. downtime due to power interruption caused by thunderstorms in the area.	NCR # 02050714
201	8/16/16 – 8/23/16	PI	7.3 hrs. downtime due to power interruption caused by thunderstorms in the area.	NCR # 02055346
200	8/30/16 – 9/06/16	PI	4.75 hrs. downtime due to power interruption caused by Tropical Storm Hermine on 9/3/16.	NCR # 02058982
202	8/30/16 – 9/06/16	PI	4.75 hrs. downtime due to power interruption caused by Tropical Storm Hermine on 9/3/16.	NCR # 02058982
203	8/30/16 – 9/06/16	PI	4.75 hrs. downtime due to power interruption caused by Tropical Storm Hermine on 9/3/16.	NCR # 02059029
205	8/30/16 – 9/06/16	PI	4.75 hrs. downtime due to power interruption caused by Tropical Storm Hermine on 9/3/16.	NCR # 02058982
200	9/20/16 – 9/27/16	PI	4.8 hrs. downtime due to power interruptions due to a loss of Delco East that supplies Southport Feeder.	NCR # 02064227
201	9/20/16 – 9/27/16	PI	4.8 hrs. downtime due to power interruptions due to a loss of Delco East that supplies Southport Feeder.	NCR # 02064227

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
202	9/20/16 – 9/27/16	PI	4.8 hrs. downtime due to power interruptions due to a loss of Delco East that supplies Southport Feeder.	NCR # 02064227
203	9/20/16 – 9/27/16	PI	4.8 hrs. downtime due to power interruptions due to a loss of Delco East that supplies Southport Feeder.	NCR # 02064227
205	9/20/16 – 9/27/16	PI	4.8 hrs. downtime due to power interruptions due to a loss of Delco East that supplies Southport Feeder.	NCR # 02064227
206	11/08/16 – 11/15/16	PI	1.28 hrs. downtime due to power interruption - cause unknown.	NCR # 02076913
203	11/29/16 – 12/06/16	PI	22.8 hrs. downtime due to power interruption due to a trip of the GFI outlet, cause of the outlet trip is unknown.	NCR # 02083449

C.2 UNAVAILABLE ANALYSES

TLD

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
28	4/6/16 – 7/7/16 (2 nd Qtr. 2016)	OT	Power Pole that the TLD was located on was replaced with a new pole. The area was searched, but the TLD could not be located.	NCR # 02043754
4	10/13/16 – 1/4/17 (4 th Qtr. 2016)	OT	Power Pole that the TLD was located on was replaced with a new pole. The area was searched, but the TLD could not be located.	NCR # 02089474

APPENDIX D

ANALYTICAL DEVIATIONS

APPENDIX D

BRUNSWICK NUCLEAR PLANT

ANALYTICAL DEVIATIONS

While BSEP was performing data review of September 2016 ground water analyses, it was identified that 10 ground water samples (see table below) collected per BSEP ODCM Table 7.3.15-1 were not analyzed by BSEP in the required timeframe stated in the BSEP ODCM (NCR # 02076456). BSEP individuals had encountered delays with the analyses of the BSEP ground water samples. It was determined that the previous ground water samples had been analyzed in June of 2016 and these samples were not analyzed until mid-October of 2016. The analysis date exceeded the 92 day requirement and fell outside of the +25% tolerance allowed by the BSEP ODCM. A review of other BSEP samples from the time of the analysis delays showed that BSEP ground water and waypoint samples required by the BSEP ODCM from September through mid-October of 2016 were not analyzed in accordance with the requirements of the BSEP ODCM. This is not a reportable event per verification with BSEP Regulatory Affairs.

Sample Manager ID	ODCM - Sample Point Description	Collection Date	Analysis Date
427899	404 - Monitoring Well ESS-1B	9/15/16	10/25/16
427928	407 - Monitoring Well ESS-13B	9/19/16	10/26/16
427606	409 - Monitoring Well ESS-17A	9/14/16	10/20/16
427606	410 - Monitoring Well ESS-17B	9/14/16	10/20/16
427929	418 - Monitoring Well ESS-21B	9/13/16	10/26/16
427608	423 - Monitoring Well ESS-24A	9/23/16	10/20/16
427609	424 - Monitoring Well ESS-24B	9/23/16	10/20/16
428068	426 - Monitoring Well ESS-25B	9/28/16	10/28/16
427611	429 - Monitoring Well ESS-27A	9/14/16	10/20/16
427930	612 - Monitoring Well ESS MWPA-118B	9/19/16	10/26/16

This occurrence was due to inadequate training and oversight of the BSEP individual(s) that were handling the collection and analysis of these BSEP ODCM samples. In order to prevent reoccurrence, a discussion of not just BSEP ODCM sample frequency requirements, but analysis frequencies were added to the BSEP count room qualification in order to heighten awareness of BSEP ODCM sampling and analysis frequency requirements.

This sampling program is implemented to fulfill sampling requirements described in the Brunswick Steam Electric Plant (BNP) OFF-SITE DOSE CALCULATION MANUAL (ODCM) Section 4.0 (Radiological Environmental Monitoring Program); Sections 7.3, 7.3.15 (ODCM Specifications for Radiological Environmental Monitoring Program), and Table 7.3.15-1. Sampling program deviations such as these are documented in the BSEP

Annual Radiological Environmental Operating Report (AREOR) each year in Appendix D - Analytical Deviations (NCR # 02076456).

APPENDIX E

**RADIOLOGICAL
ENVIRONMENTAL MONITORING
PROGRAM RESULTS**

2016

This appendix includes sample analysis report summaries and supportive data generated from each sample medium for 2016.

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398905	12/29/2015 - 1/5/2016	Beta	1.66E-02	4.46E-03	5.97E-03
399220	1/5/2016 - 1/12/2016	Beta	1.19E-02	3.85E-03	5.24E-03
399969	1/12/2016 - 1/19/2016	Beta	2.23E-02	4.82E-03	6.00E-03
400322	1/19/2016 - 1/26/2016	Beta	1.18E-02	4.47E-03	6.52E-03
400952	1/26/2016 - 2/2/2016	Beta	2.18E-02	4.64E-03	5.66E-03
401315	2/2/2016 - 2/9/2016	Beta	1.45E-02	4.20E-03	5.66E-03
401768	2/9/2016 - 2/16/2016	Beta	1.74E-02	4.19E-03	5.20E-03
402279	2/16/2016 - 2/23/2016	Beta	1.34E-02	4.01E-03	5.38E-03
403007	2/23/2016 - 3/1/2016	Beta	1.44E-02	4.17E-03	5.59E-03
404485	3/1/2016 - 3/8/2016	Beta	1.07E-02	4.04E-03	5.84E-03
405371	3/8/2016 - 3/15/2016	Beta	1.80E-02	4.28E-03	5.35E-03
405988	3/15/2016 - 3/22/2016	Beta	1.92E-02	4.46E-03	5.60E-03
406320	3/22/2016 - 3/29/2016	Beta	1.45E-02	4.02E-03	5.26E-03
406327	12/29/2015 - 3/29/2016	Cs-134	<1.63E-03	0.00E+00	1.63E-03
		Cs-137	<6.34E-04	0.00E+00	6.34E-04
		Be-7	1.57E-01	3.57E-02	3.15E-02
		K-40	<2.52E-02	0.00E+00	2.52E-02
407516	3/29/2016 - 4/5/2016	Beta	1.24E-02	3.90E-03	5.31E-03
408096	4/5/2016 - 4/12/2016	Beta	1.38E-02	4.01E-03	5.37E-03
409409	4/12/2016 - 4/19/2016	Beta	1.86E-02	4.48E-03	5.74E-03
409744	4/19/2016 - 4/26/2016	Beta	1.71E-02	4.39E-03	5.77E-03
410896	4/26/2016 - 5/3/2016	Beta	1.54E-02	4.15E-03	5.47E-03
411396	5/3/2016 - 5/10/2016	Beta	1.64E-02	4.28E-03	5.64E-03
411720	5/10/2016 - 5/17/2016	Beta	1.86E-02	4.58E-03	6.04E-03
412183	5/17/2016 - 5/24/2016	Beta	1.35E-02	3.92E-03	5.20E-03



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
412699	5/24/2016 - 5/31/2016	Beta	1.68E-02	4.26E-03	5.50E-03
413302	5/31/2016 - 6/7/2016	Beta	1.23E-02	3.78E-03	5.12E-03
413849	6/7/2016 - 6/14/2016	Beta	1.70E-02	4.15E-03	5.28E-03
414990	6/14/2016 - 6/21/2016	Beta	1.55E-02	4.13E-03	5.41E-03
415354	6/21/2016 - 6/28/2016	Beta	1.19E-02	4.27E-03	6.19E-03
415361	3/29/2016 - 6/28/2016	Cs-134	<1.33E-03	0.00E+00	1.33E-03
		Cs-137	<1.05E-03	0.00E+00	1.05E-03
		Be-7	1.88E-01	3.19E-02	2.65E-03
		K-40	<2.53E-02	0.00E+00	2.53E-02
416354	6/28/2016 - 7/5/2016	Beta	8.16E-03	3.89E-03	5.90E-03
416978	7/5/2016 - 7/12/2016	Beta	1.36E-02	4.11E-03	5.64E-03
417372	7/12/2016 - 7/19/2016	Beta	1.13E-02	3.83E-03	5.35E-03
417763	7/19/2016 - 7/26/2016	Beta	1.69E-02	4.34E-03	5.63E-03
418227	7/26/2016 - 8/2/2016	Beta	1.68E-02	4.34E-03	5.75E-03
418956	8/2/2016 - 8/9/2016	Beta	1.39E-02	4.22E-03	5.83E-03
419457	8/9/2016 - 8/16/2016	Beta	8.88E-03	3.45E-03	4.93E-03
419984	8/16/2016 - 8/23/2016	Beta	1.11E-02	4.13E-03	6.01E-03
420538	8/23/2016 - 8/30/2016	Beta	1.40E-02	4.24E-03	5.89E-03
421375	8/30/2016 - 9/6/2016	Beta	5.52E-03	3.66E-03	5.80E-03
422533	9/6/2016 - 9/13/2016	Beta	2.22E-02	4.53E-03	5.40E-03
423275	9/13/2016 - 9/20/2016	Beta	1.07E-02	3.99E-03	5.76E-03
424388	9/20/2016 - 9/27/2016	Beta	6.94E-03	3.89E-03	6.04E-03
424395	6/28/2016 - 9/27/2016	Cs-134	<2.60E-04	0.00E+00	2.60E-04
		Cs-137	<1.14E-03	0.00E+00	1.14E-03
		Be-7	1.17E-01	2.77E-02	2.56E-02
		K-40	<2.55E-02	0.00E+00	2.55E-02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
425387	9/27/2016 - 10/4/2016	Beta	2.03E-02	4.39E-03	5.34E-03
425950	10/4/2016 - 10/11/2016	Beta	1.09E-02	4.10E-03	5.96E-03
426322	10/11/2016 - 10/18/2016	Beta	1.60E-02	4.40E-03	5.88E-03
427014	10/18/2016 - 10/25/2016	Beta	1.25E-02	4.36E-03	6.31E-03
427673	10/25/2016 - 11/1/2016	Beta	2.13E-02	4.57E-03	5.60E-03
428168	11/1/2016 - 11/8/2016	Beta	1.82E-02	4.54E-03	5.95E-03
428850	11/8/2016 - 11/15/2016	Beta	1.86E-02	4.41E-03	5.57E-03
429360	11/15/2016 - 11/22/2016	Beta	3.48E-02	5.52E-03	6.10E-03
429911	11/22/2016 - 11/29/2016	Beta	1.89E-02	4.66E-03	6.07E-03
430532	11/29/2016 - 12/6/2016	Beta	1.88E-02	4.40E-03	5.49E-03
431020	12/6/2016 - 12/13/2016	Beta	1.39E-02	4.35E-03	6.05E-03
431427	12/13/2016 - 12/20/2016	Beta	1.50E-02	4.79E-03	6.58E-03
431758	12/20/2016 - 12/27/2016	Beta	2.68E-02	5.66E-03	7.00E-03
431765	9/27/2016 - 12/27/2016	Cs-134	<9.22E-04	0.00E+00	9.22E-04
		Cs-137	<1.10E-03	0.00E+00	1.10E-03
		Be-7	1.15E-01	2.64E-02	1.79E-02
		K-40	<2.97E-02	0.00E+00	2.97E-02

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398906	12/29/2015 - 1/5/2016	Beta	1.53E-02	4.33E-03	5.88E-03
399221	1/5/2016 - 1/12/2016	Beta	1.11E-02	3.74E-03	5.15E-03
399970	1/12/2016 - 1/19/2016	Beta	1.96E-02	4.61E-03	5.89E-03
400323	1/19/2016 - 1/26/2016	Beta	1.20E-02	4.41E-03	6.41E-03
400953	1/26/2016 - 2/2/2016	Beta	1.89E-02	4.46E-03	5.66E-03
401316	2/2/2016 - 2/9/2016	Beta	1.75E-02	4.37E-03	5.63E-03
401769	2/9/2016 - 2/16/2016	Beta	1.88E-02	4.28E-03	5.19E-03



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
402280	2/16/2016 - 2/23/2016	Beta	1.41E-02	4.04E-03	5.35E-03
403008	2/23/2016 - 3/1/2016	Beta	1.58E-02	4.23E-03	5.53E-03
404486	3/1/2016 - 3/8/2016	Beta	9.91E-03	4.06E-03	5.97E-03
405372	3/8/2016 - 3/15/2016	Beta	1.55E-02	3.94E-03	5.05E-03
405989	3/15/2016 - 3/22/2016	Beta	1.78E-02	4.26E-03	5.40E-03
406321	3/22/2016 - 3/29/2016	Beta	1.57E-02	4.01E-03	5.12E-03
406328	12/29/2015 - 3/29/2016	Cs-134	<9.43E-04	0.00E+00	9.43E-04
		Cs-137	<7.47E-04	0.00E+00	7.47E-04
		Be-7	1.45E-01	3.03E-02	1.87E-02
		K-40	1.54E-02	9.36E-03	3.78E-03
407517	3/29/2016 - 4/5/2016	Beta	1.72E-02	4.10E-03	5.14E-03
408097	4/5/2016 - 4/12/2016	Beta	1.60E-02	4.09E-03	5.26E-03
409410	4/12/2016 - 4/19/2016	Beta	1.71E-02	4.30E-03	5.58E-03
409745	4/19/2016 - 4/26/2016	Beta	2.21E-02	4.54E-03	5.55E-03
410897	4/26/2016 - 5/3/2016	Beta	1.63E-02	4.10E-03	5.29E-03
411397	5/3/2016 - 5/10/2016	Beta	1.52E-02	4.09E-03	5.42E-03
411721	5/10/2016 - 5/17/2016	Beta	1.68E-02	4.35E-03	5.80E-03
412184	5/17/2016 - 5/24/2016	Beta	1.33E-02	3.76E-03	4.95E-03
412700	5/24/2016 - 5/31/2016	Beta	1.41E-02	3.96E-03	5.27E-03
413303	5/31/2016 - 6/7/2016	Beta	1.05E-02	3.54E-03	4.90E-03
413850	6/7/2016 - 6/14/2016	Beta	1.94E-02	4.15E-03	5.03E-03
414991	6/14/2016 - 6/21/2016	Beta	1.73E-02	4.41E-03	5.71E-03
415355	6/21/2016 - 6/28/2016	Beta	1.47E-02	4.36E-03	6.05E-03
415362	3/29/2016 - 6/28/2016	Cs-134	<8.50E-04	0.00E+00	8.50E-04
		Cs-137	<6.72E-04	0.00E+00	6.72E-04
		Be-7	1.71E-01	3.22E-02	2.27E-02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
415362	3/29/2016 - 6/28/2016	K-40	7.84E-03	1.17E-02	1.96E-02
416355	6/28/2016 - 7/5/2016	Beta	1.20E-02	4.11E-03	5.86E-03
416979	7/5/2016 - 7/12/2016	Beta	1.37E-02	4.31E-03	5.97E-03
417373	7/12/2016 - 7/19/2016	Beta	1.11E-02	3.77E-03	5.27E-03
417764	7/19/2016 - 7/26/2016	Beta	1.96E-02	4.58E-03	5.75E-03
418228	7/26/2016 - 8/2/2016	Beta	1.48E-02	4.18E-03	5.68E-03
418957	8/2/2016 - 8/9/2016	Beta	1.10E-02	4.12E-03	5.97E-03
419458	8/9/2016 - 8/16/2016	Beta	1.01E-02	3.52E-03	4.89E-03
419985	8/16/2016 - 8/23/2016	Beta	8.84E-03	4.10E-03	6.21E-03
420539	8/23/2016 - 8/30/2016	Beta	1.38E-02	4.19E-03	5.81E-03
421376	8/30/2016 - 9/6/2016	Beta	9.06E-03	3.78E-03	5.57E-03
422534	9/6/2016 - 9/13/2016	Beta	2.54E-02	4.63E-03	5.30E-03
423276	9/13/2016 - 9/20/2016	Beta	9.28E-03	3.85E-03	5.66E-03
424389	9/20/2016 - 9/27/2016	Beta	1.01E-02	3.97E-03	5.80E-03
424396	6/28/2016 - 9/27/2016	Cs-134	<1.15E-03	0.00E+00	1.15E-03
		Cs-137	<1.20E-03	0.00E+00	1.20E-03
		Be-7	1.06E-01	2.55E-02	2.19E-02
		K-40	<2.55E-02	0.00E+00	2.55E-02
425388	9/27/2016 - 10/4/2016	Beta	1.88E-02	4.25E-03	5.26E-03
425951	10/4/2016 - 10/11/2016	Beta	5.77E-03	3.69E-03	5.85E-03
426323	10/11/2016 - 10/18/2016	Beta	1.77E-02	4.40E-03	5.72E-03
427015	10/18/2016 - 10/25/2016	Beta	1.29E-02	4.31E-03	6.18E-03
427674	10/25/2016 - 11/1/2016	Beta	2.36E-02	4.63E-03	5.49E-03
428169	11/1/2016 - 11/8/2016	Beta	1.71E-02	4.40E-03	5.81E-03
428851	11/8/2016 - 11/15/2016	Beta	1.65E-02	4.22E-03	5.44E-03



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
429361	11/15/2016 - 11/22/2016	Beta	3.49E-02	5.43E-03	5.96E-03
429912	11/22/2016 - 11/29/2016	Beta	2.10E-02	4.73E-03	5.98E-03
430533	11/29/2016 - 12/6/2016	Beta	1.74E-02	4.27E-03	5.43E-03
431021	12/6/2016 - 12/13/2016	Beta	1.27E-02	4.24E-03	5.98E-03
431428	12/13/2016 - 12/20/2016	Beta	1.58E-02	4.79E-03	6.48E-03
431759	12/20/2016 - 12/27/2016	Beta	2.71E-02	5.63E-03	6.93E-03
431766	9/27/2016 - 12/27/2016	Cs-134	<1.05E-03	0.00E+00	1.05E-03
		Cs-137	<1.08E-03	0.00E+00	1.08E-03
		Be-7	1.15E-01	2.67E-02	1.97E-02
		K-40	<2.84E-02	0.00E+00	2.84E-02

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398907	12/29/2015 - 1/5/2016	Beta	1.41E-02	4.23E-03	5.82E-03
399222	1/5/2016 - 1/12/2016	Beta	1.19E-02	3.78E-03	5.12E-03
399971	1/12/2016 - 1/19/2016	Beta	2.17E-02	4.73E-03	5.90E-03
400324	1/19/2016 - 1/26/2016	Beta	1.43E-02	4.55E-03	6.42E-03
400954	1/26/2016 - 2/2/2016	Beta	2.67E-02	4.90E-03	5.66E-03
401317	2/2/2016 - 2/9/2016	Beta	1.40E-02	4.17E-03	5.65E-03
401770	2/9/2016 - 2/16/2016	Beta	1.95E-02	4.32E-03	5.20E-03
402281	2/16/2016 - 2/23/2016	Beta	1.66E-02	4.22E-03	5.38E-03
403009	2/23/2016 - 3/1/2016	Beta	1.57E-02	4.26E-03	5.59E-03
404487	3/1/2016 - 3/8/2016	Beta	9.85E-03	3.99E-03	5.84E-03
405373	3/8/2016 - 3/15/2016	Beta	1.53E-02	4.09E-03	5.33E-03
405990	3/15/2016 - 3/22/2016	Beta	2.10E-02	4.54E-03	5.57E-03
406322	3/22/2016 - 3/29/2016	Beta	1.56E-02	4.07E-03	5.23E-03
406329	12/29/2015 - 3/29/2016	Cs-134	<1.30E-03	0.00E+00	1.30E-03



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
406329	12/29/2015 - 3/29/2016	Cs-137	<9.20E-04	0.00E+00	9.20E-04
		Be-7	1.55E-01	3.64E-02	3.47E-02
		K-40	<3.01E-02	0.00E+00	3.01E-02
407518	3/29/2016 - 4/5/2016	Beta	1.71E-02	4.18E-03	5.29E-03
408098	4/5/2016 - 4/12/2016	Beta	2.28E-02	4.56E-03	5.38E-03
409411	4/12/2016 - 4/19/2016	Beta	1.63E-02	4.33E-03	5.73E-03
409746	4/19/2016 - 4/26/2016	Beta	1.80E-02	4.42E-03	5.73E-03
410898	4/26/2016 - 5/3/2016	Beta	2.34E-02	4.60E-03	5.43E-03
411398	5/3/2016 - 5/10/2016	Beta	1.95E-02	4.46E-03	5.60E-03
411722	5/10/2016 - 5/17/2016	Beta	1.78E-02	4.50E-03	5.97E-03
412185	5/17/2016 - 5/24/2016	Beta	1.20E-02	3.81E-03	5.18E-03
412701	5/24/2016 - 5/31/2016	Beta	1.33E-02	4.02E-03	5.45E-03
413304	5/31/2016 - 6/7/2016	Beta	1.38E-02	3.86E-03	5.07E-03
413851	6/7/2016 - 6/14/2016	Beta	1.92E-02	4.25E-03	5.22E-03
414992	6/14/2016 - 6/21/2016	Beta	1.68E-02	4.19E-03	5.39E-03
415356	6/21/2016 - 6/28/2016	Beta	1.75E-02	4.57E-03	6.13E-03
415363	3/29/2016 - 6/28/2016	Cs-134	<8.74E-04	0.00E+00	8.74E-04
		Cs-137	<8.02E-04	0.00E+00	8.02E-04
		Be-7	1.54E-01	2.96E-02	1.65E-02
		K-40	<1.99E-02	0.00E+00	1.99E-02
416356	6/28/2016 - 7/5/2016	Beta	1.22E-02	4.11E-03	5.84E-03
416980	7/5/2016 - 7/12/2016	Beta	1.28E-02	4.03E-03	5.59E-03
417374	7/12/2016 - 7/19/2016	Beta	1.30E-02	3.91E-03	5.28E-03
417765	7/19/2016 - 7/26/2016	Beta	1.79E-02	4.27E-03	5.42E-03
418229	7/26/2016 - 8/2/2016	Beta	1.41E-02	4.16E-03	5.72E-03
418958	8/2/2016 - 8/9/2016	Beta	1.31E-02	4.15E-03	5.79E-03



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
419459	8/9/2016 - 8/16/2016	Beta	1.13E-02	3.64E-03	4.95E-03
419986	8/16/2016 - 8/23/2016	Beta	8.63E-03	3.94E-03	5.95E-03
420540	8/23/2016 - 8/30/2016	Beta	1.79E-02	4.44E-03	5.84E-03
421377	8/30/2016 - 9/6/2016	Beta	1.02E-02	3.98E-03	5.76E-03
422535	9/6/2016 - 9/13/2016	Beta	2.12E-02	4.43E-03	5.34E-03
423277	9/13/2016 - 9/20/2016	Beta	9.51E-03	3.89E-03	5.71E-03
424390	9/20/2016 - 9/27/2016	Beta	8.78E-03	3.99E-03	5.98E-03
424397	6/28/2016 - 9/27/2016	Cs-134	<1.24E-03	0.00E+00	1.24E-03
		Cs-137	<6.01E-04	0.00E+00	6.01E-04
		Be-7	1.11E-01	2.74E-02	2.43E-02
		K-40	2.18E-02	1.29E-02	1.41E-02
425389	9/27/2016 - 10/4/2016	Beta	1.86E-02	4.26E-03	5.28E-03
425952	10/4/2016 - 10/11/2016	Beta	9.20E-03	3.98E-03	5.94E-03
426324	10/11/2016 - 10/18/2016	Beta	1.95E-02	4.57E-03	5.83E-03
427016	10/18/2016 - 10/25/2016	Beta	1.43E-02	4.45E-03	6.26E-03
427675	10/25/2016 - 11/1/2016	Beta	2.16E-02	4.55E-03	5.54E-03
428170	11/1/2016 - 11/8/2016	Beta	1.95E-02	4.60E-03	5.92E-03
428852	11/8/2016 - 11/15/2016	Beta	1.76E-02	4.34E-03	5.55E-03
429362	11/15/2016 - 11/22/2016	Beta	3.74E-02	5.62E-03	6.07E-03
429913	11/22/2016 - 11/29/2016	Beta	2.49E-02	4.99E-03	6.05E-03
430534	11/29/2016 - 12/6/2016	Beta	2.05E-02	4.50E-03	5.48E-03
431022	12/6/2016 - 12/13/2016	Beta	1.61E-02	4.49E-03	6.04E-03
431429	12/13/2016 - 12/20/2016	Beta	2.23E-02	5.28E-03	6.60E-03
431760	12/20/2016 - 12/27/2016	Beta	2.71E-02	5.70E-03	7.03E-03
431767	9/27/2016 - 12/27/2016	Cs-134	<9.65E-04	0.00E+00	9.65E-04

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431767	9/27/2016 - 12/27/2016	Cs-137	<1.15E-03	0.00E+00	1.15E-03
		Be-7	1.23E-01	3.14E-02	3.10E-02
		K-40	1.76E-02	1.46E-02	2.10E-02

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398908	12/29/2015 - 1/5/2016	Beta	1.52E-02	4.35E-03	5.92E-03
399223	1/5/2016 - 1/12/2016	Beta	1.40E-02	3.97E-03	5.20E-03
399972	1/12/2016 - 1/19/2016	Beta	2.51E-02	4.95E-03	5.94E-03
400325	1/19/2016 - 1/26/2016	Beta	1.14E-02	4.40E-03	6.47E-03
400955	1/26/2016 - 2/2/2016	Beta	2.18E-02	4.71E-03	5.78E-03
401318	2/2/2016 - 2/9/2016	Beta	1.61E-02	4.41E-03	5.86E-03
401771	2/9/2016 - 2/16/2016	Beta	2.04E-02	4.63E-03	5.63E-03
402282	2/16/2016 - 2/23/2016	Beta	1.53E-02	4.09E-03	5.31E-03
403010	2/23/2016 - 3/1/2016	Beta	1.76E-02	4.34E-03	5.53E-03
404488	3/1/2016 - 3/8/2016	Beta	1.72E-02	4.48E-03	5.90E-03
405374	3/8/2016 - 3/15/2016	Beta	1.59E-02	4.03E-03	5.15E-03
405991	3/15/2016 - 3/22/2016	Beta	1.59E-02	4.21E-03	5.50E-03
406323	3/22/2016 - 3/29/2016	Beta	1.70E-02	4.22E-03	5.35E-03
406330	12/29/2015 - 3/29/2016	Cs-134	<1.31E-03	0.00E+00	1.31E-03
		Cs-137	<1.11E-03	0.00E+00	1.11E-03
		Be-7	1.63E-01	3.26E-02	2.38E-02
		K-40	<2.34E-02	0.00E+00	2.34E-02
407519	3/29/2016 - 4/5/2016	Beta	2.29E-02	4.58E-03	5.39E-03
408099	4/5/2016 - 4/12/2016	Beta	1.92E-02	4.50E-03	5.64E-03
409412	4/12/2016 - 4/19/2016	Beta	2.01E-02	4.59E-03	5.78E-03
409747	4/19/2016 - 4/26/2016	Beta	2.08E-02	4.49E-03	5.58E-03
410899	4/26/2016 - 5/3/2016	Beta	1.82E-02	4.20E-03	5.26E-03

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
411399	5/3/2016 - 5/10/2016	Beta	1.86E-02	4.32E-03	5.47E-03
411723	5/10/2016 - 5/17/2016	Beta	1.69E-02	4.37E-03	5.82E-03
412186	5/17/2016 - 5/24/2016	Beta	1.58E-02	4.00E-03	5.08E-03
412702	5/24/2016 - 5/31/2016	Beta	1.51E-02	4.04E-03	5.31E-03
413305	5/31/2016 - 6/7/2016	Beta	1.35E-02	3.75E-03	4.92E-03
413852	6/7/2016 - 6/14/2016	Beta	2.03E-02	4.23E-03	5.08E-03
414993	6/14/2016 - 6/21/2016	Beta	1.89E-02	4.21E-03	5.21E-03
415357	6/21/2016 - 6/28/2016	Beta	1.21E-02	4.16E-03	5.97E-03
415364	3/29/2016 - 6/28/2016	Cs-134	<9.51E-04	0.00E+00	9.51E-04
		Cs-137	<1.06E-03	0.00E+00	1.06E-03
		Be-7	1.78E-01	3.47E-02	2.43E-02
		K-40	2.18E-02	1.27E-02	1.33E-02
416357	6/28/2016 - 7/5/2016	Beta	1.12E-02	3.95E-03	5.66E-03
416981	7/5/2016 - 7/12/2016	Beta	1.34E-02	4.31E-03	6.00E-03
417375	7/12/2016 - 7/19/2016	Beta	1.19E-02	3.79E-03	5.20E-03
417766	7/19/2016 - 7/26/2016	Beta	1.96E-02	4.44E-03	5.53E-03
418230	7/26/2016 - 8/2/2016	Beta	1.70E-02	4.38E-03	5.79E-03
418959	8/2/2016 - 8/9/2016	Beta	1.08E-02	4.05E-03	5.88E-03
419460	8/9/2016 - 8/16/2016	Beta	1.31E-02	3.79E-03	4.99E-03
419987	8/16/2016 - 8/23/2016	Beta	9.91E-03	4.09E-03	6.08E-03
420541	8/23/2016 - 8/30/2016	Beta	1.65E-02	4.46E-03	5.99E-03
421378	8/30/2016 - 9/6/2016	Beta	1.07E-02	4.09E-03	5.90E-03
422536	9/6/2016 - 9/13/2016	Beta	2.92E-02	4.93E-03	5.44E-03
423278	9/13/2016 - 9/20/2016	Beta	1.20E-02	4.13E-03	5.84E-03
424391	9/20/2016 - 9/27/2016	Beta	1.05E-02	4.20E-03	6.16E-03



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
424398	6/28/2016 - 9/27/2016	Cs-134	<9.31E-04	0.00E+00	9.31E-04
		Cs-137	<5.85E-04	0.00E+00	5.85E-04
		Be-7	1.29E-01	2.87E-02	2.17E-02
		K-40	<2.19E-02	0.00E+00	2.19E-02
425390	9/27/2016 - 10/4/2016	Beta	2.43E-02	4.72E-03	5.47E-03
425953	10/4/2016 - 10/11/2016	Beta	1.07E-02	4.25E-03	6.25E-03
426325	10/11/2016 - 10/18/2016	Beta	1.66E-02	4.52E-03	6.04E-03
427017	10/18/2016 - 10/25/2016	Beta	1.31E-02	4.54E-03	6.55E-03
427676	10/25/2016 - 11/1/2016	Beta	2.36E-02	4.99E-03	6.09E-03
428171	11/1/2016 - 11/8/2016	Beta	2.21E-02	4.75E-03	5.92E-03
428853	11/8/2016 - 11/15/2016	Beta	2.37E-02	4.70E-03	5.55E-03
429363	11/15/2016 - 11/22/2016	Beta	3.95E-02	5.79E-03	6.18E-03
429914	11/22/2016 - 11/29/2016	Beta	2.34E-02	4.97E-03	6.16E-03
430535	11/29/2016 - 12/6/2016	Beta	2.54E-02	5.34E-03	6.42E-03
431023	12/6/2016 - 12/13/2016	Beta	1.59E-02	4.53E-03	6.13E-03
431430	12/13/2016 - 12/20/2016	Beta	2.39E-02	5.51E-03	6.84E-03
431761	12/20/2016 - 12/27/2016	Beta	4.12E-02	6.57E-03	7.27E-03
431768	9/27/2016 - 12/27/2016	Cs-134	<1.21E-03	0.00E+00	1.21E-03
		Cs-137	<9.51E-04	0.00E+00	9.51E-04
		Be-7	1.61E-01	3.35E-02	2.55E-02
		K-40	<2.78E-02	0.00E+00	2.78E-02

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398909	12/29/2015 - 1/5/2016	Beta	1.22E-02	4.27E-03	6.10E-03
399224	1/5/2016 - 1/12/2016	Beta	1.49E-02	4.10E-03	5.31E-03
399973	1/12/2016 - 1/19/2016	Beta	2.37E-02	4.96E-03	6.10E-03
400326	1/19/2016 - 1/26/2016	Beta	1.11E-02	4.46E-03	6.61E-03
400956	1/26/2016 - 2/2/2016	Beta	1.84E-02	4.57E-03	5.90E-03

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
401319	2/2/2016 - 2/9/2016	Beta	1.63E-02	4.31E-03	5.65E-03
401772	2/9/2016 - 2/16/2016	Beta	1.83E-02	4.24E-03	5.19E-03
402283	2/16/2016 - 2/23/2016	Beta	1.63E-02	4.18E-03	5.35E-03
403011	2/23/2016 - 3/1/2016	Beta	1.31E-02	4.07E-03	5.55E-03
404489	3/1/2016 - 3/8/2016	Beta	1.71E-02	4.43E-03	5.82E-03
405375	3/8/2016 - 3/15/2016	Beta	1.78E-02	4.26E-03	5.34E-03
405992	3/15/2016 - 3/22/2016	Beta	1.70E-02	4.32E-03	5.60E-03
406324	3/22/2016 - 3/29/2016	Beta	1.71E-02	4.19E-03	5.27E-03
406331	12/29/2015 - 3/29/2016	Cs-134	<1.47E-03	0.00E+00	1.47E-03
		Cs-137	<1.01E-03	0.00E+00	1.01E-03
		Be-7	1.54E-01	3.15E-02	2.35E-02
		K-40	<2.62E-02	0.00E+00	2.62E-02
407520	3/29/2016 - 4/5/2016	Beta	1.73E-02	4.20E-03	5.30E-03
408100	4/5/2016 - 4/12/2016	Beta	1.42E-02	4.04E-03	5.38E-03
409413	4/12/2016 - 4/19/2016	Beta	1.79E-02	4.44E-03	5.73E-03
409748	4/19/2016 - 4/26/2016	Beta	1.51E-02	4.25E-03	5.74E-03
410900	4/26/2016 - 5/3/2016	Beta	1.36E-02	4.08E-03	5.55E-03
411400	5/3/2016 - 5/10/2016	Beta	1.48E-02	4.23E-03	5.72E-03
411724	5/10/2016 - 5/17/2016	Beta	1.76E-02	4.57E-03	6.09E-03
412187	5/17/2016 - 5/24/2016	Beta	1.32E-02	3.94E-03	5.27E-03
412703	5/24/2016 - 5/31/2016	Beta	2.00E-02	4.47E-03	5.53E-03
413306	5/31/2016 - 6/7/2016	Beta	1.25E-02	3.87E-03	5.23E-03
413853	6/7/2016 - 6/14/2016	Beta	2.00E-02	4.41E-03	5.41E-03
414994	6/14/2016 - 6/21/2016	Beta	1.47E-02	4.16E-03	5.54E-03
415358	6/21/2016 - 6/28/2016	Beta	1.67E-02	4.57E-03	6.21E-03



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415365	3/29/2016 - 6/28/2016	Cs-134	<1.32E-03	0.00E+00	1.32E-03
		Cs-137	<8.62E-04	0.00E+00	8.62E-04
		Be-7	1.70E-01	3.33E-02	2.06E-02
		K-40	<2.53E-02	0.00E+00	2.53E-02
416358	6/28/2016 - 7/5/2016	Beta	1.31E-02	4.31E-03	6.09E-03
416982	7/5/2016 - 7/12/2016	Beta	1.42E-02	4.22E-03	5.76E-03
417376	7/12/2016 - 7/19/2016	Beta	1.53E-02	4.15E-03	5.44E-03
417767	7/19/2016 - 7/26/2016	Beta	2.14E-02	4.60E-03	5.62E-03
418231	7/26/2016 - 8/2/2016	Beta	1.52E-02	4.34E-03	5.91E-03
418960	8/2/2016 - 8/9/2016	Beta	1.10E-02	4.13E-03	5.99E-03
419461	8/9/2016 - 8/16/2016	Beta	1.18E-02	3.75E-03	5.07E-03
419988	8/16/2016 - 8/23/2016	Beta	1.28E-02	4.32E-03	6.16E-03
420542	8/23/2016 - 8/30/2016	Beta	1.54E-02	4.44E-03	6.07E-03
421379	8/30/2016 - 9/6/2016	Beta	9.25E-03	3.91E-03	5.78E-03
422537	9/6/2016 - 9/13/2016	Beta	2.28E-02	4.66E-03	5.58E-03
423279	9/13/2016 - 9/20/2016	Beta	1.71E-02	4.46E-03	5.86E-03
424392	9/20/2016 - 9/27/2016	Beta	1.13E-02	4.16E-03	6.01E-03
424399	6/28/2016 - 9/27/2016	Cs-134	<7.48E-04	0.00E+00	7.48E-04
		Cs-137	<5.93E-04	0.00E+00	5.93E-04
		Be-7	1.29E-01	2.86E-02	2.03E-02
		K-40	<2.44E-02	0.00E+00	2.44E-02
425391	9/27/2016 - 10/4/2016	Beta	1.88E-02	4.40E-03	5.50E-03
425954	10/4/2016 - 10/11/2016	Beta	1.27E-02	4.26E-03	6.04E-03
426326	10/11/2016 - 10/18/2016	Beta	1.75E-02	4.52E-03	5.93E-03
427018	10/18/2016 - 10/25/2016	Beta	1.30E-02	4.44E-03	6.39E-03
427677	10/25/2016 - 11/1/2016	Beta	1.69E-02	4.37E-03	5.71E-03



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
428172	11/1/2016 - 11/8/2016	Beta	2.14E-02	4.79E-03	6.04E-03
428854	11/8/2016 - 11/15/2016	Beta	1.77E-02	4.42E-03	5.68E-03
429364	11/15/2016 - 11/22/2016	Beta	3.52E-02	5.58E-03	6.16E-03
429915	11/22/2016 - 11/29/2016	Beta	2.13E-02	4.85E-03	6.16E-03
430536	11/29/2016 - 12/6/2016	Beta	2.11E-02	4.57E-03	5.56E-03
431024	12/6/2016 - 12/13/2016	Beta	1.22E-02	4.29E-03	6.13E-03
431431	12/13/2016 - 12/20/2016	Beta	1.80E-02	5.05E-03	6.66E-03
431762	12/20/2016 - 12/27/2016	Beta	2.37E-02	5.54E-03	7.09E-03
431769	9/27/2016 - 12/27/2016	Cs-134	<7.28E-04	0.00E+00	7.28E-04
		Cs-137	<5.73E-04	0.00E+00	5.73E-04
		Be-7	1.12E-01	2.56E-02	1.46E-02
		K-40	<2.69E-02	0.00E+00	2.69E-02

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398910	12/29/2015 - 1/5/2016	Beta	1.11E-02	4.10E-03	5.92E-03
399225	1/5/2016 - 1/12/2016	Beta	1.35E-02	3.95E-03	5.22E-03
399974	1/12/2016 - 1/19/2016	Beta	1.77E-02	4.53E-03	5.94E-03
400327	1/19/2016 - 1/26/2016	Beta	8.96E-03	4.25E-03	6.47E-03
400957	1/26/2016 - 2/2/2016	Beta	1.92E-02	4.49E-03	5.67E-03
401320	2/2/2016 - 2/9/2016	Beta	1.58E-02	4.30E-03	5.68E-03
401773	2/9/2016 - 2/16/2016	Beta	1.96E-02	4.34E-03	5.23E-03
402284	2/16/2016 - 2/23/2016	Beta	2.24E-02	4.58E-03	5.39E-03
403012	2/23/2016 - 3/1/2016	Beta	1.56E-02	4.25E-03	5.60E-03
404490	3/1/2016 - 3/8/2016	Beta	7.54E-03	3.83E-03	5.85E-03
405376	3/8/2016 - 3/15/2016	Beta	1.89E-02	4.33E-03	5.35E-03
405993	3/15/2016 - 3/22/2016	Beta	1.87E-02	4.44E-03	5.61E-03



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
406325	3/22/2016 - 3/29/2016	Beta	1.32E-02	3.93E-03	5.28E-03
406332	12/29/2015 - 3/29/2016	Cs-134	<1.29E-03	0.00E+00	1.29E-03
		Cs-137	<1.12E-03	0.00E+00	1.12E-03
		Be-7	1.42E-01	3.03E-02	1.86E-02
		K-40	<2.99E-02	0.00E+00	2.99E-02
407521	3/29/2016 - 4/5/2016	Beta	1.52E-02	4.09E-03	5.34E-03
408101	4/5/2016 - 4/12/2016	Beta	1.61E-02	4.18E-03	5.41E-03
409414	4/12/2016 - 4/19/2016	Beta	1.55E-02	4.32E-03	5.78E-03
409749	4/19/2016 - 4/26/2016	Beta	1.79E-02	4.45E-03	5.80E-03
410901	4/26/2016 - 5/3/2016	Beta	1.79E-02	4.32E-03	5.51E-03
411401	5/3/2016 - 5/10/2016	Beta	1.36E-02	4.13E-03	5.67E-03
411725	5/10/2016 - 5/17/2016	Beta	1.77E-02	4.55E-03	6.05E-03
412188	5/17/2016 - 5/24/2016	Beta	1.40E-02	3.99E-03	5.26E-03
412704	5/24/2016 - 5/31/2016	Beta	1.15E-02	3.95E-03	5.56E-03
413307	5/31/2016 - 6/7/2016	Beta	1.16E-02	3.77E-03	5.18E-03
413854	6/7/2016 - 6/14/2016	Beta	1.84E-02	4.26E-03	5.33E-03
414995	6/14/2016 - 6/21/2016	Beta	1.51E-02	4.14E-03	5.49E-03
415359	6/21/2016 - 6/28/2016	Beta	1.46E-02	4.47E-03	6.25E-03
415366	3/29/2016 - 6/28/2016	Cs-134	<1.28E-03	0.00E+00	1.28E-03
		Cs-137	<1.34E-03	0.00E+00	1.34E-03
		Be-7	1.55E-01	3.30E-02	2.41E-02
		K-40	<2.58E-02	0.00E+00	2.58E-02
416359	6/28/2016 - 7/5/2016	Beta	1.40E-02	4.29E-03	5.96E-03
416983	7/5/2016 - 7/12/2016	Beta	1.50E-02	4.24E-03	5.72E-03
417377	7/12/2016 - 7/19/2016	Beta	1.26E-02	3.95E-03	5.41E-03
417768	7/19/2016 - 7/26/2016	Beta	1.77E-02	4.34E-03	5.55E-03



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
418232	7/26/2016 - 8/2/2016	Beta	1.85E-02	4.52E-03	5.87E-03
418961	8/2/2016 - 8/9/2016	Beta	1.32E-02	4.21E-03	5.90E-03
419462	8/9/2016 - 8/16/2016	Beta	1.68E-02	4.04E-03	5.01E-03
419989	8/16/2016 - 8/23/2016	Beta	1.47E-02	4.41E-03	6.11E-03
420543	8/23/2016 - 8/30/2016	Beta	1.57E-02	4.40E-03	5.98E-03
421380	8/30/2016 - 9/6/2016	Beta	1.08E-02	4.09E-03	5.89E-03
422538	9/6/2016 - 9/13/2016	Beta	2.54E-02	4.76E-03	5.49E-03
423280	9/13/2016 - 9/20/2016	Beta	7.88E-03	3.88E-03	5.88E-03
424393	9/20/2016 - 9/27/2016	Beta	1.10E-02	4.22E-03	6.13E-03
424400	6/28/2016 - 9/27/2016	Cs-134	<1.37E-03	0.00E+00	1.37E-03
		Cs-137	<8.29E-04	0.00E+00	8.29E-04
		Be-7	1.17E-01	2.67E-02	2.17E-02
		K-40	<2.59E-02	0.00E+00	2.59E-02
425392	9/27/2016 - 10/4/2016	Beta	2.13E-02	4.51E-03	5.43E-03
425955	10/4/2016 - 10/11/2016	Beta	1.13E-02	4.19E-03	6.09E-03
426327	10/11/2016 - 10/18/2016	Beta	1.57E-02	4.43E-03	5.98E-03
427019	10/18/2016 - 10/25/2016	Beta	1.42E-02	4.52E-03	6.39E-03
427678	10/25/2016 - 11/1/2016	Beta	1.97E-02	4.52E-03	5.67E-03
428173	11/1/2016 - 11/8/2016	Beta	1.70E-02	4.53E-03	6.06E-03
428855	11/8/2016 - 11/15/2016	Beta	1.76E-02	4.41E-03	5.66E-03
429365	11/15/2016 - 11/22/2016	Beta	3.63E-02	5.65E-03	6.19E-03
429916	11/22/2016 - 11/29/2016	Beta	2.04E-02	4.80E-03	6.16E-03
430537	11/29/2016 - 12/6/2016	Beta	2.08E-02	4.43E-03	5.34E-03
431025	12/6/2016 - 12/13/2016	Beta	1.52E-02	4.35E-03	5.89E-03
431432	12/13/2016 - 12/20/2016	Beta	1.62E-02	4.79E-03	6.44E-03



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431763	12/20/2016 - 12/27/2016	Beta	2.68E-02	5.56E-03	6.82E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431770	9/27/2016 - 12/27/2016	Cs-134	<1.42E-03	0.00E+00	1.42E-03
		Cs-137	<1.35E-03	0.00E+00	1.35E-03
		Be-7	1.54E-01	3.28E-02	2.19E-02
		K-40	1.48E-02	1.12E-02	1.38E-02

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398911	12/29/2015 - 1/5/2016	Beta	1.42E-02	4.33E-03	5.98E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
399226	1/5/2016 - 1/12/2016	Beta	1.51E-02	4.06E-03	5.23E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
399975	1/12/2016 - 1/19/2016	Beta	2.39E-02	4.91E-03	5.99E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400328	1/19/2016 - 1/26/2016	Beta	1.20E-02	4.47E-03	6.51E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400958	1/26/2016 - 2/2/2016	Beta	1.73E-02	4.45E-03	5.79E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
401321	2/2/2016 - 2/9/2016	Beta	1.35E-02	4.18E-03	5.74E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
401774	2/9/2016 - 2/16/2016	Beta	1.49E-02	4.09E-03	5.29E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
402285	2/16/2016 - 2/23/2016	Beta	1.14E-02	3.89E-03	5.41E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
403013	2/23/2016 - 3/1/2016	Beta	1.35E-02	4.13E-03	5.62E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
404491	3/1/2016 - 3/8/2016	Beta	1.04E-02	4.04E-03	5.88E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
405377	3/8/2016 - 3/15/2016	Beta	1.71E-02	4.22E-03	5.34E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
405994	3/15/2016 - 3/22/2016	Beta	1.93E-02	4.49E-03	5.63E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
406326	3/22/2016 - 3/29/2016	Beta	1.24E-02	3.87E-03	5.25E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
406333	12/29/2015 - 3/29/2016	Cs-134	<1.17E-03	0.00E+00	1.17E-03
		Cs-137	<1.12E-03	0.00E+00	1.12E-03
		Be-7	1.29E-01	3.01E-02	2.41E-02
		K-40	<2.25E-02	0.00E+00	2.25E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
407522	3/29/2016 - 4/5/2016	Beta	1.55E-02	4.08E-03	5.30E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
408102	4/5/2016 - 4/12/2016	Beta	1.31E-02	3.98E-03	5.40E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
409415	4/12/2016 - 4/19/2016	Beta	1.59E-02	4.34E-03	5.76E-03

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
409750	4/19/2016 - 4/26/2016	Beta	1.60E-02	4.30E-03	5.72E-03



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
410902	4/26/2016 - 5/3/2016	Beta	2.13E-02	4.52E-03	5.49E-03
411402	5/3/2016 - 5/10/2016	Beta	1.43E-02	4.18E-03	5.67E-03
411726	5/10/2016 - 5/17/2016	Beta	1.69E-02	4.50E-03	6.05E-03
412189	5/17/2016 - 5/24/2016	Beta	1.08E-02	3.76E-03	5.24E-03
412705	5/24/2016 - 5/31/2016	Beta	1.47E-02	4.12E-03	5.48E-03
413308	5/31/2016 - 6/7/2016	Beta	1.16E-02	3.78E-03	5.18E-03
413855	6/7/2016 - 6/14/2016	Beta	1.85E-02	4.30E-03	5.38E-03
414996	6/14/2016 - 6/21/2016	Beta	1.40E-02	4.08E-03	5.49E-03
415360	6/21/2016 - 6/28/2016	Beta	1.65E-02	4.52E-03	6.14E-03
415367	3/29/2016 - 6/28/2016	Cs-134	<1.04E-03	0.00E+00	1.04E-03
		Cs-137	<1.01E-03	0.00E+00	1.01E-03
		Be-7	1.71E-01	2.54E-02	1.68E-02
		K-40	1.73E-02	1.28E-02	1.72E-02
416360	6/28/2016 - 7/5/2016	Beta	1.14E-02	4.17E-03	6.03E-03
416984	7/5/2016 - 7/12/2016	Beta	1.25E-02	4.09E-03	5.74E-03
417378	7/12/2016 - 7/19/2016	Beta	1.18E-02	3.90E-03	5.40E-03
417769	7/19/2016 - 7/26/2016	Beta	1.61E-02	4.27E-03	5.60E-03
418233	7/26/2016 - 8/2/2016	Beta	1.34E-02	4.22E-03	5.90E-03
418962	8/2/2016 - 8/9/2016	Beta	1.31E-02	4.25E-03	5.97E-03
419463	8/9/2016 - 8/16/2016	Beta	1.06E-02	3.66E-03	5.07E-03
419990	8/16/2016 - 8/23/2016	Beta	9.47E-03	4.09E-03	6.13E-03
420544	8/23/2016 - 8/30/2016	Beta	1.70E-02	4.53E-03	6.06E-03
421381	8/30/2016 - 9/6/2016	Beta	1.18E-02	4.07E-03	5.77E-03
422539	9/6/2016 - 9/13/2016	Beta	2.62E-02	4.85E-03	5.56E-03
423281	9/13/2016 - 9/20/2016	Beta	1.11E-02	4.07E-03	5.85E-03



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
424394	9/20/2016 - 9/27/2016	Beta	1.32E-02	4.26E-03	5.98E-03
424401	6/28/2016 - 9/27/2016	Cs-134	<1.49E-03	0.00E+00	1.49E-03
		Cs-137	<1.18E-03	0.00E+00	1.18E-03
		Be-7	1.28E-01	2.81E-02	1.82E-02
		K-40	2.92E-02	1.33E-02	3.96E-03
425393	9/27/2016 - 10/4/2016	Beta	1.90E-02	4.41E-03	5.50E-03
425956	10/4/2016 - 10/11/2016	Beta	1.29E-02	4.28E-03	6.06E-03
426328	10/11/2016 - 10/18/2016	Beta	1.49E-02	4.38E-03	5.97E-03
427020	10/18/2016 - 10/25/2016	Beta	1.12E-02	4.33E-03	6.39E-03
427679	10/25/2016 - 11/1/2016	Beta	1.97E-02	4.54E-03	5.70E-03
428174	11/1/2016 - 11/8/2016	Beta	2.49E-02	4.99E-03	6.04E-03
428856	11/8/2016 - 11/15/2016	Beta	1.90E-02	4.54E-03	5.72E-03
429366	11/15/2016 - 11/22/2016	Beta	3.37E-02	5.53E-03	6.21E-03
429917	11/22/2016 - 11/29/2016	Beta	1.83E-02	4.73E-03	6.26E-03
430538	11/29/2016 - 12/6/2016	Beta	2.45E-02	4.82E-03	5.65E-03
431026	12/6/2016 - 12/13/2016	Beta	2.47E-02	5.13E-03	6.27E-03
431433	12/13/2016 - 12/20/2016	Beta	1.80E-02	5.14E-03	6.83E-03
431764	12/20/2016 - 12/27/2016	Beta	2.82E-02	5.93E-03	7.30E-03
431771	9/27/2016 - 12/27/2016	Cs-134	<1.48E-03	0.00E+00	1.48E-03
		Cs-137	<1.08E-03	0.00E+00	1.08E-03
		Be-7	1.30E-01	3.07E-02	2.53E-02
		K-40	<2.29E-02	0.00E+00	2.29E-02

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398912	12/29/2015 - 1/5/2016	I-131	<3.35E-02	0.00E+00	3.35E-02
		Cs-134	<2.22E-02	0.00E+00	2.22E-02
		Cs-137	<2.99E-02	0.00E+00	2.99E-02
		Be-7	<2.27E-01	0.00E+00	2.27E-01
		K-40	8.94E-01	4.17E-01	4.16E-01
399227	1/5/2016 - 1/12/2016	I-131	<2.10E-02	0.00E+00	2.10E-02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m³

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
399227	1/5/2016 - 1/12/2016	Cs-134	<1.21E-02	0.00E+00	1.21E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	6.49E-01	2.62E-01	2.16E-01
399976	1/12/2016 - 1/19/2016	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<1.49E-02	0.00E+00	1.49E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	7.78E-01	3.12E-01	3.11E-01
400329	1/19/2016 - 1/26/2016	I-131	<3.68E-02	0.00E+00	3.68E-02
		Cs-134	<2.84E-02	0.00E+00	2.84E-02
		Cs-137	<3.30E-02	0.00E+00	3.30E-02
		Be-7	<2.43E-01	0.00E+00	2.43E-01
		K-40	6.88E-01	3.86E-01	4.38E-01
400959	1/26/2016 - 2/2/2016	I-131	<3.37E-02	0.00E+00	3.37E-02
		Cs-134	<2.18E-02	0.00E+00	2.18E-02
		Cs-137	<2.69E-02	0.00E+00	2.69E-02
		Be-7	<2.32E-01	0.00E+00	2.32E-01
		K-40	1.38E+00	4.93E-01	3.89E-01
401322	2/2/2016 - 2/9/2016	I-131	<1.77E-02	0.00E+00	1.77E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<1.67E-02	0.00E+00	1.67E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	9.71E-01	3.03E-01	5.85E-02
401775	2/9/2016 - 2/16/2016	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<1.49E-02	0.00E+00	1.49E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	8.94E-01	3.16E-01	2.22E-01
402286	2/16/2016 - 2/23/2016	I-131	<2.19E-02	0.00E+00	2.19E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	9.42E-01	3.08E-01	6.38E-02
403014	2/23/2016 - 3/1/2016	I-131	<1.50E-02	0.00E+00	1.50E-02
		Cs-134	<1.24E-02	0.00E+00	1.24E-02
		Cs-137	<1.20E-02	0.00E+00	1.20E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	7.53E-01	2.86E-01	2.43E-01
404492	3/1/2016 - 3/8/2016	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<1.42E-02	0.00E+00	1.42E-02
		Cs-137	<1.35E-02	0.00E+00	1.35E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	1.03E+00	3.31E-01	2.40E-01
405378	3/8/2016 - 3/15/2016	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
405378	3/8/2016 - 3/15/2016	Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	6.56E-01	2.84E-01	2.99E-01
405995	3/15/2016 - 3/22/2016	I-131	<2.54E-02	0.00E+00	2.54E-02
		Cs-134	<1.32E-02	0.00E+00	1.32E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<8.16E-02	0.00E+00	8.16E-02
		K-40	8.10E-01	2.73E-01	5.78E-02
406334	3/22/2016 - 3/29/2016	I-131	<1.50E-02	0.00E+00	1.50E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.96E-02	0.00E+00	1.96E-02
		Be-7	<8.72E-02	0.00E+00	8.72E-02
		K-40	8.67E-01	3.04E-01	2.44E-01
407523	3/29/2016 - 4/5/2016	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<1.20E-02	0.00E+00	1.20E-02
		Cs-137	<1.28E-02	0.00E+00	1.28E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	9.53E-01	3.08E-01	6.30E-02
408103	4/5/2016 - 4/12/2016	I-131	<1.26E-02	0.00E+00	1.26E-02
		Cs-134	<9.50E-03	0.00E+00	9.50E-03
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	5.09E-01	2.47E-01	2.65E-01
409416	4/12/2016 - 4/19/2016	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<1.34E-02	0.00E+00	1.34E-02
		Cs-137	<1.67E-02	0.00E+00	1.67E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	7.48E-01	2.61E-01	5.80E-02
409751	4/19/2016 - 4/26/2016	I-131	<1.61E-02	0.00E+00	1.61E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<2.20E-02	0.00E+00	2.20E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	<5.42E-01	0.00E+00	5.42E-01
410903	4/26/2016 - 5/3/2016	I-131	<2.03E-02	0.00E+00	2.03E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	7.28E-01	2.92E-01	2.64E-01
411403	5/3/2016 - 5/10/2016	I-131	<1.70E-02	0.00E+00	1.70E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.29E-02	0.00E+00	1.29E-02
		Be-7	<9.42E-02	0.00E+00	9.42E-02
		K-40	6.60E-01	2.41E-01	5.59E-02
411727	5/10/2016 - 5/17/2016	I-131	<1.60E-02	0.00E+00	1.60E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<9.43E-02	0.00E+00	9.43E-02
		K-40	8.86E-01	3.40E-01	3.71E-01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
412190	5/17/2016 - 5/24/2016	I-131	<1.36E-02	0.00E+00	1.36E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	7.25E-01	2.72E-01	2.17E-01
412706	5/24/2016 - 5/31/2016	I-131	<1.91E-02	0.00E+00	1.91E-02
		Cs-134	<1.32E-02	0.00E+00	1.32E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<9.56E-02	0.00E+00	9.56E-02
		K-40	5.78E-01	2.58E-01	2.36E-01
413309	5/31/2016 - 6/7/2016	I-131	<1.72E-02	0.00E+00	1.72E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.15E-02	0.00E+00	1.15E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	6.65E-01	2.82E-01	2.97E-01
413856	6/7/2016 - 6/14/2016	I-131	<1.88E-02	0.00E+00	1.88E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<9.84E-03	0.00E+00	9.84E-03
		Be-7	<9.40E-02	0.00E+00	9.40E-02
		K-40	6.67E-01	2.66E-01	2.03E-01
414997	6/14/2016 - 6/21/2016	I-131	<1.94E-02	0.00E+00	1.94E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	<9.48E-02	0.00E+00	9.48E-02
		K-40	8.28E-01	2.90E-01	2.23E-01
415368	6/21/2016 - 6/28/2016	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<9.49E-02	0.00E+00	9.49E-02
		K-40	9.45E-01	3.12E-01	2.36E-01
416361	6/28/2016 - 7/5/2016	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	<5.67E-01	0.00E+00	5.67E-01
416985	7/5/2016 - 7/12/2016	I-131	<1.78E-02	0.00E+00	1.78E-02
		Cs-134	<1.25E-02	0.00E+00	1.25E-02
		Cs-137	<1.10E-02	0.00E+00	1.10E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	6.51E-01	2.38E-01	5.51E-02
417379	7/12/2016 - 7/19/2016	I-131	<1.61E-02	0.00E+00	1.61E-02
		Cs-134	<1.20E-02	0.00E+00	1.20E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	6.03E-01	2.68E-01	2.83E-01
417770	7/19/2016 - 7/26/2016	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<1.86E-02	0.00E+00	1.86E-02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m³

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
417770	7/19/2016 - 7/26/2016	Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	9.59E-01	3.49E-01	3.27E-01
418234	7/26/2016 - 8/2/2016	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<1.14E-02	0.00E+00	1.14E-02
		Cs-137	<1.42E-02	0.00E+00	1.42E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	6.07E-01	3.04E-01	3.84E-01
418963	8/2/2016 - 8/9/2016	I-131	<1.61E-02	0.00E+00	1.61E-02
		Cs-134	<1.20E-02	0.00E+00	1.20E-02
		Cs-137	<9.13E-03	0.00E+00	9.13E-03
		Be-7	<9.55E-02	0.00E+00	9.55E-02
		K-40	7.79E-01	2.76E-01	1.95E-01
419464	8/9/2016 - 8/16/2016	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.19E-02	0.00E+00	1.19E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<8.60E-02	0.00E+00	8.60E-02
		K-40	<5.75E-01	0.00E+00	5.75E-01
419991	8/16/2016 - 8/23/2016	I-131	<1.62E-02	0.00E+00	1.62E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	<9.43E-02	0.00E+00	9.43E-02
		K-40	8.84E-01	3.09E-01	2.61E-01
420545	8/23/2016 - 8/30/2016	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<3.64E-03	0.00E+00	3.64E-03
		Be-7	<6.40E-02	0.00E+00	6.40E-02
		K-40	8.81E-01	3.35E-01	3.33E-01
421382	8/30/2016 - 9/6/2016	I-131	<1.98E-02	0.00E+00	1.98E-02
		Cs-134	<1.96E-02	0.00E+00	1.96E-02
		Cs-137	<1.67E-02	0.00E+00	1.67E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	5.97E-01	2.62E-01	2.27E-01
422540	9/6/2016 - 9/13/2016	I-131	<1.73E-02	0.00E+00	1.73E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	5.87E-01	2.74E-01	2.94E-01
423282	9/13/2016 - 9/20/2016	I-131	<1.07E-02	0.00E+00	1.07E-02
		Cs-134	<1.21E-02	0.00E+00	1.21E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	9.49E-01	2.94E-01	5.71E-02
424402	9/20/2016 - 9/27/2016	I-131	<2.04E-02	0.00E+00	2.04E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
424402	9/20/2016 - 9/27/2016	K-40	1.07E+00	3.32E-01	2.23E-01
425394	9/27/2016 - 10/4/2016	I-131	<1.60E-02	0.00E+00	1.60E-02
		Cs-134	<1.32E-02	0.00E+00	1.32E-02
		Cs-137	<9.20E-03	0.00E+00	9.20E-03
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	6.44E-01	2.88E-01	3.22E-01
425957	10/4/2016 - 10/11/2016	I-131	<1.62E-02	0.00E+00	1.62E-02
		Cs-134	<1.23E-02	0.00E+00	1.23E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<7.61E-02	0.00E+00	7.61E-02
		K-40	8.40E-01	3.04E-01	2.65E-01
426329	10/11/2016 - 10/18/2016	I-131	<1.71E-02	0.00E+00	1.71E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	9.03E-01	3.29E-01	2.86E-01
427021	10/18/2016 - 10/25/2016	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<1.10E-02	0.00E+00	1.10E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	7.47E-01	2.60E-01	5.79E-02
427680	10/25/2016 - 11/1/2016	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<9.48E-03	0.00E+00	9.48E-03
		Cs-137	<1.67E-02	0.00E+00	1.67E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	6.62E-01	2.65E-01	2.27E-01
428175	11/1/2016 - 11/8/2016	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<2.41E-02	0.00E+00	2.41E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	1.02E+00	3.43E-01	2.65E-01
428857	11/8/2016 - 11/15/2016	I-131	<1.40E-02	0.00E+00	1.40E-02
		Cs-134	<1.49E-02	0.00E+00	1.49E-02
		Cs-137	<1.96E-02	0.00E+00	1.96E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	5.99E-01	2.79E-01	3.14E-01
429367	11/15/2016 - 11/22/2016	I-131	<3.59E-02	0.00E+00	3.59E-02
		Cs-134	<1.34E-02	0.00E+00	1.34E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	8.85E-01	3.00E-01	1.93E-01
429918	11/22/2016 - 11/29/2016	I-131	<1.11E-02	0.00E+00	1.11E-02
		Cs-134	<1.22E-02	0.00E+00	1.22E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<6.02E-02	0.00E+00	6.02E-02
		K-40	7.59E-01	2.65E-01	5.88E-02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
430539	11/29/2016 - 12/6/2016	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<1.30E-02	0.00E+00	1.30E-02
		Cs-137	<1.14E-02	0.00E+00	1.14E-02
		Be-7	<7.43E-02	0.00E+00	7.43E-02
		K-40	1.03E+00	3.10E-01	5.71E-02
431027	12/6/2016 - 12/13/2016	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<2.72E-03	0.00E+00	2.72E-03
		Cs-137	<1.16E-02	0.00E+00	1.16E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	1.03E+00	3.27E-01	2.16E-01
431434	12/13/2016 - 12/20/2016	I-131	<1.41E-02	0.00E+00	1.41E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<8.50E-02	0.00E+00	8.50E-02
		K-40	1.03E+00	3.47E-01	2.66E-01
431772	12/20/2016 - 12/27/2016	I-131	<2.43E-02	0.00E+00	2.43E-02
		Cs-134	<9.97E-03	0.00E+00	9.97E-03
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	1.23E+00	3.52E-01	6.18E-02

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398913	12/29/2015 - 1/5/2016	I-131	<3.73E-02	0.00E+00	3.73E-02
		Cs-134	<2.38E-02	0.00E+00	2.38E-02
		Cs-137	<3.56E-02	0.00E+00	3.56E-02
		Be-7	<2.59E-01	0.00E+00	2.59E-01
		K-40	1.13E+00	5.64E-01	7.26E-01
399228	1/5/2016 - 1/12/2016	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<1.69E-02	0.00E+00	1.69E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<9.91E-02	0.00E+00	9.91E-02
		K-40	7.80E-01	2.69E-01	5.87E-02
399977	1/12/2016 - 1/19/2016	I-131	<2.09E-02	0.00E+00	2.09E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<8.82E-02	0.00E+00	8.82E-02
		K-40	<6.22E-01	0.00E+00	6.22E-01
400330	1/19/2016 - 1/26/2016	I-131	<4.10E-02	0.00E+00	4.10E-02
		Cs-134	<2.79E-02	0.00E+00	2.79E-02
		Cs-137	<3.65E-02	0.00E+00	3.65E-02
		Be-7	<2.83E-01	0.00E+00	2.83E-01
		K-40	1.01E+00	4.32E-01	3.88E-01
400960	1/26/2016 - 2/2/2016	I-131	<3.20E-02	0.00E+00	3.20E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<2.69E-02	0.00E+00	2.69E-02
		Be-7	<2.07E-01	0.00E+00	2.07E-01
		K-40	1.25E+00	4.60E-01	3.36E-01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
401323	2/2/2016 - 2/9/2016	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<1.06E-02	0.00E+00	1.06E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	7.08E-01	2.72E-01	2.28E-01
401776	2/9/2016 - 2/16/2016	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<1.71E-02	0.00E+00	1.71E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	6.90E-01	2.88E-01	2.61E-01
402287	2/16/2016 - 2/23/2016	I-131	<1.98E-02	0.00E+00	1.98E-02
		Cs-134	<1.07E-02	0.00E+00	1.07E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	7.92E-01	2.87E-01	2.22E-01
403015	2/23/2016 - 3/1/2016	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<9.23E-03	0.00E+00	9.23E-03
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	9.77E-01	3.01E-01	5.76E-02
404493	3/1/2016 - 3/8/2016	I-131	<1.87E-02	0.00E+00	1.87E-02
		Cs-134	<1.24E-02	0.00E+00	1.24E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.48E-01	0.00E+00	1.48E-01
		K-40	8.66E-01	3.24E-01	2.75E-01
405379	3/8/2016 - 3/15/2016	I-131	<1.46E-02	0.00E+00	1.46E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<1.21E-02	0.00E+00	1.21E-02
		Be-7	<9.04E-02	0.00E+00	9.04E-02
		K-40	8.77E-01	2.87E-01	5.94E-02
405996	3/15/2016 - 3/22/2016	I-131	<3.05E-02	0.00E+00	3.05E-02
		Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<1.94E-02	0.00E+00	1.94E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	5.20E-01	2.70E-01	3.34E-01
406335	3/22/2016 - 3/29/2016	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<1.73E-02	0.00E+00	1.73E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	6.41E-01	2.62E-01	2.43E-01
407524	3/29/2016 - 4/5/2016	I-131	<1.61E-02	0.00E+00	1.61E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	6.59E-01	2.80E-01	2.91E-01
408104	4/5/2016 - 4/12/2016	I-131	<1.61E-02	0.00E+00	1.61E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m³

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
408104	4/5/2016 - 4/12/2016	Cs-137	<1.11E-02	0.00E+00	1.11E-02
		Be-7	<9.30E-02	0.00E+00	9.30E-02
		K-40	9.02E-01	3.19E-01	2.95E-01
409417	4/12/2016 - 4/19/2016	I-131	<1.46E-02	0.00E+00	1.46E-02
		Cs-134	<1.07E-02	0.00E+00	1.07E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<7.45E-02	0.00E+00	7.45E-02
		K-40	5.33E-01	2.48E-01	2.61E-01
409752	4/19/2016 - 4/26/2016	I-131	<2.51E-02	0.00E+00	2.51E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	9.81E-01	3.26E-01	2.45E-01
410904	4/26/2016 - 5/3/2016	I-131	<1.58E-02	0.00E+00	1.58E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<9.22E-02	0.00E+00	9.22E-02
		K-40	5.79E-01	2.60E-01	2.55E-01
411404	5/3/2016 - 5/10/2016	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<1.16E-02	0.00E+00	1.16E-02
		Cs-137	<1.12E-02	0.00E+00	1.12E-02
		Be-7	<9.36E-02	0.00E+00	9.36E-02
		K-40	<5.61E-01	0.00E+00	5.61E-01
411728	5/10/2016 - 5/17/2016	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<9.07E-02	0.00E+00	9.07E-02
		K-40	6.34E-01	2.47E-01	2.01E-01
412191	5/17/2016 - 5/24/2016	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<1.26E-02	0.00E+00	1.26E-02
		Cs-137	<8.80E-03	0.00E+00	8.80E-03
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	<5.02E-01	0.00E+00	5.02E-01
412707	5/24/2016 - 5/31/2016	I-131	<1.27E-02	0.00E+00	1.27E-02
		Cs-134	<1.16E-02	0.00E+00	1.16E-02
		Cs-137	<1.69E-02	0.00E+00	1.69E-02
		Be-7	<8.35E-02	0.00E+00	8.35E-02
		K-40	8.23E-01	2.66E-01	5.44E-02
413310	5/31/2016 - 6/7/2016	I-131	<1.72E-02	0.00E+00	1.72E-02
		Cs-134	<1.29E-02	0.00E+00	1.29E-02
		Cs-137	<1.36E-02	0.00E+00	1.36E-02
		Be-7	<9.66E-02	0.00E+00	9.66E-02
		K-40	5.82E-01	2.19E-01	5.25E-02
413857	6/7/2016 - 6/14/2016	I-131	<1.80E-02	0.00E+00	1.80E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<8.82E-02	0.00E+00	8.82E-02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
413857	6/7/2016 - 6/14/2016	K-40	7.09E-01	2.59E-01	2.05E-01
414998	6/14/2016 - 6/21/2016	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<7.72E-03	0.00E+00	7.72E-03
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	1.07E+00	3.19E-01	5.92E-02
415369	6/21/2016 - 6/28/2016	I-131	<1.61E-02	0.00E+00	1.61E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.91E-02	0.00E+00	1.91E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	7.38E-01	2.68E-01	1.85E-01
416362	6/28/2016 - 7/5/2016	I-131	<1.61E-02	0.00E+00	1.61E-02
		Cs-134	<1.41E-02	0.00E+00	1.41E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<6.40E-02	0.00E+00	6.40E-02
		K-40	6.51E-01	2.48E-01	6.08E-02
416986	7/5/2016 - 7/12/2016	I-131	<2.03E-02	0.00E+00	2.03E-02
		Cs-134	<1.87E-02	0.00E+00	1.87E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	8.62E-01	3.02E-01	2.21E-01
417380	7/12/2016 - 7/19/2016	I-131	<1.45E-02	0.00E+00	1.45E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<2.13E-02	0.00E+00	2.13E-02
		K-40	7.29E-01	2.87E-01	2.76E-01
417771	7/19/2016 - 7/26/2016	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<1.20E-02	0.00E+00	1.20E-02
		Cs-137	<1.63E-02	0.00E+00	1.63E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	6.33E-01	3.28E-01	4.27E-01
418235	7/26/2016 - 8/2/2016	I-131	<1.72E-02	0.00E+00	1.72E-02
		Cs-134	<1.14E-02	0.00E+00	1.14E-02
		Cs-137	<2.09E-02	0.00E+00	2.09E-02
		Be-7	<1.37E-01	0.00E+00	1.37E-01
		K-40	8.13E-01	2.90E-01	2.02E-01
418964	8/2/2016 - 8/9/2016	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	7.68E-01	2.75E-01	6.31E-02
419465	8/9/2016 - 8/16/2016	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<6.40E-02	0.00E+00	6.40E-02
		K-40	4.64E-01	2.71E-01	3.47E-01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
419992	8/16/2016 - 8/23/2016	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<1.00E-02	0.00E+00	1.00E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	9.19E-01	3.23E-01	2.53E-01
420546	8/23/2016 - 8/30/2016	I-131	<1.36E-02	0.00E+00	1.36E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<1.31E-02	0.00E+00	1.31E-02
		Be-7	<9.41E-02	0.00E+00	9.41E-02
		K-40	8.19E-01	2.68E-01	5.55E-02
421383	8/30/2016 - 9/6/2016	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.52E-02	0.00E+00	1.52E-02
		Cs-137	<2.13E-02	0.00E+00	2.13E-02
		Be-7	<9.44E-02	0.00E+00	9.44E-02
		K-40	5.43E-01	2.26E-01	6.13E-02
422541	9/6/2016 - 9/13/2016	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.67E-02	0.00E+00	1.67E-02
		Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	7.94E-01	2.64E-01	5.52E-02
423283	9/13/2016 - 9/20/2016	I-131	<1.47E-02	0.00E+00	1.47E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	7.67E-01	2.58E-01	5.47E-02
424403	9/20/2016 - 9/27/2016	I-131	<1.59E-02	0.00E+00	1.59E-02
		Cs-134	<1.25E-02	0.00E+00	1.25E-02
		Cs-137	<1.88E-02	0.00E+00	1.88E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	5.89E-01	2.46E-01	2.18E-01
425395	9/27/2016 - 10/4/2016	I-131	<1.45E-02	0.00E+00	1.45E-02
		Cs-134	<8.98E-03	0.00E+00	8.98E-03
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	5.57E-01	2.64E-01	2.96E-01
425958	10/4/2016 - 10/11/2016	I-131	<2.00E-02	0.00E+00	2.00E-02
		Cs-134	<1.59E-02	0.00E+00	1.59E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<2.11E-02	0.00E+00	2.11E-02
		K-40	7.72E-01	2.60E-01	5.50E-02
426330	10/11/2016 - 10/18/2016	I-131	<1.36E-02	0.00E+00	1.36E-02
		Cs-134	<1.52E-02	0.00E+00	1.52E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	6.16E-01	2.73E-01	2.96E-01
427022	10/18/2016 - 10/25/2016	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<7.86E-03	0.00E+00	7.86E-03

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
427022	10/18/2016 - 10/25/2016	Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	8.94E-01	2.94E-01	6.06E-02
427681	10/25/2016 - 11/1/2016	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.91E-02	0.00E+00	1.91E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	7.53E-01	2.70E-01	6.19E-02
428176	11/1/2016 - 11/8/2016	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	7.75E-01	2.73E-01	6.18E-02
428858	11/8/2016 - 11/15/2016	I-131	<1.72E-02	0.00E+00	1.72E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	8.03E-01	2.67E-01	5.58E-02
429368	11/15/2016 - 11/22/2016	I-131	<3.06E-02	0.00E+00	3.06E-02
		Cs-134	<1.31E-02	0.00E+00	1.31E-02
		Cs-137	<1.25E-02	0.00E+00	1.25E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	8.07E-01	3.23E-01	3.26E-01
429919	11/22/2016 - 11/29/2016	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<9.63E-02	0.00E+00	9.63E-02
		K-40	<6.88E-01	0.00E+00	6.88E-01
430540	11/29/2016 - 12/6/2016	I-131	<1.10E-02	0.00E+00	1.10E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	8.24E-01	3.08E-01	2.84E-01
431028	12/6/2016 - 12/13/2016	I-131	<1.54E-02	0.00E+00	1.54E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	9.99E-01	3.23E-01	2.24E-01
431435	12/13/2016 - 12/20/2016	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	9.34E-01	3.43E-01	3.48E-01
431773	12/20/2016 - 12/27/2016	I-131	<1.35E-02	0.00E+00	1.35E-02
		Cs-134	<1.07E-02	0.00E+00	1.07E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431773	12/20/2016 - 12/27/2016	K-40	7.18E-01	2.55E-01	5.72E-02

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398914	12/29/2015 - 1/5/2016	I-131	<3.48E-02	0.00E+00	3.48E-02
		Cs-134	<1.93E-02	0.00E+00	1.93E-02
		Cs-137	<3.52E-02	0.00E+00	3.52E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	1.01E+00	4.96E-01	6.00E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
399229	1/5/2016 - 1/12/2016	I-131	<2.43E-02	0.00E+00	2.43E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<9.56E-02	0.00E+00	9.56E-02
		K-40	8.50E-01	2.90E-01	6.23E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
399978	1/12/2016 - 1/19/2016	I-131	<1.38E-02	0.00E+00	1.38E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<1.95E-02	0.00E+00	1.95E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	7.90E-01	3.02E-01	2.52E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400331	1/19/2016 - 1/26/2016	I-131	<3.79E-02	0.00E+00	3.79E-02
		Cs-134	<3.63E-02	0.00E+00	3.63E-02
		Cs-137	<3.25E-02	0.00E+00	3.25E-02
		Be-7	<1.97E-01	0.00E+00	1.97E-01
		K-40	1.19E+00	4.32E-01	1.01E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400961	1/26/2016 - 2/2/2016	I-131	<4.54E-02	0.00E+00	4.54E-02
		Cs-134	<3.65E-02	0.00E+00	3.65E-02
		Cs-137	<2.94E-02	0.00E+00	2.94E-02
		Be-7	<2.07E-01	0.00E+00	2.07E-01
		K-40	1.23E+00	4.34E-01	9.80E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
401324	2/2/2016 - 2/9/2016	I-131	<1.77E-02	0.00E+00	1.77E-02
		Cs-134	<1.42E-02	0.00E+00	1.42E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<8.80E-02	0.00E+00	8.80E-02
		K-40	9.44E-01	3.17E-01	2.40E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
401777	2/9/2016 - 2/16/2016	I-131	<1.91E-02	0.00E+00	1.91E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	<5.95E-01	0.00E+00	5.95E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
402288	2/16/2016 - 2/23/2016	I-131	<1.64E-02	0.00E+00	1.64E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.93E-02	0.00E+00	1.93E-02
		Be-7	<8.94E-02	0.00E+00	8.94E-02
		K-40	7.80E-01	3.04E-01	2.98E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
403016	2/23/2016 - 3/1/2016	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<1.05E-02	0.00E+00	1.05E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
403016	2/23/2016 - 3/1/2016	K-40	8.63E-01	3.07E-01	2.11E-01
404494	3/1/2016 - 3/8/2016	I-131	<2.04E-02	0.00E+00	2.04E-02
		Cs-134	<1.84E-02	0.00E+00	1.84E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<9.62E-02	0.00E+00	9.62E-02
		K-40	8.09E-01	2.83E-01	6.27E-02
405380	3/8/2016 - 3/15/2016	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.29E-02	0.00E+00	1.29E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	8.64E-01	2.81E-01	5.71E-02
405997	3/15/2016 - 3/22/2016	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<1.30E-02	0.00E+00	1.30E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	7.41E-01	2.77E-01	2.22E-01
406336	3/22/2016 - 3/29/2016	I-131	<1.33E-02	0.00E+00	1.33E-02
		Cs-134	<1.71E-02	0.00E+00	1.71E-02
		Cs-137	<1.31E-02	0.00E+00	1.31E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	7.61E-01	2.79E-01	2.17E-01
407525	3/29/2016 - 4/5/2016	I-131	<2.45E-02	0.00E+00	2.45E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<9.90E-03	0.00E+00	9.90E-03
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	3.70E-01	2.39E-01	3.09E-01
408105	4/5/2016 - 4/12/2016	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	6.08E-01	2.33E-01	5.68E-02
409418	4/12/2016 - 4/19/2016	I-131	<1.32E-02	0.00E+00	1.32E-02
		Cs-134	<1.64E-02	0.00E+00	1.64E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	7.74E-01	2.64E-01	5.67E-02
409753	4/19/2016 - 4/26/2016	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<1.49E-02	0.00E+00	1.49E-02
		Cs-137	<2.05E-02	0.00E+00	2.05E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	7.56E-01	3.25E-01	3.75E-01
410905	4/26/2016 - 5/3/2016	I-131	<1.58E-02	0.00E+00	1.58E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<8.37E-02	0.00E+00	8.37E-02
		K-40	5.24E-01	2.42E-01	2.50E-01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
411405	5/3/2016 - 5/10/2016	I-131	<1.61E-02	0.00E+00	1.61E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	<4.60E-01	0.00E+00	4.60E-01
411729	5/10/2016 - 5/17/2016	I-131	<1.72E-02	0.00E+00	1.72E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	8.32E-01	2.73E-01	5.64E-02
412192	5/17/2016 - 5/24/2016	I-131	<1.51E-02	0.00E+00	1.51E-02
		Cs-134	<1.64E-02	0.00E+00	1.64E-02
		Cs-137	<1.26E-02	0.00E+00	1.26E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	9.62E-01	3.07E-01	6.21E-02
412708	5/24/2016 - 5/31/2016	I-131	<1.80E-02	0.00E+00	1.80E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	8.21E-01	2.84E-01	2.04E-01
413311	5/31/2016 - 6/7/2016	I-131	<1.46E-02	0.00E+00	1.46E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<7.83E-02	0.00E+00	7.83E-02
		K-40	9.25E-01	3.34E-01	3.11E-01
413858	6/7/2016 - 6/14/2016	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.03E-02	0.00E+00	1.03E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<9.33E-02	0.00E+00	9.33E-02
		K-40	<5.67E-01	0.00E+00	5.67E-01
414999	6/14/2016 - 6/21/2016	I-131	<1.46E-02	0.00E+00	1.46E-02
		Cs-134	<9.19E-03	0.00E+00	9.19E-03
		Cs-137	<1.14E-02	0.00E+00	1.14E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	6.16E-01	2.55E-01	2.32E-01
415370	6/21/2016 - 6/28/2016	I-131	<1.50E-02	0.00E+00	1.50E-02
		Cs-134	<1.08E-02	0.00E+00	1.08E-02
		Cs-137	<1.64E-02	0.00E+00	1.64E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	7.48E-01	3.08E-01	3.32E-01
416363	6/28/2016 - 7/5/2016	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.26E-02	0.00E+00	1.26E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	1.01E+00	3.10E-01	5.93E-02
416987	7/5/2016 - 7/12/2016	I-131	<1.88E-02	0.00E+00	1.88E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m³

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
416987	7/5/2016 - 7/12/2016	Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	7.19E-01	2.52E-01	5.57E-02
417381	7/12/2016 - 7/19/2016	I-131	<2.44E-02	0.00E+00	2.44E-02
		Cs-134	<1.27E-02	0.00E+00	1.27E-02
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<9.18E-02	0.00E+00	9.18E-02
		K-40	8.67E-01	3.27E-01	3.17E-01
417772	7/19/2016 - 7/26/2016	I-131	<1.34E-02	0.00E+00	1.34E-02
		Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	7.28E-01	2.78E-01	2.11E-01
418236	7/26/2016 - 8/2/2016	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<1.42E-02	0.00E+00	1.42E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.00E-01	0.00E+00	1.00E-01
		K-40	4.74E-01	2.46E-01	2.91E-01
418965	8/2/2016 - 8/9/2016	I-131	<1.45E-02	0.00E+00	1.45E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.00E-01	0.00E+00	1.00E-01
		K-40	7.46E-01	2.76E-01	2.31E-01
419466	8/9/2016 - 8/16/2016	I-131	<1.60E-02	0.00E+00	1.60E-02
		Cs-134	<1.20E-02	0.00E+00	1.20E-02
		Cs-137	<9.12E-03	0.00E+00	9.12E-03
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	8.31E-01	2.72E-01	5.63E-02
419993	8/16/2016 - 8/23/2016	I-131	<1.60E-02	0.00E+00	1.60E-02
		Cs-134	<1.06E-02	0.00E+00	1.06E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<9.47E-02	0.00E+00	9.47E-02
		K-40	8.71E-01	2.92E-01	2.06E-01
420547	8/23/2016 - 8/30/2016	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<1.84E-02	0.00E+00	1.84E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	6.43E-01	2.57E-01	2.26E-01
421384	8/30/2016 - 9/6/2016	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<3.31E-03	0.00E+00	3.31E-03
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	5.89E-01	2.50E-01	2.23E-01
422542	9/6/2016 - 9/13/2016	I-131	<1.29E-02	0.00E+00	1.29E-02
		Cs-134	<1.02E-02	0.00E+00	1.02E-02
		Cs-137	<8.63E-03	0.00E+00	8.63E-03
		Be-7	<1.08E-01	0.00E+00	1.08E-01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
422542	9/6/2016 - 9/13/2016	K-40	7.31E-01	2.83E-01	2.69E-01
423284	9/13/2016 - 9/20/2016	I-131	<1.37E-02	0.00E+00	1.37E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<9.47E-02	0.00E+00	9.47E-02
		K-40	6.60E-01	2.55E-01	1.90E-01
424404	9/20/2016 - 9/27/2016	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.08E-02	0.00E+00	1.08E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	6.05E-01	2.55E-01	2.23E-01
425396	9/27/2016 - 10/4/2016	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<1.30E-02	0.00E+00	1.30E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<9.61E-02	0.00E+00	9.61E-02
		K-40	1.04E+00	3.06E-01	5.62E-02
425959	10/4/2016 - 10/11/2016	I-131	<1.48E-02	0.00E+00	1.48E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<9.67E-02	0.00E+00	9.67E-02
		K-40	8.47E-01	2.78E-01	5.74E-02
426331	10/11/2016 - 10/18/2016	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<1.92E-02	0.00E+00	1.92E-02
		Be-7	<8.45E-02	0.00E+00	8.45E-02
		K-40	1.10E+00	3.19E-01	5.64E-02
427023	10/18/2016 - 10/25/2016	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	6.72E-01	2.56E-01	6.28E-02
427682	10/25/2016 - 11/1/2016	I-131	<1.49E-02	0.00E+00	1.49E-02
		Cs-134	<1.27E-02	0.00E+00	1.27E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	8.05E-01	2.68E-01	5.60E-02
428177	11/1/2016 - 11/8/2016	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.05E-02	0.00E+00	1.05E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	7.02E-01	2.88E-01	2.93E-01
428859	11/8/2016 - 11/15/2016	I-131	<2.03E-02	0.00E+00	2.03E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<1.14E-02	0.00E+00	1.14E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	7.47E-01	2.75E-01	2.05E-01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
429369	11/15/2016 - 11/22/2016	I-131	<2.58E-02	0.00E+00	2.58E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.36E-02	0.00E+00	1.36E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	8.82E-01	3.12E-01	2.60E-01
429920	11/22/2016 - 11/29/2016	I-131	<1.41E-02	0.00E+00	1.41E-02
		Cs-134	<1.69E-02	0.00E+00	1.69E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	8.66E-01	3.24E-01	2.84E-01
430541	11/29/2016 - 12/6/2016	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	7.61E-01	3.22E-01	3.44E-01
431029	12/6/2016 - 12/13/2016	I-131	<9.27E-03	0.00E+00	9.27E-03
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<2.08E-02	0.00E+00	2.08E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	8.05E-01	3.04E-01	2.79E-01
431436	12/13/2016 - 12/20/2016	I-131	<1.26E-02	0.00E+00	1.26E-02
		Cs-134	<1.42E-02	0.00E+00	1.42E-02
		Cs-137	<1.35E-02	0.00E+00	1.35E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	8.35E-01	3.02E-01	2.50E-01
431774	12/20/2016 - 12/27/2016	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.19E-02	0.00E+00	1.19E-02
		Be-7	<8.95E-02	0.00E+00	8.95E-02
		K-40	9.00E-01	3.14E-01	2.49E-01
Sample Point 203 [INDICATOR - SSW @ 2 miles]					
398915	12/29/2015 - 1/5/2016	I-131	<3.94E-02	0.00E+00	3.94E-02
		Cs-134	<2.90E-02	0.00E+00	2.90E-02
		Cs-137	<3.93E-02	0.00E+00	3.93E-02
		Be-7	<3.01E-01	0.00E+00	3.01E-01
		K-40	9.97E-01	4.19E-01	3.52E-01
399230	1/5/2016 - 1/12/2016	I-131	<1.52E-02	0.00E+00	1.52E-02
		Cs-134	<1.22E-02	0.00E+00	1.22E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	8.13E-01	3.10E-01	2.93E-01
399979	1/12/2016 - 1/19/2016	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<9.47E-03	0.00E+00	9.47E-03
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	7.82E-01	2.94E-01	2.49E-01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400332	1/19/2016 - 1/26/2016	I-131	<3.49E-02	0.00E+00	3.49E-02
		Cs-134	<2.82E-02	0.00E+00	2.82E-02
		Cs-137	<2.79E-02	0.00E+00	2.79E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	<9.01E-01	0.00E+00	9.01E-01
400962	1/26/2016 - 2/2/2016	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<2.94E-02	0.00E+00	2.94E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<2.49E-01	0.00E+00	2.49E-01
		K-40	1.40E+00	5.09E-01	4.29E-01
401325	2/2/2016 - 2/9/2016	I-131	<1.70E-02	0.00E+00	1.70E-02
		Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	9.34E-01	3.20E-01	2.47E-01
401778	2/9/2016 - 2/16/2016	I-131	<2.15E-02	0.00E+00	2.15E-02
		Cs-134	<1.33E-02	0.00E+00	1.33E-02
		Cs-137	<2.30E-02	0.00E+00	2.30E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	8.53E-01	3.30E-01	2.79E-01
402289	2/16/2016 - 2/23/2016	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<1.23E-02	0.00E+00	1.23E-02
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<8.83E-02	0.00E+00	8.83E-02
		K-40	6.24E-01	2.93E-01	3.42E-01
403017	2/23/2016 - 3/1/2016	I-131	<1.15E-02	0.00E+00	1.15E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<9.86E-02	0.00E+00	9.86E-02
		K-40	<6.22E-01	0.00E+00	6.22E-01
404495	3/1/2016 - 3/8/2016	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	7.16E-01	2.86E-01	2.68E-01
405381	3/8/2016 - 3/15/2016	I-131	<2.06E-02	0.00E+00	2.06E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<9.76E-03	0.00E+00	9.76E-03
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	5.89E-01	2.76E-01	2.99E-01
405998	3/15/2016 - 3/22/2016	I-131	<3.62E-02	0.00E+00	3.62E-02
		Cs-134	<1.65E-02	0.00E+00	1.65E-02
		Cs-137	<1.63E-02	0.00E+00	1.63E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	8.01E-01	2.79E-01	6.20E-02
406337	3/22/2016 - 3/29/2016	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<1.21E-02	0.00E+00	1.21E-02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
406337	3/22/2016 - 3/29/2016	Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.37E-01	0.00E+00	1.37E-01
		K-40	9.36E-01	3.53E-01	3.52E-01
407526	3/29/2016 - 4/5/2016	I-131	<2.86E-02	0.00E+00	2.86E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.20E-02	0.00E+00	1.20E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	7.73E-01	2.90E-01	2.46E-01
408106	4/5/2016 - 4/12/2016	I-131	<1.60E-02	0.00E+00	1.60E-02
		Cs-134	<1.34E-02	0.00E+00	1.34E-02
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	8.28E-01	2.79E-01	5.91E-02
409419	4/12/2016 - 4/19/2016	I-131	<2.08E-02	0.00E+00	2.08E-02
		Cs-134	<1.69E-02	0.00E+00	1.69E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	8.71E-01	2.95E-01	6.38E-02
409754	4/19/2016 - 4/26/2016	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<1.86E-02	0.00E+00	1.86E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	6.81E-01	2.42E-01	5.43E-02
410906	4/26/2016 - 5/3/2016	I-131	<2.40E-02	0.00E+00	2.40E-02
		Cs-134	<1.24E-02	0.00E+00	1.24E-02
		Cs-137	<1.92E-02	0.00E+00	1.92E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	6.94E-01	2.94E-01	3.09E-01
411406	5/3/2016 - 5/10/2016	I-131	<1.87E-02	0.00E+00	1.87E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<1.59E-02	0.00E+00	1.59E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	<6.48E-01	0.00E+00	6.48E-01
411730	5/10/2016 - 5/17/2016	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.17E-02	0.00E+00	1.17E-02
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	<9.41E-02	0.00E+00	9.41E-02
		K-40	7.30E-01	2.51E-01	5.49E-02
412193	5/17/2016 - 5/24/2016	I-131	<1.34E-02	0.00E+00	1.34E-02
		Cs-134	<9.97E-03	0.00E+00	9.97E-03
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	8.09E-01	2.78E-01	6.09E-02
412709	5/24/2016 - 5/31/2016	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<1.22E-02	0.00E+00	1.22E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
412709	5/24/2016 - 5/31/2016	K-40	8.12E-01	3.08E-01	2.83E-01
413312	5/31/2016 - 6/7/2016	I-131	<1.55E-02	0.00E+00	1.55E-02
		Cs-134	<8.90E-03	0.00E+00	8.90E-03
		Cs-137	<1.11E-02	0.00E+00	1.11E-02
		Be-7	<8.22E-02	0.00E+00	8.22E-02
		K-40	5.93E-01	2.42E-01	2.09E-01
413859	6/7/2016 - 6/14/2016	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<1.71E-02	0.00E+00	1.71E-02
		Cs-137	<1.22E-02	0.00E+00	1.22E-02
		Be-7	<9.72E-02	0.00E+00	9.72E-02
		K-40	7.56E-01	2.68E-01	2.05E-01
415000	6/14/2016 - 6/21/2016	I-131	<1.64E-02	0.00E+00	1.64E-02
		Cs-134	<1.20E-02	0.00E+00	1.20E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	6.04E-01	2.42E-01	2.04E-01
415371	6/21/2016 - 6/28/2016	I-131	<1.53E-02	0.00E+00	1.53E-02
		Cs-134	<1.01E-02	0.00E+00	1.01E-02
		Cs-137	<1.08E-02	0.00E+00	1.08E-02
		Be-7	<9.14E-02	0.00E+00	9.14E-02
		K-40	9.24E-01	2.95E-01	1.86E-01
416364	6/28/2016 - 7/5/2016	I-131	<8.61E-03	0.00E+00	8.61E-03
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.27E-02	0.00E+00	1.27E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	8.50E-01	2.88E-01	2.23E-01
416988	7/5/2016 - 7/12/2016	I-131	<2.08E-02	0.00E+00	2.08E-02
		Cs-134	<1.42E-02	0.00E+00	1.42E-02
		Cs-137	<1.35E-02	0.00E+00	1.35E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	7.16E-01	2.72E-01	2.08E-01
417382	7/12/2016 - 7/19/2016	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.84E-02	0.00E+00	1.84E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	6.38E-01	2.33E-01	5.40E-02
417773	7/19/2016 - 7/26/2016	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.21E-02	0.00E+00	1.21E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	1.05E+00	3.09E-01	5.68E-02
418237	7/26/2016 - 8/2/2016	I-131	<2.01E-02	0.00E+00	2.01E-02
		Cs-134	<1.20E-02	0.00E+00	1.20E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<8.62E-02	0.00E+00	8.62E-02
		K-40	5.54E-01	2.91E-01	3.71E-01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
418966	8/2/2016 - 8/9/2016	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<9.20E-03	0.00E+00	9.20E-03
		Be-7	<9.62E-02	0.00E+00	9.62E-02
		K-40	5.94E-01	2.46E-01	2.05E-01
419467	8/9/2016 - 8/16/2016	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	9.17E-01	2.98E-01	6.06E-02
419994	8/16/2016 - 8/23/2016	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<6.49E-02	0.00E+00	6.49E-02
		K-40	6.47E-01	2.72E-01	2.42E-01
420548	8/23/2016 - 8/30/2016	I-131	<2.01E-02	0.00E+00	2.01E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<8.48E-02	0.00E+00	8.48E-02
		K-40	<5.93E-01	0.00E+00	5.93E-01
421385	8/30/2016 - 9/6/2016	I-131	<2.03E-02	0.00E+00	2.03E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.34E-02	0.00E+00	1.34E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	7.64E-01	2.87E-01	2.40E-01
422543	9/6/2016 - 9/13/2016	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.32E-02	0.00E+00	1.32E-02
		Cs-137	<1.16E-02	0.00E+00	1.16E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	7.53E-01	2.59E-01	5.67E-02
423285	9/13/2016 - 9/20/2016	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<1.31E-02	0.00E+00	1.31E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	1.01E+00	3.35E-01	2.48E-01
424405	9/20/2016 - 9/27/2016	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<9.74E-02	0.00E+00	9.74E-02
		K-40	9.33E-01	3.23E-01	2.21E-01
425397	9/27/2016 - 10/4/2016	I-131	<2.43E-02	0.00E+00	2.43E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.93E-02	0.00E+00	1.93E-02
		Be-7	<9.96E-02	0.00E+00	9.96E-02
		K-40	7.74E-01	2.66E-01	5.83E-02
425960	10/4/2016 - 10/11/2016	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<1.49E-02	0.00E+00	1.49E-02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
425960	10/4/2016 - 10/11/2016	Cs-137	<1.86E-02	0.00E+00	1.86E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	8.04E-01	2.98E-01	2.02E-01
426332	10/11/2016 - 10/18/2016	I-131	<1.68E-02	0.00E+00	1.68E-02
		Cs-134	<1.21E-02	0.00E+00	1.21E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	8.04E-01	3.19E-01	3.31E-01
427024	10/18/2016 - 10/25/2016	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<1.65E-02	0.00E+00	1.65E-02
		Cs-137	<1.94E-02	0.00E+00	1.94E-02
		Be-7	<7.78E-02	0.00E+00	7.78E-02
		K-40	6.88E-01	3.00E-01	3.21E-01
427683	10/25/2016 - 11/1/2016	I-131	<2.60E-02	0.00E+00	2.60E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<9.22E-02	0.00E+00	9.22E-02
		K-40	1.05E+00	3.38E-01	2.22E-01
428178	11/1/2016 - 11/8/2016	I-131	<1.80E-02	0.00E+00	1.80E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	8.41E-01	3.06E-01	2.34E-01
428860	11/8/2016 - 11/15/2016	I-131	<9.59E-03	0.00E+00	9.59E-03
		Cs-134	<1.59E-02	0.00E+00	1.59E-02
		Cs-137	<1.03E-02	0.00E+00	1.03E-02
		Be-7	<9.72E-02	0.00E+00	9.72E-02
		K-40	6.54E-01	3.32E-01	4.15E-01
429370	11/15/2016 - 11/22/2016	I-131	<2.75E-02	0.00E+00	2.75E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<2.10E-02	0.00E+00	2.10E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	6.22E-01	2.91E-01	3.33E-01
429921	11/22/2016 - 11/29/2016	I-131	<1.10E-02	0.00E+00	1.10E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	7.26E-01	2.70E-01	1.86E-01
430542	11/29/2016 - 12/6/2016	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<2.21E-02	0.00E+00	2.21E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	9.12E-01	3.15E-01	6.86E-02
431030	12/6/2016 - 12/13/2016	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<6.10E-02	0.00E+00	6.10E-02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431030	12/6/2016 - 12/13/2016	K-40	7.73E-01	3.15E-01	3.31E-01
431437	12/13/2016 - 12/20/2016	I-131	<1.98E-02	0.00E+00	1.98E-02
		Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	8.42E-01	2.87E-01	6.17E-02
431775	12/20/2016 - 12/27/2016	I-131	<9.94E-03	0.00E+00	9.94E-03
		Cs-134	<1.25E-02	0.00E+00	1.25E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	9.74E-01	3.20E-01	6.60E-02

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398916	12/29/2015 - 1/5/2016	I-131	<4.35E-02	0.00E+00	4.35E-02
		Cs-134	<3.42E-02	0.00E+00	3.42E-02
		Cs-137	<3.28E-02	0.00E+00	3.28E-02
		Be-7	<2.18E-01	0.00E+00	2.18E-01
		K-40	1.39E+00	5.05E-01	3.97E-01
399231	1/5/2016 - 1/12/2016	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<2.12E-02	0.00E+00	2.12E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.00E-01	0.00E+00	1.00E-01
		K-40	7.54E-01	2.91E-01	2.59E-01
399980	1/12/2016 - 1/19/2016	I-131	<2.08E-02	0.00E+00	2.08E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<8.77E-02	0.00E+00	8.77E-02
		K-40	1.06E+00	3.53E-01	2.52E-01
400333	1/19/2016 - 1/26/2016	I-131	<4.33E-02	0.00E+00	4.33E-02
		Cs-134	<3.61E-02	0.00E+00	3.61E-02
		Cs-137	<2.20E-02	0.00E+00	2.20E-02
		Be-7	<2.19E-01	0.00E+00	2.19E-01
		K-40	1.07E+00	5.05E-01	5.82E-01
400963	1/26/2016 - 2/2/2016	I-131	<4.28E-02	0.00E+00	4.28E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<3.71E-02	0.00E+00	3.71E-02
		Be-7	<2.16E-01	0.00E+00	2.16E-01
		K-40	1.09E+00	4.16E-01	1.02E-01
401326	2/2/2016 - 2/9/2016	I-131	<1.18E-02	0.00E+00	1.18E-02
		Cs-134	<1.20E-02	0.00E+00	1.20E-02
		Cs-137	<9.14E-03	0.00E+00	9.14E-03
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	6.85E-01	2.50E-01	5.80E-02
401779	2/9/2016 - 2/16/2016	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<7.58E-02	0.00E+00	7.58E-02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
401779	2/9/2016 - 2/16/2016	K-40	7.67E-01	2.82E-01	2.21E-01
402290	2/16/2016 - 2/23/2016	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.86E-02	0.00E+00	1.86E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	7.24E-01	2.78E-01	2.34E-01
403018	2/23/2016 - 3/1/2016	I-131	<1.98E-02	0.00E+00	1.98E-02
		Cs-134	<1.64E-02	0.00E+00	1.64E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	8.14E-01	2.71E-01	5.65E-02
404496	3/1/2016 - 3/8/2016	I-131	<1.68E-02	0.00E+00	1.68E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	7.29E-01	2.59E-01	5.81E-02
405382	3/8/2016 - 3/15/2016	I-131	<1.41E-02	0.00E+00	1.41E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	7.23E-01	3.24E-01	3.89E-01
405999	3/15/2016 - 3/22/2016	I-131	<2.34E-02	0.00E+00	2.34E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	7.03E-01	2.73E-01	2.32E-01
406338	3/22/2016 - 3/29/2016	I-131	<1.78E-02	0.00E+00	1.78E-02
		Cs-134	<1.28E-02	0.00E+00	1.28E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<5.86E-02	0.00E+00	5.86E-02
		K-40	8.49E-01	2.76E-01	5.61E-02
407527	3/29/2016 - 4/5/2016	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	1.02E+00	3.60E-01	3.69E-01
408107	4/5/2016 - 4/12/2016	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<7.36E-02	0.00E+00	7.36E-02
		K-40	6.38E-01	2.68E-01	2.61E-01
409420	4/12/2016 - 4/19/2016	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<1.47E-02	0.00E+00	1.47E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<9.60E-02	0.00E+00	9.60E-02
		K-40	6.87E-01	2.67E-01	2.23E-01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
409755	4/19/2016 - 4/26/2016	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	8.32E-01	3.28E-01	3.27E-01
410907	4/26/2016 - 5/3/2016	I-131	<1.35E-02	0.00E+00	1.35E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<7.40E-02	0.00E+00	7.40E-02
		K-40	<5.89E-01	0.00E+00	5.89E-01
411407	5/3/2016 - 5/10/2016	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.59E-02	0.00E+00	1.59E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	9.91E-01	3.20E-01	2.36E-01
411731	5/10/2016 - 5/17/2016	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	6.29E-01	2.70E-01	2.41E-01
412194	5/17/2016 - 5/24/2016	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<1.59E-02	0.00E+00	1.59E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	<5.95E-01	0.00E+00	5.95E-01
412710	5/24/2016 - 5/31/2016	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<1.16E-02	0.00E+00	1.16E-02
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	8.82E-01	2.81E-01	5.56E-02
413313	5/31/2016 - 6/7/2016	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<9.47E-02	0.00E+00	9.47E-02
		K-40	7.16E-01	2.67E-01	1.99E-01
413860	6/7/2016 - 6/14/2016	I-131	<2.01E-02	0.00E+00	2.01E-02
		Cs-134	<1.73E-02	0.00E+00	1.73E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<8.70E-02	0.00E+00	8.70E-02
		K-40	6.78E-01	2.68E-01	2.27E-01
415001	6/14/2016 - 6/21/2016	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<9.24E-03	0.00E+00	9.24E-03
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	7.92E-01	3.02E-01	2.84E-01
415372	6/21/2016 - 6/28/2016	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415372	6/21/2016 - 6/28/2016	Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<8.73E-02	0.00E+00	8.73E-02
		K-40	8.90E-01	3.07E-01	2.40E-01
416365	6/28/2016 - 7/5/2016	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<1.86E-02	0.00E+00	1.86E-02
		Cs-137	<1.95E-02	0.00E+00	1.95E-02
		Be-7	<1.58E-01	0.00E+00	1.58E-01
		K-40	<5.96E-01	0.00E+00	5.96E-01
416989	7/5/2016 - 7/12/2016	I-131	<1.62E-02	0.00E+00	1.62E-02
		Cs-134	<1.37E-02	0.00E+00	1.37E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	6.56E-01	2.87E-01	3.15E-01
417383	7/12/2016 - 7/19/2016	I-131	<1.64E-02	0.00E+00	1.64E-02
		Cs-134	<1.05E-02	0.00E+00	1.05E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<8.57E-02	0.00E+00	8.57E-02
		K-40	8.28E-01	2.91E-01	2.25E-01
417774	7/19/2016 - 7/26/2016	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<8.91E-03	0.00E+00	8.91E-03
		Be-7	<9.48E-02	0.00E+00	9.48E-02
		K-40	7.30E-01	2.72E-01	2.11E-01
418238	7/26/2016 - 8/2/2016	I-131	<1.62E-02	0.00E+00	1.62E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<3.26E-03	0.00E+00	3.26E-03
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	6.44E-01	2.55E-01	2.10E-01
418967	8/2/2016 - 8/9/2016	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<1.17E-02	0.00E+00	1.17E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<9.50E-02	0.00E+00	9.50E-02
		K-40	6.03E-01	2.72E-01	2.96E-01
419468	8/9/2016 - 8/16/2016	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	7.36E-01	2.69E-01	1.91E-01
419995	8/16/2016 - 8/23/2016	I-131	<1.41E-02	0.00E+00	1.41E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<7.35E-02	0.00E+00	7.35E-02
		K-40	8.50E-01	3.37E-01	3.72E-01
420549	8/23/2016 - 8/30/2016	I-131	<1.55E-02	0.00E+00	1.55E-02
		Cs-134	<1.47E-02	0.00E+00	1.47E-02
		Cs-137	<1.59E-02	0.00E+00	1.59E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
420549	8/23/2016 - 8/30/2016	K-40	9.62E-01	3.28E-01	2.88E-01
421386	8/30/2016 - 9/6/2016	I-131	<1.67E-02	0.00E+00	1.67E-02
		Cs-134	<1.29E-02	0.00E+00	1.29E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<5.91E-02	0.00E+00	5.91E-02
		K-40	9.12E-01	3.27E-01	3.12E-01
422544	9/6/2016 - 9/13/2016	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<5.92E-02	0.00E+00	5.92E-02
		K-40	7.33E-01	2.74E-01	2.19E-01
423286	9/13/2016 - 9/20/2016	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<8.86E-02	0.00E+00	8.86E-02
		K-40	7.83E-01	3.32E-01	3.81E-01
424406	9/20/2016 - 9/27/2016	I-131	<2.26E-02	0.00E+00	2.26E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<9.47E-03	0.00E+00	9.47E-03
		Be-7	<7.68E-02	0.00E+00	7.68E-02
		K-40	4.67E-01	2.85E-01	3.86E-01
425398	9/27/2016 - 10/4/2016	I-131	<1.80E-02	0.00E+00	1.80E-02
		Cs-134	<1.19E-02	0.00E+00	1.19E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	4.26E-01	2.22E-01	2.15E-01
425961	10/4/2016 - 10/11/2016	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	1.05E+00	3.12E-01	5.68E-02
426333	10/11/2016 - 10/18/2016	I-131	<1.56E-02	0.00E+00	1.56E-02
		Cs-134	<1.30E-02	0.00E+00	1.30E-02
		Cs-137	<9.03E-03	0.00E+00	9.03E-03
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	7.36E-01	2.58E-01	5.70E-02
427025	10/18/2016 - 10/25/2016	I-131	<1.45E-02	0.00E+00	1.45E-02
		Cs-134	<1.65E-02	0.00E+00	1.65E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<9.95E-02	0.00E+00	9.95E-02
		K-40	1.08E+00	3.19E-01	5.86E-02
427684	10/25/2016 - 11/1/2016	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<9.66E-02	0.00E+00	9.66E-02
		K-40	6.76E-01	2.47E-01	5.73E-02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
428179	11/1/2016 - 11/8/2016	I-131	<1.53E-02	0.00E+00	1.53E-02
		Cs-134	<1.65E-02	0.00E+00	1.65E-02
		Cs-137	<1.14E-02	0.00E+00	1.14E-02
		Be-7	<9.74E-02	0.00E+00	9.74E-02
		K-40	6.75E-01	2.88E-01	3.03E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
428861	11/8/2016 - 11/15/2016	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<9.82E-02	0.00E+00	9.82E-02
		K-40	9.91E-01	3.54E-01	3.53E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
429371	11/15/2016 - 11/22/2016	I-131	<3.50E-02	0.00E+00	3.50E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.16E-02	0.00E+00	1.16E-02
		Be-7	<9.37E-02	0.00E+00	9.37E-02
		K-40	4.93E-01	2.10E-01	5.81E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
429922	11/22/2016 - 11/29/2016	I-131	<8.89E-03	0.00E+00	8.89E-03
		Cs-134	<1.90E-02	0.00E+00	1.90E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	7.47E-01	2.85E-01	2.42E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
430543	11/29/2016 - 12/6/2016	I-131	<1.62E-02	0.00E+00	1.62E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	8.86E-01	3.00E-01	6.49E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431031	12/6/2016 - 12/13/2016	I-131	<1.71E-02	0.00E+00	1.71E-02
		Cs-134	<1.91E-02	0.00E+00	1.91E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	1.01E+00	3.10E-01	5.85E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431438	12/13/2016 - 12/20/2016	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	9.88E-01	3.26E-01	2.48E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431776	12/20/2016 - 12/27/2016	I-131	<2.34E-02	0.00E+00	2.34E-02
		Cs-134	<1.28E-02	0.00E+00	1.28E-02
		Cs-137	<9.72E-03	0.00E+00	9.72E-03
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	1.16E+00	3.69E-01	3.14E-01

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398917	12/29/2015 - 1/5/2016	I-131	<3.76E-02	0.00E+00	3.76E-02
		Cs-134	<2.58E-02	0.00E+00	2.58E-02
		Cs-137	<2.43E-02	0.00E+00	2.43E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	<1.01E+00	0.00E+00	1.01E+00



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
399232	1/5/2016 - 1/12/2016	I-131	<1.53E-02	0.00E+00	1.53E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<2.13E-02	0.00E+00	2.13E-02
		Be-7	<9.00E-02	0.00E+00	9.00E-02
		K-40	9.89E-01	3.08E-01	5.96E-02
399981	1/12/2016 - 1/19/2016	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<1.10E-02	0.00E+00	1.10E-02
		Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	9.21E-01	2.96E-01	5.94E-02
400334	1/19/2016 - 1/26/2016	I-131	<4.15E-02	0.00E+00	4.15E-02
		Cs-134	<2.98E-02	0.00E+00	2.98E-02
		Cs-137	<3.68E-02	0.00E+00	3.68E-02
		Be-7	<2.41E-01	0.00E+00	2.41E-01
		K-40	1.57E+00	5.02E-01	1.01E-01
400964	1/26/2016 - 2/2/2016	I-131	<3.57E-02	0.00E+00	3.57E-02
		Cs-134	<3.29E-02	0.00E+00	3.29E-02
		Cs-137	<2.95E-02	0.00E+00	2.95E-02
		Be-7	<1.93E-01	0.00E+00	1.93E-01
		K-40	9.42E-01	3.78E-01	9.82E-02
401327	2/2/2016 - 2/9/2016	I-131	<2.08E-02	0.00E+00	2.08E-02
		Cs-134	<1.48E-02	0.00E+00	1.48E-02
		Cs-137	<2.22E-02	0.00E+00	2.22E-02
		Be-7	<6.71E-02	0.00E+00	6.71E-02
		K-40	6.84E-01	2.93E-01	2.86E-01
401780	2/9/2016 - 2/16/2016	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<9.00E-02	0.00E+00	9.00E-02
		K-40	8.29E-01	3.26E-01	3.36E-01
402291	2/16/2016 - 2/23/2016	I-131	<1.77E-02	0.00E+00	1.77E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	6.94E-01	2.72E-01	2.23E-01
403019	2/23/2016 - 3/1/2016	I-131	<1.88E-02	0.00E+00	1.88E-02
		Cs-134	<1.52E-02	0.00E+00	1.52E-02
		Cs-137	<1.35E-02	0.00E+00	1.35E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	5.19E-01	2.17E-01	5.86E-02
404497	3/1/2016 - 3/8/2016	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	9.00E-01	3.01E-01	6.42E-02
405383	3/8/2016 - 3/15/2016	I-131	<1.64E-02	0.00E+00	1.64E-02
		Cs-134	<1.07E-02	0.00E+00	1.07E-02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
405383	3/8/2016 - 3/15/2016	Cs-137	<1.14E-02	0.00E+00	1.14E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	7.84E-01	2.86E-01	2.28E-01
406000	3/15/2016 - 3/22/2016	I-131	<3.53E-02	0.00E+00	3.53E-02
		Cs-134	<1.08E-02	0.00E+00	1.08E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	<6.09E-01	0.00E+00	6.09E-01
406339	3/22/2016 - 3/29/2016	I-131	<1.50E-02	0.00E+00	1.50E-02
		Cs-134	<1.20E-02	0.00E+00	1.20E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	8.14E-01	3.26E-01	3.49E-01
407528	3/29/2016 - 4/5/2016	I-131	<3.21E-02	0.00E+00	3.21E-02
		Cs-134	<1.99E-02	0.00E+00	1.99E-02
		Cs-137	<1.63E-02	0.00E+00	1.63E-02
		Be-7	<1.00E-01	0.00E+00	1.00E-01
		K-40	9.14E-01	3.00E-01	6.19E-02
408108	4/5/2016 - 4/12/2016	I-131	<1.91E-02	0.00E+00	1.91E-02
		Cs-134	<1.32E-02	0.00E+00	1.32E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	<6.39E-01	0.00E+00	6.39E-01
409421	4/12/2016 - 4/19/2016	I-131	<1.48E-02	0.00E+00	1.48E-02
		Cs-134	<1.65E-02	0.00E+00	1.65E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	6.05E-01	3.03E-01	3.77E-01
409756	4/19/2016 - 4/26/2016	I-131	<1.51E-02	0.00E+00	1.51E-02
		Cs-134	<1.95E-02	0.00E+00	1.95E-02
		Cs-137	<9.14E-03	0.00E+00	9.14E-03
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	7.47E-01	3.03E-01	3.11E-01
410908	4/26/2016 - 5/3/2016	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<1.69E-02	0.00E+00	1.69E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<9.78E-02	0.00E+00	9.78E-02
		K-40	9.32E-01	3.06E-01	2.14E-01
411408	5/3/2016 - 5/10/2016	I-131	<2.23E-02	0.00E+00	2.23E-02
		Cs-134	<1.72E-02	0.00E+00	1.72E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	7.60E-01	2.83E-01	2.31E-01
411732	5/10/2016 - 5/17/2016	I-131	<1.33E-02	0.00E+00	1.33E-02
		Cs-134	<1.21E-02	0.00E+00	1.21E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<9.77E-02	0.00E+00	9.77E-02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
411732	5/10/2016 - 5/17/2016	K-40	6.95E-01	2.49E-01	5.71E-02
412195	5/17/2016 - 5/24/2016	I-131	<1.40E-02	0.00E+00	1.40E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	<5.83E-01	0.00E+00	5.83E-01
412711	5/24/2016 - 5/31/2016	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.30E-02	0.00E+00	1.30E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	6.15E-01	2.35E-01	5.75E-02
413314	5/31/2016 - 6/7/2016	I-131	<1.06E-02	0.00E+00	1.06E-02
		Cs-134	<1.26E-02	0.00E+00	1.26E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	9.48E-01	3.33E-01	3.22E-01
413861	6/7/2016 - 6/14/2016	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	8.46E-01	2.85E-01	6.03E-02
415002	6/14/2016 - 6/21/2016	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.29E-02	0.00E+00	1.29E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	7.98E-01	2.69E-01	5.69E-02
415373	6/21/2016 - 6/28/2016	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<9.78E-02	0.00E+00	9.78E-02
		K-40	5.57E-01	2.69E-01	3.05E-01
416366	6/28/2016 - 7/5/2016	I-131	<1.62E-02	0.00E+00	1.62E-02
		Cs-134	<1.31E-02	0.00E+00	1.31E-02
		Cs-137	<1.34E-02	0.00E+00	1.34E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	5.71E-01	2.62E-01	2.81E-01
416990	7/5/2016 - 7/12/2016	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.48E-02	0.00E+00	1.48E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
		Be-7	<8.55E-02	0.00E+00	8.55E-02
		K-40	6.53E-01	2.83E-01	3.01E-01
417384	7/12/2016 - 7/19/2016	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<1.07E-02	0.00E+00	1.07E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	<6.66E-01	0.00E+00	6.66E-01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
417775	7/19/2016 - 7/26/2016	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.72E-02	0.00E+00	1.72E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	7.21E-01	2.71E-01	2.10E-01
418239	7/26/2016 - 8/2/2016	I-131	<1.73E-02	0.00E+00	1.73E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<9.63E-02	0.00E+00	9.63E-02
		K-40	7.43E-01	2.75E-01	2.11E-01
418968	8/2/2016 - 8/9/2016	I-131	<1.62E-02	0.00E+00	1.62E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<1.84E-02	0.00E+00	1.84E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	8.02E-01	2.87E-01	2.21E-01
419469	8/9/2016 - 8/16/2016	I-131	<1.84E-02	0.00E+00	1.85E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<1.83E-02	0.00E+00	1.83E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	1.11E+00	3.40E-01	2.40E-01
419996	8/16/2016 - 8/23/2016	I-131	<1.72E-02	0.00E+00	1.72E-02
		Cs-134	<1.69E-02	0.00E+00	1.69E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	<8.43E-02	0.00E+00	8.43E-02
		K-40	8.02E-01	2.87E-01	2.30E-01
420550	8/23/2016 - 8/30/2016	I-131	<1.40E-02	0.00E+00	1.40E-02
		Cs-134	<1.29E-02	0.00E+00	1.29E-02
		Cs-137	<1.14E-02	0.00E+00	1.14E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	8.92E-01	3.00E-01	2.07E-01
421387	8/30/2016 - 9/6/2016	I-131	<1.70E-02	0.00E+00	1.70E-02
		Cs-134	<1.71E-02	0.00E+00	1.71E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	7.27E-01	2.78E-01	2.18E-01
422545	9/6/2016 - 9/13/2016	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<1.30E-02	0.00E+00	1.30E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<7.48E-02	0.00E+00	7.48E-02
		K-40	7.81E-01	2.66E-01	5.72E-02
423287	9/13/2016 - 9/20/2016	I-131	<1.26E-02	0.00E+00	1.26E-02
		Cs-134	<1.87E-02	0.00E+00	1.87E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	6.43E-01	2.67E-01	2.45E-01
424407	9/20/2016 - 9/27/2016	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.04E-02	0.00E+00	1.04E-02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
424407	9/20/2016 - 9/27/2016	Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	1.20E+00	3.70E-01	2.46E-01
425399	9/27/2016 - 10/4/2016	I-131	<1.15E-02	0.00E+00	1.15E-02
		Cs-134	<1.31E-02	0.00E+00	1.31E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	8.95E-01	3.25E-01	3.07E-01
425962	10/4/2016 - 10/11/2016	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	7.16E-01	2.58E-01	5.88E-02
426334	10/11/2016 - 10/18/2016	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	4.29E-01	2.24E-01	2.18E-01
427026	10/18/2016 - 10/25/2016	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<1.93E-02	0.00E+00	1.93E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	6.97E-01	2.71E-01	2.26E-01
427685	10/25/2016 - 11/1/2016	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<1.42E-02	0.00E+00	1.42E-02
		Cs-137	<1.88E-02	0.00E+00	1.88E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	7.33E-01	2.60E-01	5.84E-02
428180	11/1/2016 - 11/8/2016	I-131	<2.13E-02	0.00E+00	2.13E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<6.09E-02	0.00E+00	6.09E-02
		K-40	9.56E-01	3.01E-01	5.89E-02
428862	11/8/2016 - 11/15/2016	I-131	<1.91E-02	0.00E+00	1.91E-02
		Cs-134	<1.24E-02	0.00E+00	1.24E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	9.86E-01	3.30E-01	2.55E-01
429372	11/15/2016 - 11/22/2016	I-131	<2.46E-02	0.00E+00	2.46E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	9.70E-01	3.36E-01	2.50E-01
429923	11/22/2016 - 11/29/2016	I-131	<1.67E-02	0.00E+00	1.67E-02
		Cs-134	<1.90E-02	0.00E+00	1.90E-02
		Cs-137	<2.10E-02	0.00E+00	2.10E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
429923	11/22/2016 - 11/29/2016	K-40	1.01E+00	3.10E-01	5.85E-02
430544	11/29/2016 - 12/6/2016	I-131	<1.80E-02	0.00E+00	1.80E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<2.05E-02	0.00E+00	2.05E-02
		Be-7	<8.18E-02	0.00E+00	8.18E-02
		K-40	7.90E-01	2.94E-01	2.22E-01
431032	12/6/2016 - 12/13/2016	I-131	<2.08E-02	0.00E+00	2.08E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.96E-02	0.00E+00	1.96E-02
		Be-7	<9.74E-02	0.00E+00	9.74E-02
		K-40	4.82E-01	2.65E-01	3.31E-01
431439	12/13/2016 - 12/20/2016	I-131	<1.25E-02	0.00E+00	1.25E-02
		Cs-134	<1.08E-02	0.00E+00	1.08E-02
		Cs-137	<1.63E-02	0.00E+00	1.63E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	7.71E-01	2.66E-01	5.81E-02
431777	12/20/2016 - 12/27/2016	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	7.01E-01	2.62E-01	6.33E-02

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398918	12/29/2015 - 1/5/2016	I-131	<3.21E-02	0.00E+00	3.21E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<2.12E-02	0.00E+00	2.12E-02
		Be-7	<1.83E-01	0.00E+00	1.83E-01
		K-40	1.10E+00	4.97E-01	5.55E-01
399233	1/5/2016 - 1/12/2016	I-131	<2.44E-02	0.00E+00	2.44E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	5.30E-01	2.72E-01	3.07E-01
399982	1/12/2016 - 1/19/2016	I-131	<2.00E-02	0.00E+00	2.00E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<2.11E-02	0.00E+00	2.11E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	8.66E-01	3.44E-01	3.52E-01
400335	1/19/2016 - 1/26/2016	I-131	<4.42E-02	0.00E+00	4.42E-02
		Cs-134	<2.84E-02	0.00E+00	2.84E-02
		Cs-137	<3.06E-02	0.00E+00	3.06E-02
		Be-7	<2.30E-01	0.00E+00	2.30E-01
		K-40	1.51E+00	4.93E-01	1.02E-01
400965	1/26/2016 - 2/2/2016	I-131	<3.73E-02	0.00E+00	3.73E-02
		Cs-134	<3.73E-02	0.00E+00	3.73E-02
		Cs-137	<3.45E-02	0.00E+00	3.45E-02
		Be-7	<2.12E-01	0.00E+00	2.12E-01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400965	1/26/2016 - 2/2/2016	K-40	1.55E+00	4.97E-01	1.00E-01
401328	2/2/2016 - 2/9/2016	I-131	<1.70E-02	0.00E+00	1.70E-02
		Cs-134	<9.73E-03	0.00E+00	9.73E-03
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	5.68E-01	2.28E-01	5.92E-02
401781	2/9/2016 - 2/16/2016	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.59E-02	0.00E+00	1.59E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	7.55E-01	2.67E-01	6.02E-02
402292	2/16/2016 - 2/23/2016	I-131	<2.25E-02	0.00E+00	2.25E-02
		Cs-134	<1.05E-02	0.00E+00	1.05E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<8.53E-02	0.00E+00	8.53E-02
		K-40	8.29E-01	2.88E-01	6.42E-02
403020	2/23/2016 - 3/1/2016	I-131	<2.40E-02	0.00E+00	2.40E-02
		Cs-134	<1.33E-02	0.00E+00	1.33E-02
		Cs-137	<2.07E-02	0.00E+00	2.07E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	8.31E-01	3.12E-01	2.65E-01
404498	3/1/2016 - 3/8/2016	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<1.86E-02	0.00E+00	1.86E-02
		Cs-137	<2.51E-02	0.00E+00	2.51E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	9.38E-01	3.22E-01	2.26E-01
405384	3/8/2016 - 3/15/2016	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<9.59E-02	0.00E+00	9.59E-02
		K-40	9.54E-01	3.62E-01	3.78E-01
406001	3/15/2016 - 3/22/2016	I-131	<3.61E-02	0.00E+00	3.61E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.67E-02	0.00E+00	1.67E-02
		Be-7	<9.14E-02	0.00E+00	9.14E-02
		K-40	<6.19E-01	0.00E+00	6.19E-01
406340	3/22/2016 - 3/29/2016	I-131	<1.91E-02	0.00E+00	1.91E-02
		Cs-134	<1.22E-02	0.00E+00	1.22E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<9.87E-02	0.00E+00	9.87E-02
		K-40	1.02E+00	3.06E-01	5.75E-02
407529	3/29/2016 - 4/5/2016	I-131	<2.72E-02	0.00E+00	2.72E-02
		Cs-134	<1.34E-02	0.00E+00	1.34E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	8.76E-01	3.16E-01	2.91E-01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
408109	4/5/2016 - 4/12/2016	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.02E-02	0.00E+00	1.02E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	1.12E+00	3.58E-01	2.69E-01
409422	4/12/2016 - 4/19/2016	I-131	<1.67E-02	0.00E+00	1.67E-02
		Cs-134	<1.72E-02	0.00E+00	1.72E-02
		Cs-137	<1.19E-02	0.00E+00	1.19E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	<5.38E-01	0.00E+00	5.38E-01
409757	4/19/2016 - 4/26/2016	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.37E-02	0.00E+00	1.37E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	7.28E-01	2.71E-01	2.12E-01
410909	4/26/2016 - 5/3/2016	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<2.05E-02	0.00E+00	2.05E-02
		Be-7	<9.62E-02	0.00E+00	9.62E-02
		K-40	8.41E-01	3.01E-01	2.12E-01
411409	5/3/2016 - 5/10/2016	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.42E-02	0.00E+00	1.42E-02
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	7.52E-01	3.06E-01	3.01E-01
411733	5/10/2016 - 5/17/2016	I-131	<1.02E-02	0.00E+00	1.02E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<1.93E-02	0.00E+00	1.93E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	9.02E-01	3.16E-01	2.36E-01
412196	5/17/2016 - 5/24/2016	I-131	<1.78E-02	0.00E+00	1.78E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	6.55E-01	2.66E-01	2.40E-01
412712	5/24/2016 - 5/31/2016	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.87E-02	0.00E+00	1.87E-02
		Be-7	<1.37E-01	0.00E+00	1.37E-01
		K-40	7.59E-01	2.69E-01	6.05E-02
413315	5/31/2016 - 6/7/2016	I-131	<1.51E-02	0.00E+00	1.51E-02
		Cs-134	<7.91E-03	0.00E+00	7.91E-03
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	7.83E-01	3.05E-01	2.82E-01
413862	6/7/2016 - 6/14/2016	I-131	<2.18E-02	0.00E+00	2.18E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m³

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
413862	6/7/2016 - 6/14/2016	Cs-137	<1.64E-02	0.00E+00	1.64E-02
		Be-7	<8.76E-02	0.00E+00	8.76E-02
		K-40	7.78E-01	2.64E-01	5.70E-02
415003	6/14/2016 - 6/21/2016	I-131	<1.91E-02	0.00E+00	1.91E-02
		Cs-134	<1.21E-02	0.00E+00	1.21E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	7.75E-01	2.85E-01	2.37E-01
415374	6/21/2016 - 6/28/2016	I-131	<1.84E-02	0.00E+00	1.84E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.29E-02	0.00E+00	1.29E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	8.56E-01	3.16E-01	3.10E-01
416367	6/28/2016 - 7/5/2016	I-131	<1.68E-02	0.00E+00	1.68E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	9.01E-01	2.98E-01	6.26E-02
416991	7/5/2016 - 7/12/2016	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.69E-02	0.00E+00	1.69E-02
		Be-7	<9.39E-02	0.00E+00	9.39E-02
		K-40	9.24E-01	2.88E-01	5.56E-02
417385	7/12/2016 - 7/19/2016	I-131	<1.91E-02	0.00E+00	1.91E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	9.03E-01	2.97E-01	6.12E-02
417776	7/19/2016 - 7/26/2016	I-131	<1.67E-02	0.00E+00	1.67E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	7.06E-01	2.89E-01	2.90E-01
418240	7/26/2016 - 8/2/2016	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<1.96E-02	0.00E+00	1.96E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	8.93E-01	3.44E-01	3.51E-01
418969	8/2/2016 - 8/9/2016	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	1.21E+00	3.48E-01	6.16E-02
419470	8/9/2016 - 8/16/2016	I-131	<2.74E-02	0.00E+00	2.74E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<9.50E-02	0.00E+00	9.50E-02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
419470	8/9/2016 - 8/16/2016	K-40	8.25E-01	3.01E-01	2.28E-01
419997	8/16/2016 - 8/23/2016	I-131	<1.88E-02	0.00E+00	1.88E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	9.23E-01	3.36E-01	3.31E-01
420551	8/23/2016 - 8/30/2016	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<1.17E-02	0.00E+00	1.17E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<9.43E-02	0.00E+00	9.43E-02
		K-40	7.97E-01	3.41E-01	3.86E-01
421388	8/30/2016 - 9/6/2016	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<2.27E-02	0.00E+00	2.27E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	6.86E-01	3.03E-01	3.24E-01
422546	9/6/2016 - 9/13/2016	I-131	<2.08E-02	0.00E+00	2.08E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.26E-02	0.00E+00	1.26E-02
		Be-7	<8.23E-02	0.00E+00	8.23E-02
		K-40	8.94E-01	3.14E-01	2.34E-01
423288	9/13/2016 - 9/20/2016	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<1.31E-02	0.00E+00	1.31E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	7.93E-01	3.26E-01	3.42E-01
424408	9/20/2016 - 9/27/2016	I-131	<8.81E-03	0.00E+00	8.81E-03
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<1.49E-01	0.00E+00	1.49E-01
		K-40	1.00E+00	3.29E-01	2.61E-01
425400	9/27/2016 - 10/4/2016	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.19E-02	0.00E+00	1.19E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	6.93E-01	2.60E-01	6.26E-02
425963	10/4/2016 - 10/11/2016	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	8.32E-01	2.87E-01	6.26E-02
426335	10/11/2016 - 10/18/2016	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<9.54E-03	0.00E+00	9.54E-03
		Be-7	<1.00E-01	0.00E+00	1.00E-01
		K-40	7.88E-01	2.87E-01	2.17E-01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
427027	10/18/2016 - 10/25/2016	I-131	<1.43E-02	0.00E+00	1.43E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	7.00E-01	2.52E-01	5.75E-02
427686	10/25/2016 - 11/1/2016	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.28E-02	0.00E+00	1.28E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	1.09E+00	3.50E-01	2.45E-01
428181	11/1/2016 - 11/8/2016	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<1.19E-02	0.00E+00	1.19E-02
		Cs-137	<2.07E-02	0.00E+00	2.07E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	7.02E-01	3.24E-01	3.75E-01
428863	11/8/2016 - 11/15/2016	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<2.24E-02	0.00E+00	2.24E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	9.41E-01	3.38E-01	2.87E-01
429373	11/15/2016 - 11/22/2016	I-131	<2.96E-02	0.00E+00	2.96E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	5.61E-01	2.50E-01	2.35E-01
429924	11/22/2016 - 11/29/2016	I-131	<2.12E-02	0.00E+00	2.12E-02
		Cs-134	<1.90E-02	0.00E+00	1.90E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	9.41E-01	3.26E-01	2.25E-01
430545	11/29/2016 - 12/6/2016	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.71E-02	0.00E+00	1.71E-02
		Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	1.13E+00	3.52E-01	2.56E-01
431033	12/6/2016 - 12/13/2016	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<2.10E-02	0.00E+00	2.10E-02
		Cs-137	<1.89E-02	0.00E+00	1.89E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	9.21E-01	3.10E-01	6.57E-02
431440	12/13/2016 - 12/20/2016	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<1.84E-02	0.00E+00	1.84E-02
		Cs-137	<1.89E-02	0.00E+00	1.89E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	1.04E+00	3.32E-01	6.58E-02
431778	12/20/2016 - 12/27/2016	I-131	<1.35E-02	0.00E+00	1.35E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID: 431778 Sample Dates: 12/20/2016 - 12/27/2016

Nuclide	Activity	2 Sigma Error	MDA
Cs-137	<1.96E-02	0.00E+00	1.96E-02
Be-7	<1.54E-01	0.00E+00	1.54E-01
K-40	8.11E-01	2.99E-01	2.34E-01

Media Type: FISH Concentration (Activity): pCi/kg wet

Sample Point 700 [INDICATOR - SSW @ 5.5 miles]

Sample ID: 412590 Sample Dates: 5/14/2016 - 5/14/2016

FREESWIM

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.16E+01	0.00E+00	1.16E+01
Co-58	<1.04E+01	0.00E+00	1.04E+01
Fe-59	<2.17E+01	0.00E+00	2.17E+01
Co-60	<9.35E+00	0.00E+00	9.35E+00
Zn-65	<2.46E+01	0.00E+00	2.46E+01
Nb-95	<1.20E+01	0.00E+00	1.20E+01
I-131	<1.43E+01	0.00E+00	1.43E+01
Cs-134	<9.67E+00	0.00E+00	9.67E+00
Cs-137	<9.88E+00	0.00E+00	9.88E+00
Be-7	<7.21E+01	0.00E+00	7.21E+01
K-40	2.38E+03	3.56E+02	1.50E+02
Ag-110M	<9.79E+00	0.00E+00	9.79E+00
Sb-122	<1.25E+02	0.00E+00	1.25E+02
Sb-125	<2.35E+01	0.00E+00	2.35E+01

Sample ID: 429264 Sample Dates: 11/6/2016 - 11/6/2016

FREESWIM

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.55E+01	0.00E+00	1.55E+01
Co-58	<1.25E+01	0.00E+00	1.25E+01
Fe-59	<4.70E+01	0.00E+00	4.70E+01
Co-60	<2.91E+01	0.00E+00	2.91E+01
Zn-65	<5.10E+01	0.00E+00	5.10E+01
Nb-95	<2.52E+01	0.00E+00	2.52E+01
I-131	<2.00E+01	0.00E+00	2.00E+01
Cs-134	<2.46E+01	0.00E+00	2.46E+01
Cs-137	<2.42E+01	0.00E+00	2.42E+01
Be-7	<1.52E+02	0.00E+00	1.52E+02
K-40	3.78E+03	7.18E+02	4.61E+02
Ag-110M	<1.56E+01	0.00E+00	1.56E+01
Sb-122	<3.53E+01	0.00E+00	3.53E+01
Sb-125	<5.00E+01	0.00E+00	5.00E+01

Sample Point 701 [INDICATOR - SSW @ 5.5 miles]

Sample ID: 412591 Sample Dates: 5/14/2016 - 5/14/2016

BOTMFEEDER

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.84E+01	0.00E+00	1.84E+01
Co-58	<1.59E+01	0.00E+00	1.59E+01
Fe-59	<5.01E+01	0.00E+00	5.01E+01
Co-60	<2.17E+01	0.00E+00	2.17E+01
Zn-65	<3.85E+01	0.00E+00	3.85E+01
Nb-95	<2.59E+01	0.00E+00	2.59E+01
I-131	<3.64E+01	0.00E+00	3.64E+01
Cs-134	<2.47E+01	0.00E+00	2.47E+01
Cs-137	<2.22E+01	0.00E+00	2.22E+01
Be-7	<1.81E+02	0.00E+00	1.81E+02
K-40	2.63E+03	5.33E+02	3.19E+02
Ag-110M	<1.71E+01	0.00E+00	1.71E+01
Sb-122	<2.93E+02	0.00E+00	2.93E+02
Sb-125	<3.32E+01	0.00E+00	3.32E+01

Sample ID: 429265 Sample Dates: 11/6/2016 - 11/6/2016

BOTMFEEDER

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.22E+01	0.00E+00	3.22E+01
Co-58	<2.01E+01	0.00E+00	2.01E+01
Fe-59	<1.36E+01	0.00E+00	1.36E+01
Co-60	<3.75E+01	0.00E+00	3.75E+01
Zn-65	<7.70E+01	0.00E+00	7.70E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: FISH Concentration (Activity): pCi/kg wet

Sample Point 701 [INDICATOR - SSW @ 5.5 miles]

Sample ID:	429265	Sample Dates:	11/6/2016 - 11/6/2016	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
					Nb-95	<3.58E+01	0.00E+00	3.58E+01
					I-131	<3.10E+01	0.00E+00	3.10E+01
					Cs-134	<2.58E+01	0.00E+00	2.58E+01
					Cs-137	<3.60E+01	0.00E+00	3.60E+01
					Be-7	<2.07E+02	0.00E+00	2.07E+02
					K-40	2.19E+03	6.38E+02	6.08E+02
					Ag-110M	<2.78E+01	0.00E+00	2.78E+01
					Sb-122	<8.00E+01	0.00E+00	8.00E+01
					Sb-125	<6.41E+01	0.00E+00	6.41E+01

Sample Point 702 [INDICATOR - SSW @ 5.5 miles]

Sample ID:	412592	Sample Dates:	5/14/2016 - 5/14/2016	INVERTEBRA	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.73E+01	0.00E+00	1.73E+01
					Co-58	<1.56E+01	0.00E+00	1.56E+01
					Fe-59	<3.34E+01	0.00E+00	3.34E+01
					Co-60	<2.11E+01	0.00E+00	2.11E+01
					Zn-65	<4.10E+01	0.00E+00	4.10E+01
					Nb-95	<1.47E+01	0.00E+00	1.47E+01
					I-131	<2.58E+01	0.00E+00	2.58E+01
					Cs-134	<1.47E+01	0.00E+00	1.47E+01
					Cs-137	<2.12E+01	0.00E+00	2.12E+01
					Be-7	<1.33E+02	0.00E+00	1.33E+02
					K-40	3.11E+03	5.29E+02	4.76E+01
					Ag-110M	<1.50E+01	0.00E+00	1.50E+01
					Sb-122	<2.17E+02	0.00E+00	2.17E+02
					Sb-125	<3.84E+01	0.00E+00	3.84E+01

Sample ID:	429266	Sample Dates:	11/6/2016 - 11/6/2016	INVERTEBRA	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.25E+01	0.00E+00	2.25E+01
					Co-58	<2.28E+01	0.00E+00	2.28E+01
					Fe-59	<4.93E+01	0.00E+00	4.93E+01
					Co-60	<1.87E+01	0.00E+00	1.87E+01
					Zn-65	<9.64E+00	0.00E+00	9.64E+00
					Nb-95	<1.54E+01	0.00E+00	1.54E+01
					I-131	<1.59E+01	0.00E+00	1.59E+01
					Cs-134	<2.09E+01	0.00E+00	2.09E+01
					Cs-137	<1.95E+01	0.00E+00	1.95E+01
					Be-7	<1.55E+02	0.00E+00	1.55E+02
					K-40	2.87E+03	5.33E+02	5.47E+01
					Ag-110M	<1.86E+01	0.00E+00	1.86E+01
					Sb-122	<4.41E+01	0.00E+00	4.41E+01
					Sb-125	<3.11E+01	0.00E+00	3.11E+01

Sample Point 703 [CONTROL - -- @ 0 miles]

Sample ID:	412593	Sample Dates:	5/14/2016 - 5/14/2016	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.17E+01	0.00E+00	1.17E+01
					Co-58	<1.64E+01	0.00E+00	1.64E+01
					Fe-59	<2.65E+01	0.00E+00	2.65E+01
					Co-60	<1.97E+01	0.00E+00	1.97E+01
					Zn-65	<3.50E+01	0.00E+00	3.50E+01
					Nb-95	<1.63E+01	0.00E+00	1.63E+01
					I-131	<2.29E+01	0.00E+00	2.29E+01
					Cs-134	<1.01E+01	0.00E+00	1.01E+01
					Cs-137	<1.40E+01	0.00E+00	1.40E+01
					Be-7	<1.00E+02	0.00E+00	1.00E+02
					K-40	2.79E+03	4.67E+02	2.19E+02
					Ag-110M	<1.19E+01	0.00E+00	1.19E+01
					Sb-122	<1.94E+02	0.00E+00	1.94E+02
					Sb-125	<3.19E+01	0.00E+00	3.19E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: FISH Concentration (Activity): pCi/kg wet

Sample Point 703 [CONTROL - -- @ 0 miles]

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
429267	11/6/2016 - 11/6/2016		Mn-54	<2.65E+01	0.00E+00	2.65E+01
			Co-58	<2.34E+01	0.00E+00	2.34E+01
			Fe-59	<4.94E+01	0.00E+00	4.94E+01
			Co-60	<2.74E+01	0.00E+00	2.74E+01
			Zn-65	<5.36E+01	0.00E+00	5.36E+01
			Nb-95	<2.31E+01	0.00E+00	2.31E+01
			I-131	<1.91E+01	0.00E+00	1.91E+01
			Cs-134	<2.58E+01	0.00E+00	2.58E+01
			Cs-137	<2.83E+01	0.00E+00	2.83E+01
			Be-7	<1.22E+02	0.00E+00	1.22E+02
			K-40	3.19E+03	6.25E+02	6.91E+01
			Ag-110M	<1.64E+01	0.00E+00	1.64E+01
			Sb-122	<7.52E+01	0.00E+00	7.52E+01
			Sb-125	<4.92E+01	0.00E+00	4.92E+01

Sample Point 704 [CONTROL - -- @ 0 miles]

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
412594	5/14/2016 - 5/14/2016		Mn-54	<1.55E+01	0.00E+00	1.55E+01
			Co-58	<1.46E+01	0.00E+00	1.46E+01
			Fe-59	<3.43E+01	0.00E+00	3.43E+01
			Co-60	<1.92E+01	0.00E+00	1.92E+01
			Zn-65	<3.67E+01	0.00E+00	3.67E+01
			Nb-95	<1.31E+01	0.00E+00	1.31E+01
			I-131	<2.61E+01	0.00E+00	2.61E+01
			Cs-134	<1.89E+01	0.00E+00	1.89E+01
			Cs-137	<1.13E+01	0.00E+00	1.13E+01
			Be-7	<1.29E+02	0.00E+00	1.29E+02
			K-40	3.03E+03	4.83E+02	2.02E+02
			Ag-110M	<1.03E+01	0.00E+00	1.03E+01
			Sb-122	<1.76E+02	0.00E+00	1.76E+02
			Sb-125	<2.96E+01	0.00E+00	2.96E+01

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
429268	11/6/2016 - 11/6/2016		Mn-54	<1.89E+01	0.00E+00	1.89E+01
			Co-58	<1.48E+01	0.00E+00	1.48E+01
			Fe-59	<3.43E+01	0.00E+00	3.43E+01
			Co-60	<1.69E+01	0.00E+00	1.69E+01
			Zn-65	<2.95E+01	0.00E+00	2.95E+01
			Nb-95	<2.50E+01	0.00E+00	2.50E+01
			I-131	<2.45E+01	0.00E+00	2.45E+01
			Cs-134	<3.07E+01	0.00E+00	3.07E+01
			Cs-137	<2.14E+01	0.00E+00	2.14E+01
			Be-7	<1.22E+02	0.00E+00	1.22E+02
			K-40	2.53E+03	5.24E+02	6.23E+01
			Ag-110M	<1.63E+01	0.00E+00	1.63E+01
			Sb-122	<6.35E+01	0.00E+00	6.35E+01
			Sb-125	<5.22E+01	0.00E+00	5.22E+01

Sample Point 705 [CONTROL - -- @ 0 miles]

Sample ID:	Sample Dates:	INVERTEBRA	Nuclide	Activity	2 Sigma Error	MDA
412595	5/14/2016 - 5/14/2016		Mn-54	<1.94E+01	0.00E+00	1.94E+01
			Co-58	<2.05E+01	0.00E+00	2.05E+01
			Fe-59	<4.02E+01	0.00E+00	4.02E+01
			Co-60	<5.73E+00	0.00E+00	5.73E+00
			Zn-65	<4.05E+01	0.00E+00	4.05E+01
			Nb-95	<2.74E+01	0.00E+00	2.74E+01
			I-131	<2.90E+01	0.00E+00	2.90E+01
			Cs-134	<1.52E+01	0.00E+00	1.52E+01
			Cs-137	<1.04E+01	0.00E+00	1.04E+01
			Be-7	<1.33E+02	0.00E+00	1.33E+02
			K-40	3.87E+03	6.71E+02	3.22E+02



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Media Type: FISH Concentration (Activity): pCi/kg wet

Sample Point 705 [CONTROL - -- @ 0 miles]

Sample ID:	412595	Sample Dates:	5/14/2016 - 5/14/2016	INVERTEBRA	Nuclide	Activity	2 Sigma Error	MDA
					Ag-110M	<1.81E+01	0.00E+00	1.81E+01
					Sb-122	<2.44E+02	0.00E+00	2.44E+02
					Sb-125	<4.64E+01	0.00E+00	4.64E+01

Sample ID:	429269	Sample Dates:	11/6/2016 - 11/6/2016	INVERTEBRA	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.05E+01	0.00E+00	1.05E+01
					Co-58	<8.45E+00	0.00E+00	8.45E+00
					Fe-59	<2.81E+01	0.00E+00	2.81E+01
					Co-60	<1.72E+01	0.00E+00	1.72E+01
					Zn-65	<2.63E+01	0.00E+00	2.63E+01
					Nb-95	<1.23E+01	0.00E+00	1.23E+01
					I-131	<1.59E+01	0.00E+00	1.59E+01
					Cs-134	<1.79E+01	0.00E+00	1.79E+01
					Cs-137	<2.23E+01	0.00E+00	2.23E+01
					Be-7	<9.78E+01	0.00E+00	9.78E+01
					K-40	2.27E+03	4.21E+02	4.33E+01
					Ag-110M	<1.40E+01	0.00E+00	1.40E+01
					Sb-122	<3.54E+01	0.00E+00	3.54E+01
					Sb-125	<2.49E+01	0.00E+00	2.49E+01

Sample Point 706 [INDICATOR - -- @ 0 miles]

Sample ID:	429139	Sample Dates:	9/11/2016 - 11/2/2016	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.49E+01	0.00E+00	1.49E+01
					Co-58	<1.29E+01	0.00E+00	1.29E+01
					Fe-59	<5.80E+01	0.00E+00	5.80E+01
					Co-60	<2.48E+01	0.00E+00	2.48E+01
					Zn-65	<4.69E+01	0.00E+00	4.69E+01
					Nb-95	<3.08E+01	0.00E+00	3.08E+01
					I-131	<2.72E+02	0.00E+00	2.72E+02
					Cs-134	<1.95E+01	0.00E+00	1.95E+01
					Cs-137	<1.50E+01	0.00E+00	1.50E+01
					Be-7	<1.85E+02	0.00E+00	1.85E+02
					K-40	2.57E+03	4.85E+02	5.09E+01
					Ag-110M	<1.31E+01	0.00E+00	1.31E+01
					Sb-122	<8.07E+04	0.00E+00	8.07E+04
					Sb-125	<4.17E+01	0.00E+00	4.17E+01

Sample Point 707 [INDICATOR - -- @ 0 miles]

Sample ID:	429140	Sample Dates:	9/20/2016 - 11/2/2016	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.39E+01	0.00E+00	1.39E+01
					Co-58	<2.08E+01	0.00E+00	2.08E+01
					Fe-59	<7.32E+01	0.00E+00	7.32E+01
					Co-60	<2.11E+01	0.00E+00	2.11E+01
					Zn-65	<4.32E+01	0.00E+00	4.32E+01
					Nb-95	<2.19E+01	0.00E+00	2.19E+01
					I-131	<1.34E+02	0.00E+00	1.34E+02
					Cs-134	<1.69E+01	0.00E+00	1.69E+01
					Cs-137	<1.68E+01	0.00E+00	1.68E+01
					Be-7	<1.77E+02	0.00E+00	1.77E+02
					K-40	2.83E+03	4.99E+02	4.71E+01
					Ag-110M	<1.37E+01	0.00E+00	1.37E+01
					Sb-122	<3.21E+04	0.00E+00	3.21E+04
					Sb-125	<4.41E+01	0.00E+00	4.41E+01

Sample Point 708 [INDICATOR - -- @ 0 miles]

Sample ID:	429141	Sample Dates:	9/11/2016 - 11/2/2016	INVERTEBRA	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.96E+01	0.00E+00	1.96E+01
					Co-58	<2.49E+01	0.00E+00	2.49E+01
					Fe-59	<6.86E+01	0.00E+00	6.86E+01
					Co-60	<2.06E+01	0.00E+00	2.06E+01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: FISH Concentration (Activity): pCi/kg wet

Sample Point 708 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	INVERTEBRA	Nuclide	Activity	2 Sigma Error	MDA
429141	9/11/2016 - 11/2/2016		Zn-65	<4.33E+01	0.00E+00	4.33E+01
			Nb-95	<2.83E+01	0.00E+00	2.83E+01
			I-131	<2.62E+02	0.00E+00	2.62E+02
			Cs-134	<2.11E+01	0.00E+00	2.11E+01
			Cs-137	<2.09E+01	0.00E+00	2.09E+01
			Be-7	<2.06E+02	0.00E+00	2.06E+02
			K-40	2.47E+03	5.20E+02	3.87E+02
			Ag-110M	<1.72E+01	0.00E+00	1.72E+01
			Sb-122	<6.99E+04	0.00E+00	6.99E+04
			Sb-125	<4.98E+01	0.00E+00	4.98E+01

Media Type: GROUND WATER Concentration (Activity): pCi/l

Sample Point 404 [INDICATOR - SW @ 0.16 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
405347	3/2/2016 - 3/2/2016	H3GW	<-1.0E+01	0.00E+00	2.79E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415196	6/9/2016 - 6/9/2016	Mn-54	<9.72E+00	0.00E+00	9.72E+00
		Co-58	<6.46E+00	0.00E+00	6.46E+00
		Fe-59	<1.72E+01	0.00E+00	1.72E+01
		Co-60	<5.91E+00	0.00E+00	5.91E+00
		Zn-65	<1.87E+01	0.00E+00	1.87E+01
		Zr-95	<1.69E+01	0.00E+00	1.69E+01
		Nb-95	<9.94E+00	0.00E+00	9.94E+00
		I-131	<1.48E+01	0.00E+00	1.48E+01
		Cs-134	<9.19E+00	0.00E+00	9.19E+00
		Cs-137	<9.31E+00	0.00E+00	9.31E+00
		La-140	<2.27E+02	0.00E+00	2.27E+02
		Ba-140	<3.88E+01	0.00E+00	3.88E+01
		Total-Gam	0.00E+00		
		H3GW	<1.34E+02	0.00E+00	2.59E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
427899	9/15/2016 - 9/15/2016	H3GW	<-5.1E+01	0.00E+00	2.25E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431547	12/8/2016 - 12/8/2016	Mn-54	<8.75E+00	0.00E+00	8.75E+00
		Co-58	<8.20E+00	0.00E+00	8.20E+00
		Fe-59	<1.10E+01	0.00E+00	1.10E+01
		Co-60	<7.11E+00	0.00E+00	7.11E+00
		Zn-65	<8.94E+00	0.00E+00	8.94E+00
		Zr-95	<1.45E+01	0.00E+00	1.45E+01
		Nb-95	<7.98E+00	0.00E+00	7.98E+00
		I-131	<1.31E+01	0.00E+00	1.31E+01
		Cs-134	<5.81E+00	0.00E+00	5.81E+00
		Cs-137	<7.42E+00	0.00E+00	7.41E+00
		La-140	<9.87E+01	0.00E+00	9.87E+01
		Ba-140	<2.82E+01	0.00E+00	2.82E+01
		Total-Gam	0.00E+00		
		H3GW	<5.86E+01	0.00E+00	2.52E+02

Sample Point 407 [INDICATOR - ENE @ 0.06 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
406737	3/9/2016 - 3/9/2016	H3GW	<-1.4E+02	0.00E+00	2.82E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415664	6/14/2016 - 6/14/2016	Mn-54	<1.06E+01	0.00E+00	1.06E+01
		Co-58	<9.78E+00	0.00E+00	9.78E+00
		Fe-59	<1.82E+01	0.00E+00	1.82E+01
		Co-60	<8.15E+00	0.00E+00	8.15E+00
		Zn-65	<1.33E+01	0.00E+00	1.33E+01



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Media Type: GROUND WATER Concentration (Activity): pCi/l

Sample Point 407 [INDICATOR - ENE @ 0.06 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415664	6/14/2016 - 6/14/2016	Zr-95	<1.45E+01	0.00E+00	1.45E+01
		Nb-95	<9.34E+00	0.00E+00	9.34E+00
		I-131	<1.67E+01	0.00E+00	1.67E+01
		Cs-134	<7.80E+00	0.00E+00	7.80E+00
		Cs-137	<9.84E+00	0.00E+00	9.84E+00
		La-140	<2.24E+02	0.00E+00	2.24E+02
		Ba-140	<4.86E+01	0.00E+00	4.86E+01
		Total-Gam	0.00E+00		
		H3GW	<7.78E+01	0.00E+00	2.65E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
427928	9/19/2016 - 9/19/2016	H3GW	<2.03E+02	0.00E+00	2.24E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
432296	12/15/2016 - 12/15/2016	Mn-54	<6.91E+00	0.00E+00	6.91E+00
		Co-58	<8.31E+00	0.00E+00	8.31E+00
		Fe-59	<1.19E+01	0.00E+00	1.19E+01
		Co-60	<8.43E+00	0.00E+00	8.43E+00
		Zn-65	<1.38E+01	0.00E+00	1.38E+01
		Zr-95	<1.32E+01	0.00E+00	1.32E+01
		Nb-95	<7.43E+00	0.00E+00	7.43E+00
		I-131	<2.04E+01	0.00E+00	2.04E+01
		Cs-134	<6.06E+00	0.00E+00	6.06E+00
		Cs-137	<7.15E+00	0.00E+00	7.15E+00
		La-140	<7.37E+02	0.00E+00	7.37E+02
		Ba-140	<4.19E+01	0.00E+00	4.19E+01
		Total-Gam	0.00E+00		
		H3GW	<1.93E+02	0.00E+00	2.56E+02

Sample Point 409 [INDICATOR - NE @ 0.65 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
405770	3/4/2016 - 3/4/2016	H3GW	<-1.8E+02	0.00E+00	2.57E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415144	6/8/2016 - 6/8/2016	Mn-54	<8.79E+00	0.00E+00	8.79E+00
		Co-58	<9.60E+00	0.00E+00	9.60E+00
		Fe-59	<1.77E+01	0.00E+00	1.77E+01
		Co-60	<6.82E+00	0.00E+00	6.82E+00
		Zn-65	<2.36E+01	0.00E+00	2.36E+01
		Zr-95	<1.08E+01	0.00E+00	1.08E+01
		Nb-95	<7.59E+00	0.00E+00	7.59E+00
		I-131	<1.23E+01	0.00E+00	1.23E+01
		Cs-134	<8.00E+00	0.00E+00	8.00E+00
		Cs-137	<9.84E+00	0.00E+00	9.84E+00
		La-140	<6.04E+01	0.00E+00	6.04E+01
		Ba-140	<4.37E+01	0.00E+00	4.37E+01
		Total-Gam	0.00E+00		
		H3GW	<-3.0E+02	0.00E+00	2.64E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
427606	9/14/2016 - 9/14/2016	H3GW	<-1.8E+02	0.00E+00	2.38E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
430993	12/1/2016 - 12/1/2016	Mn-54	<9.20E+00	0.00E+00	9.20E+00
		Co-58	<8.91E+00	0.00E+00	8.91E+00
		Fe-59	<1.54E+01	0.00E+00	1.54E+01
		Co-60	<7.29E+00	0.00E+00	7.29E+00
		Zn-65	<1.63E+01	0.00E+00	1.63E+01
		Zr-95	<1.29E+01	0.00E+00	1.29E+01
		Nb-95	<8.65E+00	0.00E+00	8.65E+00
		I-131	<1.37E+01	0.00E+00	1.37E+01
		Cs-134	<6.51E+00	0.00E+00	6.51E+00
		Cs-137	<6.86E+00	0.00E+00	6.86E+00



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: GROUND WATER Concentration (Activity): pCi/l

Sample Point 409 [INDICATOR - NE @ 0.65 miles]

Sample ID: 430993 Sample Dates: 12/1/2016 - 12/1/2016

Nuclide	Activity	2 Sigma Error	MDA
La-140	<4.88E+01	0.00E+00	4.88E+01
Ba-140	<3.16E+01	0.00E+00	3.16E+01
Total-Gam	0.00E+00		
H3GW	<5.82E+01	0.00E+00	2.46E+02

Sample Point 410 [INDICATOR - NE @ 0.65 miles]

Sample ID: 405771 Sample Dates: 3/4/2016 - 3/4/2016

Nuclide	Activity	2 Sigma Error	MDA
H3GW	<-1.5E+02	0.00E+00	2.57E+02

Sample ID: 415145 Sample Dates: 6/8/2016 - 6/8/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<7.05E+00	0.00E+00	7.05E+00
Co-58	<8.65E+00	0.00E+00	8.65E+00
Fe-59	<1.37E+01	0.00E+00	1.37E+01
Co-60	<9.73E+00	0.00E+00	9.74E+00
Zn-65	<1.32E+01	0.00E+00	1.32E+01
Zr-95	<1.12E+01	0.00E+00	1.12E+01
Nb-95	<1.13E+01	0.00E+00	1.13E+01
I-131	<1.31E+01	0.00E+00	1.31E+01
Cs-134	<9.71E+00	0.00E+00	9.71E+00
Cs-137	<8.14E+00	0.00E+00	8.14E+00
La-140	<8.68E+01	0.00E+00	8.68E+01
Ba-140	<4.21E+01	0.00E+00	4.21E+01
Total-Gam	0.00E+00		
H3GW	<-1.5E+02	0.00E+00	2.63E+02

Sample ID: 427607 Sample Dates: 9/14/2016 - 9/14/2016

Nuclide	Activity	2 Sigma Error	MDA
H3GW	<-1.3E+02	0.00E+00	2.38E+02

Sample ID: 430994 Sample Dates: 12/1/2016 - 12/1/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<7.15E+00	0.00E+00	7.15E+00
Co-58	<7.04E+00	0.00E+00	7.04E+00
Fe-59	<1.81E+01	0.00E+00	1.81E+01
Co-60	<7.11E+00	0.00E+00	7.11E+00
Zn-65	<1.63E+01	0.00E+00	1.63E+01
Zr-95	<1.09E+01	0.00E+00	1.09E+01
Nb-95	<6.06E+00	0.00E+00	6.06E+00
I-131	<1.50E+01	0.00E+00	1.50E+01
Cs-134	<8.22E+00	0.00E+00	8.22E+00
Cs-137	<7.93E+00	0.00E+00	7.93E+00
La-140	<9.94E+01	0.00E+00	9.94E+01
Ba-140	<3.63E+01	0.00E+00	3.63E+01
Total-Gam	0.00E+00		
H3GW	<1.16E+02	0.00E+00	2.49E+02

Sample Point 418 [INDICATOR - -- @ 0 miles]

Sample ID: 405774 Sample Dates: 3/3/2016 - 3/3/2016

Nuclide	Activity	2 Sigma Error	MDA
H3GW	<-1.1E+02	0.00E+00	2.56E+02

Sample ID: 415197 Sample Dates: 6/9/2016 - 6/9/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<9.12E+00	0.00E+00	9.12E+00
Co-58	<8.39E+00	0.00E+00	8.39E+00
Fe-59	<1.60E+01	0.00E+00	1.60E+01
Co-60	<6.82E+00	0.00E+00	6.82E+00
Zn-65	<1.32E+01	0.00E+00	1.32E+01
Zr-95	<1.55E+01	0.00E+00	1.55E+01
Nb-95	<1.12E+01	0.00E+00	1.12E+01
I-131	<1.57E+01	0.00E+00	1.57E+01
Cs-134	<8.99E+00	0.00E+00	8.99E+00
Cs-137	<1.01E+01	0.00E+00	1.01E+01
La-140	<1.05E+02	0.00E+00	1.05E+02
Ba-140	<3.73E+01	0.00E+00	3.73E+01
Total-Gam	0.00E+00		



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: GROUND WATER Concentration (Activity): pCi/l

Sample Point 418 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415197	6/9/2016 - 6/9/2016	H3GW	<1.68E+01	0.00E+00	2.81E+02
427929	9/13/2016 - 9/13/2016	H3GW	<1.67E+02	0.00E+00	2.25E+02
431198	12/5/2016 - 12/5/2016	Mn-54	<7.16E+00	0.00E+00	7.16E+00
		Co-58	<8.00E+00	0.00E+00	8.00E+00
		Fe-59	<1.50E+01	0.00E+00	1.50E+01
		Co-60	<5.95E+00	0.00E+00	5.95E+00
		Zn-65	<1.55E+01	0.00E+00	1.55E+01
		Zr-95	<1.27E+01	0.00E+00	1.27E+01
		Nb-95	<7.84E+00	0.00E+00	7.84E+00
		I-131	<1.44E+01	0.00E+00	1.44E+01
		Cs-134	<7.22E+00	0.00E+00	7.22E+00
		Cs-137	<8.41E+00	0.00E+00	8.41E+00
		La-140	<1.48E+02	0.00E+00	1.48E+02
		Ba-140	<3.19E+01	0.00E+00	3.19E+01
		Total-Gam	0.00E+00		
		H3GW	<5.30E+00	0.00E+00	2.52E+02

Sample Point 423 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
405778	3/7/2016 - 3/7/2016	H3GW	<4.5E+01	0.00E+00	2.69E+02
415198	6/9/2016 - 6/9/2016	Mn-54	<1.03E+01	0.00E+00	1.03E+01
		Co-58	<8.82E+00	0.00E+00	8.82E+00
		Fe-59	<1.73E+01	0.00E+00	1.73E+01
		Co-60	<5.34E+00	0.00E+00	5.34E+00
		Zn-65	<1.68E+01	0.00E+00	1.68E+01
		Zr-95	<1.26E+01	0.00E+00	1.26E+01
		Nb-95	<1.15E+01	0.00E+00	1.15E+01
		I-131	<1.39E+01	0.00E+00	1.39E+01
		Cs-134	<8.42E+00	0.00E+00	8.42E+00
		Cs-137	<7.49E+00	0.00E+00	7.49E+00
		La-140	<1.40E+02	0.00E+00	1.40E+02
		Ba-140	<3.17E+01	0.00E+00	3.17E+01
		Total-Gam	0.00E+00		
		H3GW	<4.16E+01	0.00E+00	2.60E+02
427608	9/13/2016 - 9/13/2016	H3GW	<5.0E+01	0.00E+00	2.38E+02
431199	12/5/2016 - 12/5/2016	Mn-54	<9.48E+00	0.00E+00	9.47E+00
		Co-58	<7.42E+00	0.00E+00	7.42E+00
		Fe-59	<1.30E+01	0.00E+00	1.30E+01
		Co-60	<8.42E+00	0.00E+00	8.42E+00
		Zn-65	<1.37E+01	0.00E+00	1.37E+01
		Zr-95	<1.27E+01	0.00E+00	1.27E+01
		Nb-95	<8.18E+00	0.00E+00	8.18E+00
		I-131	<1.56E+01	0.00E+00	1.56E+01
		Cs-134	<7.30E+00	0.00E+00	7.29E+00
		Cs-137	<6.86E+00	0.00E+00	6.87E+00
		La-140	<1.15E+02	0.00E+00	1.15E+02
		Ba-140	<2.89E+01	0.00E+00	2.89E+01
		Total-Gam	0.00E+00		
		H3GW	<1.02E+02	0.00E+00	2.43E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: GROUND WATER Concentration (Activity): pCi/l

Sample Point 424 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
405779	3/7/2016 - 3/7/2016	H3GW	<-1.4E+02	0.00E+00	2.68E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415199	6/9/2016 - 6/9/2016	Mn-54	<8.24E+00	0.00E+00	8.24E+00
		Co-58	<8.42E+00	0.00E+00	8.42E+00
		Fe-59	<2.03E+01	0.00E+00	2.03E+01
		Co-60	<8.72E+00	0.00E+00	8.73E+00
		Zn-65	<1.20E+01	0.00E+00	1.20E+01
		Zr-95	<1.60E+01	0.00E+00	1.60E+01
		Nb-95	<1.32E+01	0.00E+00	1.32E+01
		I-131	<2.23E+01	0.00E+00	2.23E+01
		Cs-134	<8.65E+00	0.00E+00	8.65E+00
		Cs-137	<7.14E+00	0.00E+00	7.14E+00
		La-140	<1.09E+03	0.00E+00	1.09E+03
		Ba-140	<4.84E+01	0.00E+00	4.84E+01
		Total-Gam	0.00E+00		
		H3GW	<-1.2E+02	0.00E+00	2.59E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
427609	9/13/2016 - 9/13/2016	H3GW	<-1.4E+02	0.00E+00	2.37E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431200	12/5/2016 - 12/5/2016	Mn-54	<7.46E+00	0.00E+00	7.46E+00
		Co-58	<8.30E+00	0.00E+00	8.30E+00
		Fe-59	<1.83E+01	0.00E+00	1.83E+01
		Co-60	<9.32E+00	0.00E+00	9.32E+00
		Zn-65	<1.87E+01	0.00E+00	1.87E+01
		Zr-95	<1.22E+01	0.00E+00	1.22E+01
		Nb-95	<1.05E+01	0.00E+00	1.05E+01
		I-131	<1.55E+01	0.00E+00	1.55E+01
		Cs-134	<7.03E+00	0.00E+00	7.03E+00
		Cs-137	<7.42E+00	0.00E+00	7.42E+00
		La-140	<1.16E+02	0.00E+00	1.16E+02
		Ba-140	<3.83E+01	0.00E+00	3.83E+01
		Total-Gam	0.00E+00		
		H3GW	<1.22E+02	0.00E+00	2.46E+02

Sample Point 426 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
405782	3/8/2016 - 3/8/2016	H3GW	<-6.3E+01	0.00E+00	2.69E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415947	6/22/2016 - 6/22/2016	Mn-54	<7.79E+00	0.00E+00	7.79E+00
		Co-58	<8.29E+00	0.00E+00	8.29E+00
		Fe-59	<1.76E+01	0.00E+00	1.76E+01
		Co-60	<9.02E+00	0.00E+00	9.02E+00
		Zn-65	<1.86E+01	0.00E+00	1.86E+01
		Zr-95	<1.73E+01	0.00E+00	1.73E+01
		Nb-95	<7.55E+00	0.00E+00	7.55E+00
		I-131	<1.22E+01	0.00E+00	1.22E+01
		Cs-134	<7.56E+00	0.00E+00	7.56E+00
		Cs-137	<7.49E+00	0.00E+00	7.49E+00
		La-140	<8.79E+01	0.00E+00	8.79E+01
		Ba-140	<3.87E+01	0.00E+00	3.87E+01
		Total-Gam	0.00E+00		
		H3GW	<4.16E+01	0.00E+00	2.49E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
428068	9/28/2016 - 9/28/2016	H3GW	<-3.8E+01	0.00E+00	2.47E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431554	12/7/2016 - 12/7/2016	Mn-54	<8.75E+00	0.00E+00	8.75E+00
		Co-58	<8.73E+00	0.00E+00	8.73E+00



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Media Type: GROUND WATER Concentration (Activity): pCi/l

Sample Point 426 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431554	12/7/2016 - 12/7/2016	Fe-59	<1.64E+01	0.00E+00	1.64E+01
		Co-60	<7.87E+00	0.00E+00	7.87E+00
		Zn-65	<2.06E+01	0.00E+00	2.06E+01
		Zr-95	<1.25E+01	0.00E+00	1.25E+01
		Nb-95	<7.98E+00	0.00E+00	7.98E+00
		I-131	<1.41E+01	0.00E+00	1.41E+01
		Cs-134	<7.39E+00	0.00E+00	7.39E+00
		Cs-137	<7.68E+00	0.00E+00	7.67E+00
		La-140	<8.05E+01	0.00E+00	8.05E+01
		Ba-140	<3.75E+01	0.00E+00	3.75E+01
		Total-Gam	0.00E+00		
		H3GW	<2.16E+02	0.00E+00	2.29E+02

Sample Point 429 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
405776	3/3/2016 - 3/3/2016	H3GW	<-9.5E+01	0.00E+00	2.58E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415663	6/13/2016 - 6/13/2016	Mn-54	<1.16E+01	0.00E+00	1.16E+01
		Co-58	<9.86E+00	0.00E+00	9.86E+00
		Fe-59	<1.94E+01	0.00E+00	1.94E+01
		Co-60	<8.36E+00	0.00E+00	8.36E+00
		Zn-65	<1.68E+01	0.00E+00	1.68E+01
		Zr-95	<1.89E+01	0.00E+00	1.89E+01
		Nb-95	<1.62E+01	0.00E+00	1.62E+01
		I-131	<1.92E+01	0.00E+00	1.92E+01
		Cs-134	<1.09E+01	0.00E+00	1.09E+01
		Cs-137	<9.58E+00	0.00E+00	9.58E+00
		La-140	<3.50E+02	0.00E+00	3.50E+02
		Ba-140	<4.98E+01	0.00E+00	4.98E+01
		Total-Gam	0.00E+00		
		H3GW	<-2.2E+02	0.00E+00	2.65E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
427611	9/14/2016 - 9/14/2016	H3GW	<-6.0E+01	0.00E+00	2.36E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431203	12/5/2016 - 12/5/2016	Mn-54	<9.03E+00	0.00E+00	9.03E+00
		Co-58	<1.06E+01	0.00E+00	1.06E+01
		Fe-59	<1.76E+01	0.00E+00	1.76E+01
		Co-60	<9.70E+00	0.00E+00	9.70E+00
		Zn-65	<1.47E+01	0.00E+00	1.47E+01
		Zr-95	<1.33E+01	0.00E+00	1.33E+01
		Nb-95	<1.04E+01	0.00E+00	1.04E+01
		I-131	<1.70E+01	0.00E+00	1.70E+01
		Cs-134	<6.92E+00	0.00E+00	6.93E+00
		Cs-137	<9.08E+00	0.00E+00	9.08E+00
		La-140	<2.71E+02	0.00E+00	2.71E+02
		Ba-140	<3.98E+01	0.00E+00	3.98E+01
		Total-Gam	0.00E+00		
		H3GW	<1.53E+02	0.00E+00	2.43E+02

Sample Point 612 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
406738	3/9/2016 - 3/9/2016	H3GW	<-1.5E+02	0.00E+00	2.79E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
416811	6/23/2016 - 6/23/2016	Mn-54	<7.79E+00	0.00E+00	7.79E+00
		Co-58	<8.30E+00	0.00E+00	8.30E+00
		Fe-59	<1.67E+01	0.00E+00	1.67E+01
		Co-60	<8.36E+00	0.00E+00	8.36E+00
		Zn-65	<1.67E+01	0.00E+00	1.67E+01



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Media Type: GROUND WATER Concentration (Activity): pCi/l

Sample Point 612 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
416811	6/23/2016 - 6/23/2016	Zr-95	<1.78E+01	0.00E+00	1.78E+01
		Nb-95	<1.20E+01	0.00E+00	1.20E+01
		I-131	<1.37E+01	0.00E+00	1.37E+01
		Cs-134	<8.60E+00	0.00E+00	8.60E+00
		Cs-137	<7.49E+00	0.00E+00	7.49E+00
		La-140	<6.62E+01	0.00E+00	6.62E+01
		Ba-140	<4.08E+01	0.00E+00	4.08E+01
		Total-Gam	0.00E+00		
		H3GW	<4.89E+01	0.00E+00	2.52E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
427930	9/19/2016 - 9/19/2016	H3GW	<1.58E+02	0.00E+00	2.24E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
432297	12/15/2016 - 12/15/2016	Mn-54	<7.22E+00	0.00E+00	7.22E+00
		Co-58	<7.37E+00	0.00E+00	7.37E+00
		Fe-59	<1.69E+01	0.00E+00	1.69E+01
		Co-60	<8.93E+00	0.00E+00	8.93E+00
		Zn-65	<1.28E+01	0.00E+00	1.28E+01
		Zr-95	<1.21E+01	0.00E+00	1.21E+01
		Nb-95	<8.49E+00	0.00E+00	8.49E+00
		I-131	<1.85E+01	0.00E+00	1.85E+01
		Cs-134	<7.93E+00	0.00E+00	7.93E+00
		Cs-137	<8.64E+00	0.00E+00	8.64E+00
		La-140	<8.46E+02	0.00E+00	8.46E+02
		Ba-140	<4.80E+01	0.00E+00	4.81E+01
		Total-Gam	0.00E+00		
		H3GW	<1.22E+02	0.00E+00	2.55E+02

Media Type: SEDIMENT_SHORE Concentration (Activity): pCi/kg dry

Sample Point 500 [INDICATOR - SSW @ 5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
411586	5/2/2016 - 5/2/2016	Mn-54	<1.32E+01	0.00E+00	1.32E+01
		Co-58	<9.42E+00	0.00E+00	9.42E+00
		Fe-59	<1.99E+01	0.00E+00	1.99E+01
		Co-60	<1.18E+01	0.00E+00	1.18E+01
		Zn-65	<2.54E+01	0.00E+00	2.54E+01
		Zr-95	<1.93E+01	0.00E+00	1.93E+01
		Nb-95	<1.33E+01	0.00E+00	1.33E+01
		I-131	<1.54E+01	0.00E+00	1.54E+01
		Cs-134	<1.59E+01	0.00E+00	1.59E+01
		Cs-137	<1.15E+01	0.00E+00	1.15E+01
		Be-7	<9.81E+01	0.00E+00	9.81E+01
		K-40	1.31E+03	2.63E+02	2.98E+01
		Co-57	<8.87E+00	0.00E+00	8.87E+00
		Mo-99	<6.46E+02	0.00E+00	6.46E+02
		Ag-110M	<1.19E+01	0.00E+00	1.19E+01
		Sb-122	<8.90E+01	0.00E+00	8.90E+01
		Sb-125	<2.93E+01	0.00E+00	2.93E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
428564	11/1/2016 - 11/1/2016	Mn-54	<8.10E+00	0.00E+00	8.10E+00
		Co-58	<1.20E+01	0.00E+00	1.20E+01
		Fe-59	<1.95E+01	0.00E+00	1.95E+01
		Co-60	<1.17E+01	0.00E+00	1.17E+01
		Zn-65	<2.06E+01	0.00E+00	2.06E+01
		Zr-95	<1.75E+01	0.00E+00	1.75E+01
		Nb-95	<1.16E+01	0.00E+00	1.16E+01
		I-131	<1.26E+01	0.00E+00	1.26E+01
		Cs-134	<1.20E+01	0.00E+00	1.20E+01
		Cs-137	<8.38E+00	0.00E+00	8.38E+00
		Be-7	<9.57E+01	0.00E+00	9.57E+01

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Media Type: SEDIMENT_SHORE Concentration (Activity): pCi/kg dry

Sample Point 500 [INDICATOR - SSW @ 5 miles]

Sample ID:	428564	Sample Dates:	11/1/2016 - 11/1/2016	Nuclide	Activity	2 Sigma Error	MDA
				K-40	1.20E+03	2.37E+02	1.19E+02
				Co-57	<1.04E+01	0.00E+00	1.04E+01
				Mo-99	<3.27E+02	0.00E+00	3.27E+02
				Ag-110M	<9.32E+00	0.00E+00	9.32E+00
				Sb-122	<4.64E+01	0.00E+00	4.64E+01
				Sb-125	<2.47E+01	0.00E+00	2.47E+01

Sample Point 501 [INDICATOR - -- @ 0 miles]

Sample ID:	413272	Sample Dates:	5/12/2016 - 5/12/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<8.75E+01	0.00E+00	8.75E+01
				Co-58	<7.28E+01	0.00E+00	7.28E+01
				Fe-59	<1.74E+02	0.00E+00	1.74E+02
				Co-60	<5.92E+01	0.00E+00	5.92E+01
				Zn-65	<1.25E+02	0.00E+00	1.25E+02
				Zr-95	<1.29E+02	0.00E+00	1.29E+02
				Nb-95	<1.10E+02	0.00E+00	1.10E+02
				I-131	<3.53E+02	0.00E+00	3.53E+02
				Cs-134	<9.25E+01	0.00E+00	9.25E+01
				Cs-137	<1.31E+02	0.00E+00	1.31E+02
				Be-7	1.58E+03	6.24E+02	7.37E+02
				K-40	1.04E+04	1.87E+03	6.76E+02
				Co-57	<5.33E+01	0.00E+00	5.33E+01
				Mo-99	<9.84E+04	0.00E+00	9.84E+04
				Ag-110M	<5.87E+01	0.00E+00	5.87E+01
				Sb-122	<1.83E+04	0.00E+00	1.83E+04
				Sb-125	<1.58E+02	0.00E+00	1.58E+02
				Fe-55	<2.38E+05	0.00E+00	2.38E+05
				Sr-89	<6.50E+01	0.00E+00	6.50E+01
				Sr-90	<5.82E+01	0.00E+00	5.82E+01

Sample ID:	429796	Sample Dates:	11/15/2016 - 11/15/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<5.75E+01	0.00E+00	5.75E+01
				Co-58	<4.24E+01	0.00E+00	4.24E+01
				Fe-59	<1.23E+02	0.00E+00	1.23E+02
				Co-60	<4.29E+01	0.00E+00	4.29E+01
				Zn-65	<1.07E+02	0.00E+00	1.07E+02
				Zr-95	<8.77E+01	0.00E+00	8.77E+01
				Nb-95	<6.56E+01	0.00E+00	6.56E+01
				I-131	<1.05E+02	0.00E+00	1.05E+02
				Cs-134	<6.36E+01	0.00E+00	6.36E+01
				Cs-137	1.32E+02	5.81E+01	7.77E+01
				Be-7	<5.00E+02	0.00E+00	5.00E+02
				K-40	9.84E+03	1.52E+03	6.58E+02
				Co-57	<3.86E+01	0.00E+00	3.86E+01
				Mo-99	<9.43E+03	0.00E+00	9.43E+03
				Ag-110M	<4.52E+01	0.00E+00	4.52E+01
				Sb-122	<1.36E+03	0.00E+00	1.36E+03
				Sb-125	<1.16E+02	0.00E+00	1.16E+02
				Fe-55	<1.74E+05	0.00E+00	1.74E+05
				Ni-63	<4.49E+04	0.00E+00	4.49E+04
				Sr-89	<5.84E+01	0.00E+00	5.84E+01
				Sr-90	<4.89E+01	0.00E+00	4.89E+01

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 400 [CONTROL - NE @ 0.6 miles]

Sample ID:	399234	Sample Dates:	1/5/2016 - 2/1/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.65E+00	0.00E+00	2.65E+00
				Co-58	<2.64E+00	0.00E+00	2.64E+00
				Fe-59	<6.29E+00	0.00E+00	6.29E+00
				Co-60	<3.00E+00	0.00E+00	3.00E+00
				Zn-65	<5.88E+00	0.00E+00	5.88E+00

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Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 400 [CONTROL - NE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
399234	1/5/2016 - 2/1/2016	Zr-95	<4.40E+00	0.00E+00	4.40E+00
		Nb-95	<3.97E+00	0.00E+00	3.97E+00
		I-131	<1.06E+01	0.00E+00	1.06E+01
		Cs-134	<3.31E+00	0.00E+00	3.31E+00
		Cs-137	<3.09E+00	0.00E+00	3.09E+00
		BaLa-140	<5.44E+00	0.00E+00	5.44E+00
		H3SW	<-7.4E+01	0.00E+00	1.95E+02
401329	2/1/2016 - 3/1/2016	Mn-54	<2.68E+00	0.00E+00	2.68E+00
		Co-58	<3.57E+00	0.00E+00	3.57E+00
		Fe-59	<7.17E+00	0.00E+00	7.17E+00
		Co-60	<2.68E+00	0.00E+00	2.68E+00
		Zn-65	<5.49E+00	0.00E+00	5.49E+00
		Zr-95	<6.07E+00	0.00E+00	6.07E+00
		Nb-95	<3.58E+00	0.00E+00	3.58E+00
		I-131	<1.12E+01	0.00E+00	1.12E+01
		Cs-134	<3.62E+00	0.00E+00	3.62E+00
		Cs-137	<3.58E+00	0.00E+00	3.58E+00
		BaLa-140	<8.13E+00	0.00E+00	8.13E+00
		H3SW	<5.84E+00	0.00E+00	1.89E+02
		407530	3/1/2016 - 4/4/2016	Mn-54	<2.04E+00
Co-58	<2.92E+00			0.00E+00	2.92E+00
Fe-59	<5.22E+00			0.00E+00	5.22E+00
Co-60	<2.14E+00			0.00E+00	2.14E+00
Zn-65	<5.50E+00			0.00E+00	5.50E+00
Zr-95	<2.50E+00			0.00E+00	2.50E+00
Nb-95	<3.08E+00			0.00E+00	3.08E+00
I-131	<1.14E+01			0.00E+00	1.14E+01
Cs-134	<2.41E+00			0.00E+00	2.41E+00
Cs-137	<2.41E+00			0.00E+00	2.41E+00
BaLa-140	<5.19E+00			0.00E+00	5.19E+00
H3SW	<4.07E+01			0.00E+00	1.89E+02
410910	4/4/2016 - 5/2/2016			Mn-54	<3.99E+00
		Co-58	<4.22E+00	0.00E+00	4.22E+00
		Fe-59	<1.11E+01	0.00E+00	1.11E+01
		Co-60	<5.35E+00	0.00E+00	5.35E+00
		Zn-65	<9.38E+00	0.00E+00	9.38E+00
		Zr-95	<9.78E+00	0.00E+00	9.78E+00
		Nb-95	<4.49E+00	0.00E+00	4.49E+00
		I-131	<9.25E+00	0.00E+00	9.25E+00
		Cs-134	<3.74E+00	0.00E+00	3.74E+00
		Cs-137	<3.48E+00	0.00E+00	3.48E+00
		BaLa-140	<9.65E+00	0.00E+00	9.65E+00
		H3SW	<-3.8E+00	0.00E+00	1.96E+02
		412713	5/2/2016 - 6/1/2016	Mn-54	<1.80E+00
Co-58	<1.98E+00			0.00E+00	1.98E+00
Fe-59	<4.84E+00			0.00E+00	4.84E+00
Co-60	<1.99E+00			0.00E+00	1.99E+00
Zn-65	<4.00E+00			0.00E+00	4.00E+00
Zr-95	<3.60E+00			0.00E+00	3.60E+00
Nb-95	<3.27E+00			0.00E+00	3.27E+00
I-131	<1.04E+01			0.00E+00	1.04E+01
Cs-134	<1.78E+00			0.00E+00	1.78E+00
Cs-137	<2.01E+00			0.00E+00	2.01E+00
BaLa-140	<5.78E+00			0.00E+00	5.78E+00
H3SW	<-8.1E+01			0.00E+00	2.04E+02



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Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 400 [CONTROL - NE @ 0.6 miles]

Sample ID: 415375 Sample Dates: 6/1/2016 - 7/4/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.76E+00	0.00E+00	2.76E+00
Co-58	<3.03E+00	0.00E+00	3.03E+00
Fe-59	<6.72E+00	0.00E+00	6.72E+00
Co-60	<2.27E+00	0.00E+00	2.27E+00
Zn-65	<5.01E+00	0.00E+00	5.01E+00
Zr-95	<4.95E+00	0.00E+00	4.95E+00
Nb-95	<2.99E+00	0.00E+00	2.99E+00
I-131	<1.20E+01	0.00E+00	1.20E+01
Cs-134	<2.55E+00	0.00E+00	2.55E+00
Cs-137	<2.34E+00	0.00E+00	2.34E+00
BaLa-140	<6.84E+00	0.00E+00	6.84E+00
H3SW	<4.11E+01	0.00E+00	1.92E+02

Sample ID: 417777 Sample Dates: 7/4/2016 - 8/1/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.20E+00	0.00E+00	3.20E+00
Co-58	<2.79E+00	0.00E+00	2.79E+00
Fe-59	<5.24E+00	0.00E+00	5.24E+00
Co-60	<1.87E+00	0.00E+00	1.87E+00
Zn-65	<7.24E+00	0.00E+00	7.24E+00
Zr-95	<5.38E+00	0.00E+00	5.38E+00
Nb-95	<3.66E+00	0.00E+00	3.66E+00
I-131	<1.17E+01	0.00E+00	1.17E+01
Cs-134	<3.24E+00	0.00E+00	3.24E+00
Cs-137	<3.18E+00	0.00E+00	3.18E+00
BaLa-140	<7.97E+00	0.00E+00	7.97E+00
H3SW	<1.39E+02	0.00E+00	1.83E+02

Sample ID: 419998 Sample Dates: 8/1/2016 - 9/1/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.31E+00	0.00E+00	1.31E+00
Co-58	<1.50E+00	0.00E+00	1.50E+00
Fe-59	<3.19E+00	0.00E+00	3.19E+00
Co-60	<1.06E+00	0.00E+00	1.06E+00
Zn-65	<2.34E+00	0.00E+00	2.34E+00
Zr-95	<2.66E+00	0.00E+00	2.66E+00
Nb-95	<1.71E+00	0.00E+00	1.71E+00
I-131	<1.11E+01	0.00E+00	1.11E+01
Cs-134	<1.33E+00	0.00E+00	1.33E+00
Cs-137	<1.13E+00	0.00E+00	1.13E+00
BaLa-140	<4.26E+00	0.00E+00	4.26E+00
H3SW	<-2.6E+01	0.00E+00	1.99E+02

Sample ID: 423289 Sample Dates: 9/1/2016 - 10/3/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.43E+00	0.00E+00	2.43E+00
Co-58	<2.93E+00	0.00E+00	2.93E+00
Fe-59	<5.12E+00	0.00E+00	5.12E+00
Co-60	<2.16E+00	0.00E+00	2.16E+00
Zn-65	<5.69E+00	0.00E+00	5.69E+00
Zr-95	<3.61E+00	0.00E+00	3.61E+00
Nb-95	<2.90E+00	0.00E+00	2.90E+00
I-131	<1.01E+01	0.00E+00	1.01E+01
Cs-134	<2.62E+00	0.00E+00	2.62E+00
Cs-137	<2.66E+00	0.00E+00	2.66E+00
BaLa-140	<6.68E+00	0.00E+00	6.68E+00
H3SW	<-3.9E+01	0.00E+00	1.92E+02

Sample ID: 426336 Sample Dates: 10/3/2016 - 11/1/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.04E+00	0.00E+00	3.04E+00
Co-58	<2.53E+00	0.00E+00	2.53E+00
Fe-59	<6.40E+00	0.00E+00	6.40E+00
Co-60	<2.44E+00	0.00E+00	2.44E+00
Zn-65	<6.51E+00	0.00E+00	6.51E+00
Zr-95	<5.21E+00	0.00E+00	5.21E+00
Nb-95	<4.47E+00	0.00E+00	4.47E+00
I-131	<1.14E+01	0.00E+00	1.14E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 400 [CONTROL - NE @ 0.6 miles]

Sample ID:	426336	Sample Dates:	10/3/2016 - 11/1/2016	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<3.27E+00	0.00E+00	3.27E+00
				Cs-137	<2.55E+00	0.00E+00	2.55E+00
				BaLa-140	<9.17E+00	0.00E+00	9.17E+00
				H3SW	<3.11E+01	0.00E+00	1.94E+02

Sample ID:	428864	Sample Dates:	11/1/2016 - 12/1/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<1.75E+00	0.00E+00	1.75E+00
				Co-58	<1.93E+00	0.00E+00	1.93E+00
				Fe-59	<4.50E+00	0.00E+00	4.50E+00
				Co-60	<1.71E+00	0.00E+00	1.71E+00
				Zn-65	<3.85E+00	0.00E+00	3.85E+00
				Zr-95	<4.24E+00	0.00E+00	4.24E+00
				Nb-95	<2.53E+00	0.00E+00	2.53E+00
				I-131	<1.01E+01	0.00E+00	1.01E+01
				Cs-134	<2.27E+00	0.00E+00	2.27E+00
				Cs-137	<1.72E+00	0.00E+00	1.72E+00
				BaLa-140	<6.44E+00	0.00E+00	6.44E+00
				H3SW	<6.3E+01	0.00E+00	1.86E+02

Sample ID:	431034	Sample Dates:	12/1/2016 - 1/3/2017	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.67E+00	0.00E+00	3.67E+00
				Co-58	<3.31E+00	0.00E+00	3.31E+00
				Fe-59	<6.48E+00	0.00E+00	6.48E+00
				Co-60	<3.72E+00	0.00E+00	3.72E+00
				Zn-65	<5.43E+00	0.00E+00	5.43E+00
				Zr-95	<6.13E+00	0.00E+00	6.13E+00
				Nb-95	<3.65E+00	0.00E+00	3.65E+00
				I-131	<1.14E+01	0.00E+00	1.14E+01
				Cs-134	<3.61E+00	0.00E+00	3.61E+00
				Cs-137	<3.04E+00	0.00E+00	3.04E+00
				BaLa-140	<6.67E+00	0.00E+00	6.67E+00
				H3SW	<5.6E+01	0.00E+00	1.93E+02

Sample Point 401 [INDICATOR - SSW @ 4.9 miles]

Sample ID:	399235	Sample Dates:	1/5/2016 - 2/1/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<4.07E+00	0.00E+00	4.07E+00
				Co-58	<3.25E+00	0.00E+00	3.25E+00
				Fe-59	<6.96E+00	0.00E+00	6.96E+00
				Co-60	<3.94E+00	0.00E+00	3.94E+00
				Zn-65	<9.06E+00	0.00E+00	9.06E+00
				Zr-95	<6.77E+00	0.00E+00	6.77E+00
				Nb-95	<4.28E+00	0.00E+00	4.28E+00
				I-131	<1.17E+01	0.00E+00	1.17E+01
				Cs-134	<3.82E+00	0.00E+00	3.82E+00
				Cs-137	<3.75E+00	0.00E+00	3.75E+00
				BaLa-140	<9.75E+00	0.00E+00	9.75E+00
				H3SW	<1.50E+02	0.00E+00	1.96E+02

Sample ID:	401330	Sample Dates:	2/1/2016 - 3/1/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.54E+00	0.00E+00	3.54E+00
				Co-58	<3.95E+00	0.00E+00	3.95E+00
				Fe-59	<9.02E+00	0.00E+00	9.02E+00
				Co-60	<3.55E+00	0.00E+00	3.55E+00
				Zn-65	<7.06E+00	0.00E+00	7.06E+00
				Zr-95	<6.70E+00	0.00E+00	6.70E+00
				Nb-95	<4.65E+00	0.00E+00	4.65E+00
				I-131	<1.19E+01	0.00E+00	1.19E+01
				Cs-134	<3.57E+00	0.00E+00	3.57E+00
				Cs-137	<3.11E+00	0.00E+00	3.11E+00
				BaLa-140	<7.22E+00	0.00E+00	7.22E+00
				H3SW	6.02E+02	1.27E+02	1.90E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 401 [INDICATOR - SSW @ 4.9 miles]

Sample ID:	407531	Sample Dates:	3/1/2016 - 4/4/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.35E+00	0.00E+00	2.35E+00
				Co-58	<2.37E+00	0.00E+00	2.37E+00
				Fe-59	<5.20E+00	0.00E+00	5.20E+00
				Co-60	<1.72E+00	0.00E+00	1.72E+00
				Zn-65	<4.58E+00	0.00E+00	4.58E+00
				Zr-95	<4.80E+00	0.00E+00	4.80E+00
				Nb-95	<3.22E+00	0.00E+00	3.22E+00
				I-131	<1.20E+01	0.00E+00	1.20E+01
				Cs-134	<2.39E+00	0.00E+00	2.39E+00
				Cs-137	<2.37E+00	0.00E+00	2.37E+00
				BaLa-140	<6.84E+00	0.00E+00	6.84E+00
				H3SW	2.67E+02	1.18E+02	1.89E+02

Sample ID:	410911	Sample Dates:	4/4/2016 - 5/2/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<1.34E+00	0.00E+00	1.34E+00
				Co-58	<1.39E+00	0.00E+00	1.39E+00
				Fe-59	<2.59E+00	0.00E+00	2.59E+00
				Co-60	<1.30E+00	0.00E+00	1.30E+00
				Zn-65	<2.76E+00	0.00E+00	2.76E+00
				Zr-95	<2.43E+00	0.00E+00	2.43E+00
				Nb-95	<1.83E+00	0.00E+00	1.83E+00
				I-131	<5.16E+00	0.00E+00	5.16E+00
				Cs-134	<1.54E+00	0.00E+00	1.54E+00
				Cs-137	<1.39E+00	0.00E+00	1.39E+00
				BaLa-140	<2.60E+00	0.00E+00	2.60E+00
				H3SW	<4.17E+01	0.00E+00	1.96E+02

Sample ID:	412714	Sample Dates:	5/2/2016 - 6/1/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<1.95E+00	0.00E+00	1.95E+00
				Co-58	<2.31E+00	0.00E+00	2.31E+00
				Fe-59	<4.96E+00	0.00E+00	4.96E+00
				Co-60	<2.36E+00	0.00E+00	2.36E+00
				Zn-65	<4.10E+00	0.00E+00	4.10E+00
				Zr-95	<4.11E+00	0.00E+00	4.11E+00
				Nb-95	<3.07E+00	0.00E+00	3.07E+00
				I-131	<1.05E+01	0.00E+00	1.05E+01
				Cs-134	<2.15E+00	0.00E+00	2.15E+00
				Cs-137	<2.05E+00	0.00E+00	2.05E+00
				BaLa-140	<5.93E+00	0.00E+00	5.93E+00
				H3SW	<6.88E+01	0.00E+00	2.05E+02

Sample ID:	415376	Sample Dates:	6/1/2016 - 7/4/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.21E+00	0.00E+00	2.21E+00
				Co-58	<2.62E+00	0.00E+00	2.62E+00
				Fe-59	<5.39E+00	0.00E+00	5.39E+00
				Co-60	<2.13E+00	0.00E+00	2.13E+00
				Zn-65	<5.25E+00	0.00E+00	5.25E+00
				Zr-95	<3.73E+00	0.00E+00	3.73E+00
				Nb-95	<2.78E+00	0.00E+00	2.78E+00
				I-131	<1.14E+01	0.00E+00	1.14E+01
				Cs-134	<2.44E+00	0.00E+00	2.44E+00
				Cs-137	<2.24E+00	0.00E+00	2.24E+00
				BaLa-140	<5.69E+00	0.00E+00	5.69E+00
				H3SW	<9.18E+01	0.00E+00	1.92E+02

Sample ID:	417778	Sample Dates:	7/4/2016 - 8/1/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<1.51E+00	0.00E+00	1.51E+00
				Co-58	<1.93E+00	0.00E+00	1.93E+00
				Fe-59	<3.42E+00	0.00E+00	3.42E+00
				Co-60	<1.51E+00	0.00E+00	1.51E+00
				Zn-65	<2.49E+00	0.00E+00	2.49E+00
				Zr-95	<3.00E+00	0.00E+00	3.00E+00
				Nb-95	<2.01E+00	0.00E+00	2.01E+00
				I-131	<5.84E+00	0.00E+00	5.84E+00



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 401 [INDICATOR - SSW @ 4.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
417778	7/4/2016 - 8/1/2016	Cs-134	<1.65E+00	0.00E+00	1.65E+00
		Cs-137	<1.82E+00	0.00E+00	1.82E+00
		BaLa-140	<4.27E+00	0.00E+00	4.27E+00
		H3SW	3.23E+02	1.16E+02	1.84E+02
419999	8/1/2016 - 9/1/2016	Mn-54	<1.03E+00	0.00E+00	1.03E+00
		Co-58	<1.11E+00	0.00E+00	1.11E+00
		Fe-59	<2.71E+00	0.00E+00	2.71E+00
		Co-60	<9.99E-01	0.00E+00	9.99E-01
		Zn-65	<2.03E+00	0.00E+00	2.03E+00
		Zr-95	<2.09E+00	0.00E+00	2.09E+00
		Nb-95	<1.68E+00	0.00E+00	1.68E+00
		I-131	<9.35E+00	0.00E+00	9.35E+00
		Cs-134	<1.11E+00	0.00E+00	1.11E+00
		Cs-137	<1.08E+00	0.00E+00	1.08E+00
		BaLa-140	<3.84E+00	0.00E+00	3.84E+00
		H3SW	<5.27E+01	0.00E+00	1.99E+02
423290	9/1/2016 - 10/3/2016	Mn-54	<2.42E+00	0.00E+00	2.42E+00
		Co-58	<2.84E+00	0.00E+00	2.84E+00
		Fe-59	<6.19E+00	0.00E+00	6.19E+00
		Co-60	<2.30E+00	0.00E+00	2.30E+00
		Zn-65	<5.98E+00	0.00E+00	5.98E+00
		Zr-95	<4.76E+00	0.00E+00	4.76E+00
		Nb-95	<3.82E+00	0.00E+00	3.82E+00
		I-131	<1.11E+01	0.00E+00	1.11E+01
		Cs-134	<2.93E+00	0.00E+00	2.93E+00
		Cs-137	<2.51E+00	0.00E+00	2.51E+00
		BaLa-140	<7.21E+00	0.00E+00	7.21E+00
		H3SW	<1.28E+02	0.00E+00	1.92E+02
426337	10/3/2016 - 11/1/2016	Mn-54	<3.11E+00	0.00E+00	3.11E+00
		Co-58	<3.28E+00	0.00E+00	3.28E+00
		Fe-59	<6.20E+00	0.00E+00	6.20E+00
		Co-60	<3.11E+00	0.00E+00	3.11E+00
		Zn-65	<6.80E+00	0.00E+00	6.80E+00
		Zr-95	<6.16E+00	0.00E+00	6.16E+00
		Nb-95	<4.78E+00	0.00E+00	4.78E+00
		I-131	<1.09E+01	0.00E+00	1.09E+01
		Cs-134	<2.57E+00	0.00E+00	2.57E+00
		Cs-137	<3.53E+00	0.00E+00	3.53E+00
		BaLa-140	<5.22E+00	0.00E+00	5.22E+00
		H3SW	2.25E+02	1.19E+02	1.92E+02
428865	11/1/2016 - 12/1/2016	Mn-54	<2.53E+00	0.00E+00	2.53E+00
		Co-58	<2.25E+00	0.00E+00	2.25E+00
		Fe-59	<5.52E+00	0.00E+00	5.52E+00
		Co-60	<2.36E+00	0.00E+00	2.36E+00
		Zn-65	<5.43E+00	0.00E+00	5.43E+00
		Zr-95	<5.14E+00	0.00E+00	5.14E+00
		Nb-95	<2.93E+00	0.00E+00	2.93E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<2.42E+00	0.00E+00	2.42E+00
		Cs-137	<2.46E+00	0.00E+00	2.46E+00
		BaLa-140	<5.35E+00	0.00E+00	5.35E+00
		H3SW	1.97E+02	1.14E+02	1.87E+02
431035	12/1/2016 - 1/3/2017	Mn-54	<2.88E+00	0.00E+00	2.88E+00
		Co-58	<3.46E+00	0.00E+00	3.46E+00



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 401 [INDICATOR - SSW @ 4.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431035	12/1/2016 - 1/3/2017	Fe-59	<7.14E+00	0.00E+00	7.14E+00
		Co-60	<4.19E+00	0.00E+00	4.19E+00
		Zn-65	<4.64E+00	0.00E+00	4.64E+00
		Zr-95	<6.48E+00	0.00E+00	6.48E+00
		Nb-95	<4.60E+00	0.00E+00	4.60E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.55E+00	0.00E+00	3.55E+00
		Cs-137	<3.17E+00	0.00E+00	3.17E+00
		BaLa-140	<1.03E+01	0.00E+00	1.03E+01
		H3SW	<1.28E+02	0.00E+00	1.90E+02

Sample Point 494 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400570	1/6/2016 - 1/6/2016	H3SW	<-1.7E+02	0.00E+00	2.66E+02
399954	1/12/2016 - 1/12/2016	H3SW	<1.57E+02	0.00E+00	2.69E+02
400276	1/19/2016 - 1/19/2016	H3SW	<4.07E+00	0.00E+00	2.78E+02
400927	1/26/2016 - 1/26/2016	H3SW	<-6.7E+01	0.00E+00	2.72E+02
401290	2/2/2016 - 2/2/2016	H3SW	<7.97E+01	0.00E+00	2.77E+02
401753	2/9/2016 - 2/9/2016	H3SW	<-5.0E+01	0.00E+00	2.61E+02
402264	2/16/2016 - 2/16/2016	H3SW	<7.72E+01	0.00E+00	2.57E+02
402986	2/23/2016 - 2/23/2016	H3SW	<-5.3E+01	0.00E+00	2.78E+02
404470	3/1/2016 - 3/1/2016	H3SW	<9.33E+01	0.00E+00	2.60E+02
405356	3/8/2016 - 3/8/2016	H3SW	<-2.0E+01	0.00E+00	2.68E+02
405973	3/15/2016 - 3/15/2016	H3SW	<-2.8E+02	0.00E+00	2.84E+02
406304	3/22/2016 - 3/22/2016	H3SW	<-7.4E+01	0.00E+00	2.58E+02
407501	3/29/2016 - 3/29/2016	H3SW	<2.01E+00	0.00E+00	2.71E+02
408055	4/5/2016 - 4/5/2016	H3SW	<-7.7E+01	0.00E+00	2.67E+02
409394	4/12/2016 - 4/12/2016	H3SW	<1.86E+01	0.00E+00	2.60E+02
409728	4/19/2016 - 4/19/2016	H3SW	<7.05E+01	0.00E+00	2.51E+02
410881	4/26/2016 - 4/26/2016	H3SW	<-8.2E+01	0.00E+00	2.76E+02
411381	5/3/2016 - 5/3/2016	H3SW	<-1.1E+02	0.00E+00	2.58E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 494 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
411705	5/10/2016 - 5/10/2016	H3SW	<-1.9E+00	0.00E+00	2.57E+02
412167	5/17/2016 - 5/17/2016	H3SW	<7.09E+01	0.00E+00	2.57E+02
412684	5/24/2016 - 5/24/2016	H3SW	<5.73E+01	0.00E+00	2.58E+02
413287	6/1/2016 - 6/1/2016	H3SW	<-1.4E+02	0.00E+00	2.62E+02
413834	6/7/2016 - 6/7/2016	H3SW	<2.15E+02	0.00E+00	2.46E+02
414974	6/14/2016 - 6/14/2016	H3SW	<-2.3E+02	0.00E+00	2.74E+02
415339	6/21/2016 - 6/21/2016	H3SW	<6.79E+01	0.00E+00	2.49E+02
416339	6/28/2016 - 6/28/2016	H3SW	<5.64E+00	0.00E+00	2.62E+02
416963	7/5/2016 - 7/5/2016	H3SW	<-7.3E+01	0.00E+00	2.70E+02
417356	7/12/2016 - 7/12/2016	H3SW	<7.57E+01	0.00E+00	2.57E+02
417717	7/19/2016 - 7/19/2016	H3SW	<5.09E+01	0.00E+00	2.53E+02
418203	7/26/2016 - 7/26/2016	H3SW	<-2.3E+01	0.00E+00	2.59E+02
418931	8/2/2016 - 8/2/2016	H3SW	<-2.2E+02	0.00E+00	2.77E+02
423170	8/9/2016 - 8/9/2016	H3SW	<1.37E+01	0.00E+00	2.61E+02
423212	8/16/2016 - 8/16/2016	H3SW	<1.00E+02	0.00E+00	2.55E+02
423226	8/23/2016 - 8/23/2016	H3SW	<-1.1E+02	0.00E+00	2.67E+02
424356	8/30/2016 - 8/30/2016	H3SW	<2.59E+01	0.00E+00	2.61E+02
427535	9/6/2016 - 9/6/2016	H3SW	<-6.0E+01	0.00E+00	2.38E+02
423255	9/13/2016 - 9/13/2016	H3SW	<-1.9E+01	0.00E+00	2.28E+02
424373	9/21/2016 - 9/21/2016	H3SW	<-4.9E+01	0.00E+00	2.46E+02
425372	9/27/2016 - 9/27/2016	H3SW	<3.58E+01	0.00E+00	2.36E+02
425934	10/4/2016 - 10/4/2016	H3SW	<1.79E+02	0.00E+00	2.48E+02
426307	10/12/2016 - 10/12/2016	H3SW	<1.92E+02	0.00E+00	2.48E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 494 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
426996	10/18/2016 - 10/18/2016	H3SW	<-1.1E+02	0.00E+00	2.49E+02
427653	10/26/2016 - 10/26/2016	H3SW	<-8.0E+01	0.00E+00	2.44E+02
428152	11/1/2016 - 11/1/2016	H3SW	<2.12E+02	0.00E+00	2.29E+02
428827	11/8/2016 - 11/8/2016	H3SW	<-7.0E+00	0.00E+00	2.45E+02
429345	11/15/2016 - 11/15/2016	H3SW	<-3.1E+01	0.00E+00	2.41E+02
429896	11/21/2016 - 11/21/2016	H3SW	3.18E+03	1.96E+02	2.46E+02
430516	11/29/2016 - 11/29/2016	H3SW	<7.21E+01	0.00E+00	2.41E+02
431004	12/6/2016 - 12/6/2016	H3SW	<5.28E+00	0.00E+00	2.51E+02
431412	12/13/2016 - 12/13/2016	H3SW	<7.16E+01	0.00E+00	2.54E+02
431743	12/19/2016 - 12/19/2016	H3SW	<1.02E+02	0.00E+00	2.34E+02
432144	12/27/2016 - 12/27/2016	H3SW	<9.69E+01	0.00E+00	2.42E+02

Sample Point 495 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400458	1/6/2016 - 1/6/2016	H3SW	<-1.3E+02	0.00E+00	2.65E+02
399955	1/12/2016 - 1/12/2016	H3SW	<-2.7E+02	0.00E+00	2.86E+02
400277	1/19/2016 - 1/19/2016	H3SW	<8.58E+01	0.00E+00	2.79E+02
400727	1/6/2016 - 1/26/2016	Mn-54	<5.83E+00	0.00E+00	5.83E+00
		Co-58	<7.62E+00	0.00E+00	7.62E+00
		Fe-59	<1.50E+01	0.00E+00	1.50E+01
		Co-60	<8.37E+00	0.00E+00	8.37E+00
		Zn-65	<1.80E+01	0.00E+00	1.80E+01
		Zr-95	<1.38E+01	0.00E+00	1.38E+01
		Nb-95	<1.04E+01	0.00E+00	1.04E+01
		I-131	<2.21E+01	0.00E+00	2.21E+01
		Cs-134	<5.90E+00	0.00E+00	5.90E+00
		Cs-137	<6.77E+00	0.00E+00	6.77E+00
		La-140	<5.66E+02	0.00E+00	5.66E+02
		Ba-140	<6.35E+01	0.00E+00	6.35E+01
		Total-Gam	0.00E+00		
400928	1/26/2016 - 1/26/2016	H3SW	<-6.6E+01	0.00E+00	2.61E+02
401291	2/2/2016 - 2/2/2016	H3SW	<-1.1E+01	0.00E+00	2.61E+02
401754	2/9/2016 - 2/9/2016	H3SW	<8.23E+00	0.00E+00	2.74E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 495 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
402265	2/16/2016 - 2/16/2016	H3SW	<6.5E+01	0.00E+00	2.59E+02
402974	2/2/2016 - 2/23/2016	Mn-54	<9.38E+00	0.00E+00	9.38E+00
		Co-58	<1.10E+01	0.00E+00	1.10E+01
		Fe-59	<2.39E+01	0.00E+00	2.39E+01
		Co-60	<9.70E+00	0.00E+00	9.70E+00
		Zn-65	<1.73E+01	0.00E+00	1.73E+01
		Zr-95	<1.83E+01	0.00E+00	1.83E+01
		Nb-95	<1.50E+01	0.00E+00	1.50E+01
		I-131	<4.21E+01	0.00E+00	4.21E+01
		Cs-134	<8.31E+00	0.00E+00	8.31E+00
		Cs-137	<5.53E+00	0.00E+00	5.53E+00
		La-140	<1.88E+04	0.00E+00	1.88E+04
		Ba-140	<8.37E+01	0.00E+00	8.37E+01
		Total-Gam	0.00E+00		
402987	2/23/2016 - 2/23/2016	H3SW	<1.3E+01	0.00E+00	2.63E+02
404471	3/1/2016 - 3/1/2016	H3SW	<1.23E+02	0.00E+00	2.56E+02
405357	3/8/2016 - 3/8/2016	H3SW	<2.0E+02	0.00E+00	2.67E+02
405974	3/15/2016 - 3/15/2016	H3SW	<1.7E+02	0.00E+00	2.81E+02
406305	3/22/2016 - 3/22/2016	H3SW	<2.97E+01	0.00E+00	2.54E+02
406649	3/1/2016 - 3/29/2016	Mn-54	<1.13E+01	0.00E+00	1.13E+01
		Co-58	<9.53E+00	0.00E+00	9.53E+00
		Fe-59	<1.46E+01	0.00E+00	1.46E+01
		Co-60	<6.91E+00	0.00E+00	6.91E+00
		Zn-65	<2.19E+01	0.00E+00	2.19E+01
		Zr-95	<1.51E+01	0.00E+00	1.51E+01
		Nb-95	<1.24E+01	0.00E+00	1.24E+01
		I-131	<3.47E+01	0.00E+00	3.47E+01
		Cs-134	<8.48E+00	0.00E+00	8.48E+00
		Cs-137	<7.82E+00	0.00E+00	7.82E+00
		La-140	<3.61E+03	0.00E+00	3.61E+03
		Ba-140	<5.48E+01	0.00E+00	5.48E+01
		Total-Gam	0.00E+00		
407502	3/29/2016 - 3/29/2016	H3SW	<1.7E+02	0.00E+00	2.64E+02
408056	4/5/2016 - 4/5/2016	H3SW	<6.1E+01	0.00E+00	2.69E+02
409395	4/12/2016 - 4/12/2016	H3SW	<1.8E+02	0.00E+00	2.69E+02
409729	4/19/2016 - 4/19/2016	H3SW	<2.59E+01	0.00E+00	2.49E+02
410169	4/5/2016 - 4/26/2016	Mn-54	<1.04E+01	0.00E+00	1.04E+01
		Co-58	<9.48E+00	0.00E+00	9.48E+00
		Fe-59	<1.57E+01	0.00E+00	1.57E+01
		Co-60	<4.83E+00	0.00E+00	4.83E+00
		Zn-65	<1.89E+01	0.00E+00	1.89E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 495 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
410169	4/5/2016 - 4/26/2016	Zr-95	<1.79E+01	0.00E+00	1.79E+01
		Nb-95	<9.66E+00	0.00E+00	9.66E+00
		I-131	<2.15E+01	0.00E+00	2.15E+01
		Cs-134	<9.22E+00	0.00E+00	9.22E+00
		Cs-137	<8.45E+00	0.00E+00	8.45E+00
		La-140	<1.11E+03	0.00E+00	1.11E+03
		Ba-140	<5.80E+01	0.00E+00	5.80E+01
		Total-Gam	0.00E+00		
410882	4/26/2016 - 4/26/2016	H3SW	<2.18E+02	0.00E+00	2.70E+02
411382	5/3/2016 - 5/3/2016	H3SW	<-2.7E+02	0.00E+00	2.80E+02
411706	5/10/2016 - 5/10/2016	H3SW	<-1.3E+02	0.00E+00	2.59E+02
412168	5/17/2016 - 5/17/2016	H3SW	<-4.4E+01	0.00E+00	2.77E+02
412676	5/3/2016 - 5/24/2016	Mn-54	<9.16E+00	0.00E+00	9.16E+00
		Co-58	<8.63E+00	0.00E+00	8.63E+00
		Fe-59	<2.11E+01	0.00E+00	2.11E+01
		Co-60	<8.41E+00	0.00E+00	8.41E+00
		Zn-65	<1.76E+01	0.00E+00	1.76E+01
		Zr-95	<2.07E+01	0.00E+00	2.07E+01
		Nb-95	<1.51E+01	0.00E+00	1.51E+01
		I-131	<5.99E+01	0.00E+00	5.99E+01
		Cs-134	<1.00E+01	0.00E+00	1.00E+01
		Cs-137	<9.04E+00	0.00E+00	9.04E+00
		La-140	<1.86E+05	0.00E+00	1.86E+05
		Ba-140	<1.20E+02	0.00E+00	1.20E+02
		Total-Gam	0.00E+00		
412685	5/24/2016 - 5/24/2016	H3SW	<2.45E+01	0.00E+00	2.60E+02
413288	6/1/2016 - 6/1/2016	H3SW	<-1.4E+02	0.00E+00	2.62E+02
413835	6/7/2016 - 6/7/2016	H3SW	<1.85E+01	0.00E+00	2.51E+02
414975	6/14/2016 - 6/14/2016	H3SW	<-1.8E+02	0.00E+00	2.59E+02
415340	6/21/2016 - 6/21/2016	H3SW	<-1.8E+02	0.00E+00	2.63E+02
415642	6/1/2016 - 6/27/2016	Mn-54	<9.10E+00	0.00E+00	9.10E+00
		Co-58	<1.01E+01	0.00E+00	1.01E+01
		Fe-59	<2.14E+01	0.00E+00	2.14E+01
		Co-60	<7.67E+00	0.00E+00	7.67E+00
		Zn-65	<2.47E+01	0.00E+00	2.47E+01
		Zr-95	<1.78E+01	0.00E+00	1.78E+01
		Nb-95	<1.35E+01	0.00E+00	1.35E+01
		I-131	<5.70E+01	0.00E+00	5.70E+01
		Cs-134	<8.32E+00	0.00E+00	8.32E+00
		Cs-137	<9.59E+00	0.00E+00	9.59E+00
		La-140	<4.78E+04	0.00E+00	4.78E+04
		Ba-140	<8.55E+01	0.00E+00	8.55E+01
		Total-Gam	0.00E+00		



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 495 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
416340	6/28/2016 - 6/28/2016	H3SW	<5.24E+01	0.00E+00	2.52E+02
416964	7/5/2016 - 7/5/2016	H3SW	<-1.5E+01	0.00E+00	2.61E+02
417357	7/12/2016 - 7/12/2016	H3SW	<-4.7E+01	0.00E+00	2.53E+02
417718	7/19/2016 - 7/19/2016	H3SW	<7.57E+01	0.00E+00	2.57E+02
418190	7/5/2016 - 7/26/2016	Mn-54	<8.50E+00	0.00E+00	8.50E+00
		Co-58	<1.15E+01	0.00E+00	1.15E+01
		Fe-59	<2.55E+01	0.00E+00	2.55E+01
		Co-60	<9.41E+00	0.00E+00	9.41E+00
		Zn-65	<1.84E+01	0.00E+00	1.84E+01
		Zr-95	<2.34E+01	0.00E+00	2.34E+01
		Nb-95	<1.57E+01	0.00E+00	1.57E+01
		I-131	<7.15E+01	0.00E+00	7.15E+01
		Cs-134	<8.28E+00	0.00E+00	8.28E+00
		Cs-137	<1.25E+01	0.00E+00	1.25E+01
		La-140	<4.21E+05	0.00E+00	4.21E+05
		Ba-140	<1.17E+02	0.00E+00	1.17E+02
		Total-Gam	0.00E+00		
418204	7/26/2016 - 7/26/2016	H3SW	<1.32E+01	0.00E+00	2.59E+02
418932	8/2/2016 - 8/2/2016	H3SW	<-6.6E+01	0.00E+00	2.61E+02
423157	8/9/2016 - 8/9/2016	H3SW	<-8.8E+01	0.00E+00	2.71E+02
423200	8/16/2016 - 8/16/2016	H3SW	<2.08E+01	0.00E+00	2.56E+02
423214	8/23/2016 - 8/23/2016	H3SW	<5.88E+00	0.00E+00	2.64E+02
424654	8/2/2016 - 8/30/2016	Mn-54	<9.78E+00	0.00E+00	9.78E+00
		Co-58	<1.34E+01	0.00E+00	1.34E+01
		Fe-59	<2.74E+01	0.00E+00	2.74E+01
		Co-60	<7.98E+00	0.00E+00	7.98E+00
		Zn-65	<1.88E+01	0.00E+00	1.88E+01
		Zr-95	<1.56E+01	0.00E+00	1.56E+01
		Nb-95	<2.02E+01	0.00E+00	2.02E+01
		I-131	<1.97E+02	0.00E+00	1.97E+02
		Cs-134	<7.62E+00	0.00E+00	7.62E+00
		Cs-137	<1.11E+01	0.00E+00	1.11E+01
		La-140	<1.88E+07	0.00E+00	1.88E+07
		Ba-140	<2.63E+02	0.00E+00	2.63E+02
		Total-Gam	0.00E+00		
424342	8/30/2016 - 8/30/2016	H3SW	<-2.8E+01	0.00E+00	2.60E+02
427402	9/6/2016 - 9/6/2016	H3SW	<-9.8E+01	0.00E+00	2.39E+02
423256	9/13/2016 - 9/13/2016	H3SW	<-9.0E+01	0.00E+00	2.34E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 495 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
424374	9/21/2016 - 9/21/2016	H3SW	<-3.9E+01	0.00E+00	2.31E+02
424732	9/6/2016 - 9/27/2016	Mn-54	<7.91E+00	0.00E+00	7.91E+00
		Co-58	<1.33E+01	0.00E+00	1.33E+01
		Fe-59	<3.00E+01	0.00E+00	3.00E+01
		Co-60	<6.69E+00	0.00E+00	6.69E+00
		Zn-65	<2.12E+01	0.00E+00	2.12E+01
		Zr-95	<2.30E+01	0.00E+00	2.30E+01
		Nb-95	<1.91E+01	0.00E+00	1.91E+01
		I-131	<6.38E+02	0.00E+00	6.38E+02
		Cs-134	<8.24E+00	0.00E+00	8.24E+00
		Cs-137	<7.95E+00	0.00E+00	7.95E+00
		La-140	<2.00E+10	0.00E+00	2.00E+10
		Ba-140	<5.15E+02	0.00E+00	5.15E+02
		Total-Gam	0.00E+00		
425373	9/27/2016 - 9/27/2016	H3SW	<7.46E+01	0.00E+00	2.34E+02
425935	10/4/2016 - 10/4/2016	H3SW	<2.21E+02	0.00E+00	2.27E+02
426308	10/12/2016 - 10/12/2016	H3SW	<2.43E+01	0.00E+00	2.43E+02
426997	10/18/2016 - 10/18/2016	H3SW	<1.10E+02	0.00E+00	2.49E+02
427645	10/4/2016 - 10/26/2016	Mn-54	<5.33E+00	0.00E+00	5.33E+00
		Co-58	<1.17E+01	0.00E+00	1.17E+01
		Fe-59	<1.85E+01	0.00E+00	1.85E+01
		Co-60	<5.42E+00	0.00E+00	5.42E+00
		Zn-65	<1.75E+01	0.00E+00	1.75E+01
		Zr-95	<1.33E+01	0.00E+00	1.33E+01
		Nb-95	<1.38E+01	0.00E+00	1.38E+01
		I-131	<8.25E+01	0.00E+00	8.25E+01
		Cs-134	<6.38E+00	0.00E+00	6.38E+00
		Cs-137	<6.88E+00	0.00E+00	6.88E+00
		La-140	<2.25E+06	0.00E+00	2.25E+06
		Ba-140	<1.05E+02	0.00E+00	1.05E+02
		Total-Gam	0.00E+00		
427654	10/26/2016 - 10/26/2016	H3SW	<1.64E+02	0.00E+00	2.41E+02
428153	11/1/2016 - 11/1/2016	H3SW	<2.22E+02	0.00E+00	2.41E+02
428828	11/8/2016 - 11/8/2016	H3SW	<-4.5E+01	0.00E+00	2.60E+02
429346	11/15/2016 - 11/15/2016	H3SW	<1.78E+02	0.00E+00	2.46E+02
429897	11/21/2016 - 11/21/2016	H3SW	<-3.6E+01	0.00E+00	2.45E+02
429888	11/1/2016 - 11/29/2016	Mn-54	<8.68E+00	0.00E+00	8.68E+00
		Co-58	<8.04E+00	0.00E+00	8.04E+00
		Fe-59	<1.71E+01	0.00E+00	1.71E+01
		Co-60	<5.97E+00	0.00E+00	5.97E+00
		Zn-65	<1.40E+01	0.00E+00	1.40E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 495 [INDICATOR - -- @ 0 miles]

Sample ID: 429888	Sample Dates: 11/1/2016 - 11/29/2016	Nuclide	Activity	2 Sigma Error	MDA
		Zr-95	<2.00E+01	0.00E+00	2.00E+01
		Nb-95	<1.36E+01	0.00E+00	1.36E+01
		I-131	<2.85E+01	0.00E+00	2.85E+01
		Cs-134	<6.57E+00	0.00E+00	6.57E+00
		Cs-137	<8.64E+00	0.00E+00	8.64E+00
		La-140	<3.34E+03	0.00E+00	3.34E+03
		Ba-140	<6.61E+01	0.00E+00	6.61E+01
		Total-Gam	0.00E+00		
Sample ID: 430517	Sample Dates: 11/29/2016 - 11/29/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<5.63E+01	0.00E+00	2.35E+02
Sample ID: 431005	Sample Dates: 12/6/2016 - 12/6/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<1.73E+00	0.00E+00	2.49E+02
Sample ID: 431413	Sample Dates: 12/13/2016 - 12/13/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<-2.8E+01	0.00E+00	2.58E+02
Sample ID: 431744	Sample Dates: 12/19/2016 - 12/19/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<1.39E+02	0.00E+00	2.49E+02
Sample ID: 432074	Sample Dates: 12/6/2016 - 12/27/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<7.52E+00	0.00E+00	7.51E+00
		Co-58	<8.30E+00	0.00E+00	8.30E+00
		Fe-59	<1.50E+01	0.00E+00	1.50E+01
		Co-60	<8.08E+00	0.00E+00	8.08E+00
		Zn-65	<1.38E+01	0.00E+00	1.38E+01
		Zr-95	<1.14E+01	0.00E+00	1.14E+01
		Nb-95	<9.09E+00	0.00E+00	9.09E+00
		I-131	<2.08E+01	0.00E+00	2.08E+01
		Cs-134	<6.68E+00	0.00E+00	6.68E+00
		Cs-137	<8.17E+00	0.00E+00	8.17E+00
		La-140	<6.57E+02	0.00E+00	6.57E+02
		Ba-140	<4.53E+01	0.00E+00	4.53E+01
		Total-Gam	0.00E+00		
Sample ID: 432145	Sample Dates: 12/27/2016 - 12/27/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<-1.7E+01	0.00E+00	2.46E+02

Sample Point 496 [INDICATOR - -- @ 0 miles]

Sample ID: 400459	Sample Dates: 1/6/2016 - 1/6/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<3.54E+01	0.00E+00	2.55E+02
Sample ID: 399956	Sample Dates: 1/12/2016 - 1/12/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<-3.2E+02	0.00E+00	2.84E+02
Sample ID: 400278	Sample Dates: 1/19/2016 - 1/19/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<-1.4E+02	0.00E+00	2.81E+02
Sample ID: 400728	Sample Dates: 1/6/2016 - 1/26/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<7.91E+00	0.00E+00	7.91E+00
		Co-58	<7.25E+00	0.00E+00	7.25E+00
		Fe-59	<1.75E+01	0.00E+00	1.75E+01
		Co-60	<8.38E+00	0.00E+00	8.38E+00
		Zn-65	<1.90E+01	0.00E+00	1.90E+01
		Zr-95	<1.78E+01	0.00E+00	1.78E+01
		Nb-95	<1.26E+01	0.00E+00	1.26E+01
		I-131	<2.48E+01	0.00E+00	2.48E+01
		Cs-134	<8.46E+00	0.00E+00	8.46E+00
		Cs-137	<9.03E+00	0.00E+00	9.03E+00
		La-140	<9.79E+02	0.00E+00	9.79E+02
		Ba-140	<5.38E+01	0.00E+00	5.38E+01
		Total-Gam	0.00E+00		

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 496 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400929	1/26/2016 - 1/26/2016	H3SW	<-2.4E+01	0.00E+00	2.59E+02
401292	2/2/2016 - 2/2/2016	H3SW	<-1.5E+01	0.00E+00	2.61E+02
401755	2/9/2016 - 2/9/2016	H3SW	<-1.6E+02	0.00E+00	2.74E+02
402266	2/16/2016 - 2/16/2016	H3SW	<-2.2E+01	0.00E+00	2.60E+02
402975	2/2/2016 - 2/23/2016	Mn-54	<9.70E+00	0.00E+00	9.71E+00
		Co-58	<1.24E+01	0.00E+00	1.24E+01
		Fe-59	<2.09E+01	0.00E+00	2.09E+01
		Co-60	<5.94E+00	0.00E+00	5.94E+00
		Zn-65	<2.30E+01	0.00E+00	2.30E+01
		Zr-95	<1.92E+01	0.00E+00	1.92E+01
		Nb-95	<1.36E+01	0.00E+00	1.36E+01
		I-131	<4.37E+01	0.00E+00	4.37E+01
		Cs-134	<8.10E+00	0.00E+00	8.10E+00
		Cs-137	<7.83E+00	0.00E+00	7.83E+00
		La-140	<3.15E+04	0.00E+00	3.15E+04
		Ba-140	<9.02E+01	0.00E+00	9.02E+01
		Total-Gam	0.00E+00		
402988	2/23/2016 - 2/23/2016	H3SW	<-3.5E+01	0.00E+00	2.63E+02
404472	3/1/2016 - 3/1/2016	H3SW	<1.81E+02	0.00E+00	2.57E+02
405358	3/8/2016 - 3/8/2016	H3SW	<-2.3E+02	0.00E+00	2.68E+02
405975	3/15/2016 - 3/15/2016	H3SW	<-2.2E+02	0.00E+00	2.83E+02
406306	3/22/2016 - 3/22/2016	H3SW	<-4.8E+01	0.00E+00	2.53E+02
406650	3/1/2016 - 3/29/2016	Mn-54	<1.07E+01	0.00E+00	1.07E+01
		Co-58	<1.09E+01	0.00E+00	1.09E+01
		Fe-59	<2.06E+01	0.00E+00	2.06E+01
		Co-60	<5.93E+00	0.00E+00	5.93E+00
		Zn-65	<1.92E+01	0.00E+00	1.92E+01
		Zr-95	<1.51E+01	0.00E+00	1.51E+01
		Nb-95	<1.40E+01	0.00E+00	1.40E+01
		I-131	<3.05E+01	0.00E+00	3.05E+01
		Cs-134	<6.93E+00	0.00E+00	6.93E+00
		Cs-137	<8.14E+00	0.00E+00	8.14E+00
		La-140	<3.72E+03	0.00E+00	3.72E+03
		Ba-140	<5.30E+01	0.00E+00	5.30E+01
		Total-Gam	0.00E+00		
407503	3/29/2016 - 3/29/2016	H3SW	<-2.1E+02	0.00E+00	2.65E+02
408057	4/5/2016 - 4/5/2016	H3SW	<-2.8E+02	0.00E+00	2.69E+02
409396	4/12/2016 - 4/12/2016	H3SW	<-6.3E+01	0.00E+00	2.68E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 496 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
409730	4/19/2016 - 4/19/2016	H3SW	<-9.5E+01	0.00E+00	2.50E+02
410170	4/5/2016 - 4/26/2016	Mn-54	<8.59E+00	0.00E+00	8.59E+00
		Co-58	<8.47E+00	0.00E+00	8.47E+00
		Fe-59	<1.85E+01	0.00E+00	1.85E+01
		Co-60	<7.56E+00	0.00E+00	7.56E+00
		Zn-65	<1.70E+01	0.00E+00	1.70E+01
		Zr-95	<1.91E+01	0.00E+00	1.91E+01
		Nb-95	<1.22E+01	0.00E+00	1.22E+01
		I-131	<2.06E+01	0.00E+00	2.06E+01
		Cs-134	<9.04E+00	0.00E+00	9.04E+00
		Cs-137	<8.74E+00	0.00E+00	8.75E+00
		La-140	<1.21E+03	0.00E+00	1.21E+03
		Ba-140	<5.56E+01	0.00E+00	5.56E+01
		Total-Gam	0.00E+00		
410883	4/26/2016 - 4/26/2016	H3SW	<-1.0E+02	0.00E+00	2.69E+02
411383	5/3/2016 - 5/3/2016	H3SW	<-2.0E+02	0.00E+00	2.79E+02
411707	5/10/2016 - 5/10/2016	H3SW	<-3.1E+01	0.00E+00	2.59E+02
412169	5/17/2016 - 5/17/2016	H3SW	<1.24E+02	0.00E+00	2.76E+02
412677	5/3/2016 - 5/24/2016	Mn-54	<1.04E+01	0.00E+00	1.04E+01
		Co-58	<1.20E+01	0.00E+00	1.20E+01
		Fe-59	<3.29E+01	0.00E+00	3.29E+01
		Co-60	<6.93E+00	0.00E+00	6.93E+00
		Zn-65	<1.87E+01	0.00E+00	1.87E+01
		Zr-95	<2.14E+01	0.00E+00	2.14E+01
		Nb-95	<1.58E+01	0.00E+00	1.58E+01
		I-131	<6.68E+01	0.00E+00	6.68E+01
		Cs-134	<9.15E+00	0.00E+00	9.15E+00
		Cs-137	<9.85E+00	0.00E+00	9.85E+00
		La-140	<2.42E+05	0.00E+00	2.42E+05
		Ba-140	<1.25E+02	0.00E+00	1.25E+02
		Total-Gam	0.00E+00		
412686	5/24/2016 - 5/24/2016	H3SW	<6.59E+01	0.00E+00	2.60E+02
413289	6/1/2016 - 6/1/2016	H3SW	<-1.6E+02	0.00E+00	2.63E+02
413836	6/7/2016 - 6/7/2016	H3SW	<5.93E+01	0.00E+00	2.51E+02
414976	6/14/2016 - 6/14/2016	H3SW	<-1.6E+02	0.00E+00	2.59E+02
415341	6/21/2016 - 6/21/2016	H3SW	<-2.2E+02	0.00E+00	2.65E+02
415643	6/1/2016 - 6/27/2016	Mn-54	<9.43E+00	0.00E+00	9.43E+00
		Co-58	<1.09E+01	0.00E+00	1.09E+01
		Fe-59	<2.14E+01	0.00E+00	2.14E+01
		Co-60	<1.08E+01	0.00E+00	1.08E+01
		Zn-65	<1.51E+01	0.00E+00	1.51E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 496 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415643	6/1/2016 - 6/27/2016	Zr-95	<1.95E+01	0.00E+00	1.95E+01
		Nb-95	<1.58E+01	0.00E+00	1.58E+01
		I-131	<5.53E+01	0.00E+00	5.53E+01
		Cs-134	<9.49E+00	0.00E+00	9.49E+00
		Cs-137	<9.59E+00	0.00E+00	9.59E+00
		La-140	<4.57E+04	0.00E+00	4.57E+04
		Ba-140	<1.02E+02	0.00E+00	1.02E+02
		Total-Gam	0.00E+00		
416341	6/28/2016 - 6/28/2016	H3SW	<3.38E+01	0.00E+00	2.52E+02
416965	7/5/2016 - 7/5/2016	H3SW	<-1.5E+02	0.00E+00	2.61E+02
417358	7/12/2016 - 7/12/2016	H3SW	<9.05E+01	0.00E+00	2.52E+02
417719	7/19/2016 - 7/19/2016	H3SW	<8.86E+01	0.00E+00	2.56E+02
418191	7/5/2016 - 7/26/2016	Mn-54	<9.33E+00	0.00E+00	9.33E+00
		Co-58	<1.36E+01	0.00E+00	1.36E+01
		Fe-59	<2.57E+01	0.00E+00	2.57E+01
		Co-60	<7.96E+00	0.00E+00	7.96E+00
		Zn-65	<2.08E+01	0.00E+00	2.08E+01
		Zr-95	<2.24E+01	0.00E+00	2.24E+01
		Nb-95	<2.18E+01	0.00E+00	2.18E+01
		I-131	<1.19E+02	0.00E+00	1.19E+02
		Cs-134	<8.98E+00	0.00E+00	8.98E+00
		Cs-137	<7.82E+00	0.00E+00	7.82E+00
		La-140	<2.49E+06	0.00E+00	2.49E+06
		Ba-140	<1.57E+02	0.00E+00	1.57E+02
		Total-Gam	0.00E+00		
418205	7/26/2016 - 7/26/2016	H3SW	<4.75E+01	0.00E+00	2.59E+02
418933	8/2/2016 - 8/2/2016	H3SW	<-8.0E+01	0.00E+00	2.61E+02
423159	8/9/2016 - 8/9/2016	H3SW	<-7.3E+01	0.00E+00	2.71E+02
423201	8/16/2016 - 8/16/2016	H3SW	<-3.8E+01	0.00E+00	2.56E+02
423216	8/23/2016 - 8/23/2016	H3SW	<-1.3E+02	0.00E+00	2.64E+02
424662	8/2/2016 - 8/30/2016	Mn-54	<8.67E+00	0.00E+00	8.67E+00
		Co-58	<1.25E+01	0.00E+00	1.25E+01
		Fe-59	<2.44E+01	0.00E+00	2.44E+01
		Co-60	<7.89E+00	0.00E+00	7.90E+00
		Zn-65	<2.40E+01	0.00E+00	2.40E+01
		Zr-95	<2.88E+01	0.00E+00	2.88E+01
		Nb-95	<1.92E+01	0.00E+00	1.92E+01
		I-131	<1.86E+02	0.00E+00	1.86E+02
		Cs-134	<9.84E+00	0.00E+00	9.84E+00
		Cs-137	<9.44E+00	0.00E+00	9.44E+00
		La-140	<1.51E+07	0.00E+00	1.51E+07
		Ba-140	<1.92E+02	0.00E+00	1.92E+02
		Total-Gam	0.00E+00		



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 496 [INDICATOR - -- @ 0 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
424343	8/30/2016 - 8/30/2016	H3SW	<-6.5E+01	0.00E+00	2.58E+02
427403	9/6/2016 - 9/6/2016	H3SW	<-1.6E+02	0.00E+00	2.39E+02
423257	9/13/2016 - 9/13/2016	H3SW	<-8.4E+01	0.00E+00	2.33E+02
424375	9/21/2016 - 9/21/2016	H3SW	<-4.6E+01	0.00E+00	2.31E+02
424733	9/6/2016 - 9/27/2016	Mn-54	<9.71E+00	0.00E+00	9.71E+00
		Co-58	<1.50E+01	0.00E+00	1.50E+01
		Fe-59	<3.39E+01	0.00E+00	3.39E+01
		Co-60	<6.70E+00	0.00E+00	6.70E+00
		Zn-65	<1.44E+01	0.00E+00	1.44E+01
		Zr-95	<2.17E+01	0.00E+00	2.17E+01
		Nb-95	<2.02E+01	0.00E+00	2.02E+01
		I-131	<6.65E+02	0.00E+00	6.65E+02
		Cs-134	<6.52E+00	0.00E+00	6.52E+00
		Cs-137	<6.28E+00	0.00E+00	6.28E+00
		La-140	<1.87E+10	0.00E+00	1.87E+10
		Ba-140	<4.44E+02	0.00E+00	4.44E+02
		Total-Gam	0.00E+00		
425374	9/27/2016 - 9/27/2016	H3SW	<1.03E+02	0.00E+00	2.34E+02
425936	10/4/2016 - 10/4/2016	H3SW	<2.04E+02	0.00E+00	2.27E+02
426309	10/12/2016 - 10/12/2016	H3SW	<6.94E+00	0.00E+00	2.43E+02
426998	10/18/2016 - 10/18/2016	H3SW	<1.35E+02	0.00E+00	2.49E+02
427646	10/4/2016 - 10/26/2016	Mn-54	<1.02E+01	0.00E+00	1.02E+01
		Co-58	<1.14E+01	0.00E+00	1.14E+01
		Fe-59	<2.04E+01	0.00E+00	2.04E+01
		Co-60	<8.57E+00	0.00E+00	8.58E+00
		Zn-65	<1.75E+01	0.00E+00	1.75E+01
		Zr-95	<1.56E+01	0.00E+00	1.56E+01
		Nb-95	<1.62E+01	0.00E+00	1.62E+01
		I-131	<1.11E+02	0.00E+00	1.11E+02
		Cs-134	<6.38E+00	0.00E+00	6.38E+00
		Cs-137	<7.69E+00	0.00E+00	7.69E+00
		La-140	<2.68E+06	0.00E+00	2.68E+06
		Ba-140	<1.40E+02	0.00E+00	1.40E+02
		Total-Gam	0.00E+00		
427655	10/26/2016 - 10/26/2016	H3SW	<-4.0E+01	0.00E+00	2.43E+02
428154	11/1/2016 - 11/1/2016	H3SW	<1.56E+02	0.00E+00	2.41E+02
428829	11/8/2016 - 11/8/2016	H3SW	<2.29E+02	0.00E+00	2.41E+02
429347	11/15/2016 - 11/15/2016	H3SW	<8.34E+01	0.00E+00	2.48E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 496 [INDICATOR - -- @ 0 miles]

Sample ID: 429898	Sample Dates: 11/21/2016 - 11/21/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<2.29E+02	0.00E+00	2.39E+02
Sample ID: 429889	Sample Dates: 11/1/2016 - 11/29/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<8.70E+00	0.00E+00	8.70E+00
		Co-58	<9.35E+00	0.00E+00	9.35E+00
		Fe-59	<1.49E+01	0.00E+00	1.49E+01
		Co-60	<6.61E+00	0.00E+00	6.61E+00
		Zn-65	<2.12E+01	0.00E+00	2.12E+01
		Zr-95	<1.40E+01	0.00E+00	1.40E+01
		Nb-95	<9.76E+00	0.00E+00	9.76E+00
		I-131	<3.27E+01	0.00E+00	3.27E+01
		Cs-134	<8.45E+00	0.00E+00	8.45E+00
		Cs-137	<8.41E+00	0.00E+00	8.41E+00
		La-140	<6.61E+03	0.00E+00	6.61E+03
		Ba-140	<5.59E+01	0.00E+00	5.59E+01
		Total-Gam	0.00E+00		
Sample ID: 430518	Sample Dates: 11/29/2016 - 11/29/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<4.62E+01	0.00E+00	2.36E+02
Sample ID: 431006	Sample Dates: 12/6/2016 - 12/6/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<3.44E+01	0.00E+00	2.48E+02
Sample ID: 431414	Sample Dates: 12/13/2016 - 12/13/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<-1.0E+02	0.00E+00	2.58E+02
Sample ID: 431745	Sample Dates: 12/19/2016 - 12/19/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<4.52E+01	0.00E+00	2.49E+02
Sample ID: 432075	Sample Dates: 12/6/2016 - 12/27/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<6.26E+00	0.00E+00	6.26E+00
		Co-58	<8.36E+00	0.00E+00	8.36E+00
		Fe-59	<1.70E+01	0.00E+00	1.70E+01
		Co-60	<7.13E+00	0.00E+00	7.13E+00
		Zn-65	<1.57E+01	0.00E+00	1.57E+01
		Zr-95	<1.44E+01	0.00E+00	1.44E+01
		Nb-95	<9.53E+00	0.00E+00	9.53E+00
		I-131	<1.97E+01	0.00E+00	1.97E+01
		Cs-134	<5.84E+00	0.00E+00	5.84E+00
		Cs-137	<9.30E+00	0.00E+00	9.30E+00
		La-140	<8.04E+02	0.00E+00	8.04E+02
		Ba-140	<5.06E+01	0.00E+00	5.06E+01
		Total-Gam	0.00E+00		
Sample ID: 432146	Sample Dates: 12/27/2016 - 12/27/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<4.33E+01	0.00E+00	2.48E+02

Sample Point 497 [INDICATOR - -- @ 0 miles]

Sample ID: 400460	Sample Dates: 1/6/2016 - 1/6/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<4.83E+01	0.00E+00	2.54E+02
Sample ID: 399957	Sample Dates: 1/12/2016 - 1/12/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<-2.2E+02	0.00E+00	2.77E+02
Sample ID: 400279	Sample Dates: 1/19/2016 - 1/19/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<-8.2E+00	0.00E+00	2.81E+02
Sample ID: 400729	Sample Dates: 1/6/2016 - 1/26/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<6.75E+00	0.00E+00	6.75E+00
		Co-58	<9.25E+00	0.00E+00	9.25E+00
		Fe-59	<1.85E+01	0.00E+00	1.85E+01
		Co-60	<1.07E+01	0.00E+00	1.07E+01
		Zn-65	<2.17E+01	0.00E+00	2.17E+01
		Zr-95	<1.65E+01	0.00E+00	1.65E+01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 497 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400729	1/6/2016 - 1/26/2016	Nb-95	<9.91E+00	0.00E+00	9.91E+00
		I-131	<2.48E+01	0.00E+00	2.48E+01
		Cs-134	<6.47E+00	0.00E+00	6.47E+00
		Cs-137	<1.08E+01	0.00E+00	1.08E+01
		La-140	<1.20E+03	0.00E+00	1.20E+03
		Ba-140	<5.13E+01	0.00E+00	5.13E+01
		Total-Gam	0.00E+00		
400930	1/26/2016 - 1/26/2016	H3SW	<-3.8E+01	0.00E+00	2.61E+02
401293	2/2/2016 - 2/2/2016	H3SW	<-5.4E+01	0.00E+00	2.62E+02
401756	2/9/2016 - 2/9/2016	H3SW	<2.48E+01	0.00E+00	2.75E+02
402267	2/16/2016 - 2/16/2016	H3SW	<8.87E+01	0.00E+00	2.59E+02
402976	2/2/2016 - 2/23/2016	Mn-54	<8.77E+00	0.00E+00	8.77E+00
		Co-58	<1.04E+01	0.00E+00	1.04E+01
		Fe-59	<2.37E+01	0.00E+00	2.37E+01
		Co-60	<8.40E+00	0.00E+00	8.40E+00
		Zn-65	<2.13E+01	0.00E+00	2.13E+01
		Zr-95	<1.87E+01	0.00E+00	1.87E+01
		Nb-95	<1.26E+01	0.00E+00	1.26E+01
		I-131	<4.72E+01	0.00E+00	4.72E+01
		Cs-134	<6.17E+00	0.00E+00	6.17E+00
		Cs-137	<1.04E+01	0.00E+00	1.04E+01
		La-140	<5.02E+04	0.00E+00	5.02E+04
		Ba-140	<1.12E+02	0.00E+00	1.12E+02
		Total-Gam	0.00E+00		
402989	2/23/2016 - 2/23/2016	H3SW	<-2.2E+01	0.00E+00	2.63E+02
404473	3/1/2016 - 3/1/2016	H3SW	<1.55E+02	0.00E+00	2.57E+02
405359	3/8/2016 - 3/8/2016	H3SW	<-1.7E+02	0.00E+00	2.67E+02
405976	3/15/2016 - 3/15/2016	H3SW	<-2.5E+02	0.00E+00	2.83E+02
406307	3/22/2016 - 3/22/2016	H3SW	<-5.0E+01	0.00E+00	2.54E+02
406651	3/1/2016 - 3/29/2016	Mn-54	<9.92E+00	0.00E+00	9.92E+00
		Co-58	<1.07E+01	0.00E+00	1.07E+01
		Fe-59	<1.14E+01	0.00E+00	1.14E+01
		Co-60	<9.06E+00	0.00E+00	9.06E+00
		Zn-65	<1.92E+01	0.00E+00	1.92E+01
		Zr-95	<1.86E+01	0.00E+00	1.86E+01
		Nb-95	<1.39E+01	0.00E+00	1.39E+01
		I-131	<3.64E+01	0.00E+00	3.64E+01
		Cs-134	<8.39E+00	0.00E+00	8.39E+00
		Cs-137	<8.75E+00	0.00E+00	8.75E+00
		La-140	<8.32E+03	0.00E+00	8.32E+03
		Ba-140	<6.50E+01	0.00E+00	6.50E+01
		Total-Gam	0.00E+00		



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 497 [INDICATOR - -- @ 0 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
407504	3/29/2016 - 3/29/2016	H3SW	<-1.6E+02	0.00E+00	2.65E+02
408058	4/5/2016 - 4/5/2016	H3SW	<-8.3E+01	0.00E+00	2.70E+02
409397	4/12/2016 - 4/12/2016	H3SW	<-6.3E+01	0.00E+00	2.69E+02
409731	4/19/2016 - 4/19/2016	H3SW	<-1.5E+01	0.00E+00	2.49E+02
410171	4/5/2016 - 4/26/2016	Mn-54	<1.09E+01	0.00E+00	1.09E+01
		Co-58	<1.14E+01	0.00E+00	1.14E+01
		Fe-59	<2.14E+01	0.00E+00	2.14E+01
		Co-60	<8.38E+00	0.00E+00	8.37E+00
		Zn-65	<2.08E+01	0.00E+00	2.08E+01
		Zr-95	<1.86E+01	0.00E+00	1.86E+01
		Nb-95	<1.28E+01	0.00E+00	1.28E+01
		I-131	<2.18E+01	0.00E+00	2.18E+01
		Cs-134	<8.46E+00	0.00E+00	8.46E+00
		Cs-137	<1.06E+01	0.00E+00	1.06E+01
		La-140	<1.53E+03	0.00E+00	1.53E+03
		Ba-140	<5.16E+01	0.00E+00	5.16E+01
		Total-Gam	0.00E+00		
410884	4/26/2016 - 4/26/2016	H3SW	<-9.7E+01	0.00E+00	2.69E+02
411384	5/3/2016 - 5/3/2016	H3SW	<-2.5E+02	0.00E+00	2.79E+02
411708	5/10/2016 - 5/10/2016	H3SW	<-7.5E+01	0.00E+00	2.60E+02
412170	5/17/2016 - 5/17/2016	H3SW	<-1.9E+01	0.00E+00	2.78E+02
412678	5/3/2016 - 5/24/2016	Mn-54	<8.54E+00	0.00E+00	8.53E+00
		Co-58	<1.15E+01	0.00E+00	1.15E+01
		Fe-59	<2.06E+01	0.00E+00	2.06E+01
		Co-60	<7.60E+00	0.00E+00	7.60E+00
		Zn-65	<1.98E+01	0.00E+00	1.98E+01
		Zr-95	<2.18E+01	0.00E+00	2.18E+01
		Nb-95	<1.51E+01	0.00E+00	1.51E+01
		I-131	<7.38E+01	0.00E+00	7.38E+01
		Cs-134	<8.47E+00	0.00E+00	8.47E+00
		Cs-137	<9.59E+00	0.00E+00	9.59E+00
		La-140	<6.04E+05	0.00E+00	6.04E+05
		Ba-140	<1.16E+02	0.00E+00	1.16E+02
		Total-Gam	0.00E+00		
412687	5/24/2016 - 5/24/2016	H3SW	<5.29E+01	0.00E+00	2.61E+02
413290	6/1/2016 - 6/1/2016	H3SW	<-2.7E+02	0.00E+00	2.62E+02
413837	6/7/2016 - 6/7/2016	H3SW	<1.30E+01	0.00E+00	2.51E+02
414977	6/14/2016 - 6/14/2016	H3SW	<-1.0E+02	0.00E+00	2.59E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 497 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415342	6/21/2016 - 6/21/2016	H3SW	<-2.5E+02	0.00E+00	2.64E+02
415644	6/1/2016 - 6/27/2016	Mn-54	<9.13E+00	0.00E+00	9.13E+00
		Co-58	<1.30E+01	0.00E+00	1.30E+01
		Fe-59	<2.17E+01	0.00E+00	2.17E+01
		Co-60	<8.41E+00	0.00E+00	8.41E+00
		Zn-65	<1.86E+01	0.00E+00	1.86E+01
		Zr-95	<1.84E+01	0.00E+00	1.84E+01
		Nb-95	<1.64E+01	0.00E+00	1.64E+01
		I-131	<5.35E+01	0.00E+00	5.35E+01
		Cs-134	<8.74E+00	0.00E+00	8.74E+00
		Cs-137	<9.59E+00	0.00E+00	9.59E+00
		La-140	<1.06E+05	0.00E+00	1.06E+05
		Ba-140	<9.80E+01	0.00E+00	9.80E+01
		Total-Gam	0.00E+00		
416342	6/28/2016 - 6/28/2016	H3SW	<2.08E+01	0.00E+00	2.54E+02
416966	7/5/2016 - 7/5/2016	H3SW	<1.53E+01	0.00E+00	2.60E+02
417359	7/12/2016 - 7/12/2016	H3SW	<9.62E+01	0.00E+00	2.52E+02
417720	7/19/2016 - 7/19/2016	H3SW	<6.07E+01	0.00E+00	2.58E+02
418192	7/5/2016 - 7/26/2016	Mn-54	<1.24E+01	0.00E+00	1.24E+01
		Co-58	<1.11E+01	0.00E+00	1.11E+01
		Fe-59	<2.56E+01	0.00E+00	2.56E+01
		Co-60	<1.07E+01	0.00E+00	1.07E+01
		Zn-65	<2.27E+01	0.00E+00	2.27E+01
		Zr-95	<2.10E+01	0.00E+00	2.10E+01
		Nb-95	<1.54E+01	0.00E+00	1.54E+01
		I-131	<1.38E+02	0.00E+00	1.38E+02
		Cs-134	<7.84E+00	0.00E+00	7.84E+00
		Cs-137	<8.83E+00	0.00E+00	8.83E+00
		La-140	<2.88E+06	0.00E+00	2.88E+06
		Ba-140	<1.58E+02	0.00E+00	1.58E+02
		Total-Gam	0.00E+00		
418206	7/26/2016 - 7/26/2016	H3SW	<-4.5E+01	0.00E+00	2.58E+02
418934	8/2/2016 - 8/2/2016	H3SW	<-4.2E+01	0.00E+00	2.61E+02
423160	8/9/2016 - 8/9/2016	H3SW	<-3.1E+01	0.00E+00	2.61E+02
423202	8/16/2016 - 8/16/2016	H3SW	<-7.6E+01	0.00E+00	2.56E+02
423217	8/23/2016 - 8/23/2016	H3SW	<-5.5E+00	0.00E+00	2.46E+02
424663	8/2/2016 - 8/30/2016	Mn-54	<9.43E+00	0.00E+00	9.43E+00
		Co-58	<1.06E+01	0.00E+00	1.06E+01
		Fe-59	<3.06E+01	0.00E+00	3.06E+01
		Co-60	<9.44E+00	0.00E+00	9.44E+00
		Zn-65	<2.31E+01	0.00E+00	2.31E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 497 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
424663	8/2/2016 - 8/30/2016	Zr-95	<2.28E+01	0.00E+00	2.28E+01
		Nb-95	<2.17E+01	0.00E+00	2.17E+01
		I-131	<1.58E+02	0.00E+00	1.58E+02
		Cs-134	<7.96E+00	0.00E+00	7.95E+00
		Cs-137	<7.46E+00	0.00E+00	7.46E+00
		La-140	<1.56E+07	0.00E+00	1.56E+07
		Ba-140	<2.04E+02	0.00E+00	2.04E+02
		Total-Gam	0.00E+00		
424344	8/30/2016 - 8/30/2016	H3SW	<0.00E+00	0.00E+00	2.61E+02
427404	9/6/2016 - 9/6/2016	H3SW	<-6.4E+01	0.00E+00	2.40E+02
423258	9/13/2016 - 9/13/2016	H3SW	<-6.0E+01	0.00E+00	2.35E+02
424376	9/21/2016 - 9/21/2016	H3SW	<-5.2E+01	0.00E+00	2.31E+02
424734	9/6/2016 - 9/27/2016	Mn-54	<8.88E+00	0.00E+00	8.88E+00
		Co-58	<1.31E+01	0.00E+00	1.31E+01
		Fe-59	<4.01E+01	0.00E+00	4.01E+01
		Co-60	<9.47E+00	0.00E+00	9.47E+00
		Zn-65	<1.87E+01	0.00E+00	1.87E+01
		Zr-95	<2.01E+01	0.00E+00	2.01E+01
		Nb-95	<1.73E+01	0.00E+00	1.73E+01
		I-131	<7.00E+02	0.00E+00	7.00E+02
		Cs-134	<6.94E+00	0.00E+00	6.94E+00
		Cs-137	<7.17E+00	0.00E+00	7.17E+00
		La-140	<3.01E+10	0.00E+00	3.01E+10
		Ba-140	<4.40E+02	0.00E+00	4.40E+02
				Total-Gam	0.00E+00
425375	9/27/2016 - 9/27/2016	H3SW	<3.56E+01	0.00E+00	2.34E+02
425937	10/4/2016 - 10/4/2016	H3SW	<2.25E+02	0.00E+00	2.26E+02
426310	10/12/2016 - 10/12/2016	H3SW	<6.55E+01	0.00E+00	2.42E+02
426999	10/18/2016 - 10/18/2016	H3SW	<1.58E+02	0.00E+00	2.50E+02
427647	10/4/2016 - 10/26/2016	Mn-54	<8.43E+00	0.00E+00	8.43E+00
		Co-58	<1.01E+01	0.00E+00	1.01E+01
		Fe-59	<1.86E+01	0.00E+00	1.86E+01
		Co-60	<7.94E+00	0.00E+00	7.94E+00
		Zn-65	<1.66E+01	0.00E+00	1.66E+01
		Zr-95	<2.11E+01	0.00E+00	2.11E+01
		Nb-95	<1.38E+01	0.00E+00	1.38E+01
		I-131	<9.86E+01	0.00E+00	9.86E+01
		Cs-134	<5.94E+00	0.00E+00	5.94E+00
		Cs-137	<7.43E+00	0.00E+00	7.43E+00
		La-140	<2.40E+06	0.00E+00	2.40E+06
		Ba-140	<1.47E+02	0.00E+00	1.47E+02
				Total-Gam	0.00E+00
427656	10/26/2016 - 10/26/2016	H3SW	<1.73E+00	0.00E+00	2.43E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 497 [INDICATOR - -- @ 0 miles]

Sample ID:	428155	Sample Dates:	11/1/2016 - 11/1/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<1.98E+02	0.00E+00	2.40E+02
Sample ID:	428830	Sample Dates:	11/8/2016 - 11/8/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<1.80E+02	0.00E+00	2.41E+02
Sample ID:	429348	Sample Dates:	11/15/2016 - 11/15/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<1.82E+02	0.00E+00	2.48E+02
Sample ID:	429899	Sample Dates:	11/21/2016 - 11/21/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<1.71E+00	0.00E+00	2.47E+02
Sample ID:	429890	Sample Dates:	11/1/2016 - 11/29/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<7.00E+00	0.00E+00	7.00E+00
				Co-58	<9.65E+00	0.00E+00	9.65E+00
				Fe-59	<1.92E+01	0.00E+00	1.92E+01
				Co-60	<6.68E+00	0.00E+00	6.68E+00
				Zn-65	<1.68E+01	0.00E+00	1.68E+01
				Zr-95	<1.81E+01	0.00E+00	1.81E+01
				Nb-95	<1.17E+01	0.00E+00	1.17E+01
				I-131	<3.00E+01	0.00E+00	3.00E+01
				Cs-134	<7.09E+00	0.00E+00	7.09E+00
				Cs-137	<7.93E+00	0.00E+00	7.93E+00
				La-140	<6.89E+03	0.00E+00	6.89E+03
				Ba-140	<5.94E+01	0.00E+00	5.94E+01
				Total-Gam	0.00E+00		
Sample ID:	430519	Sample Dates:	11/29/2016 - 11/29/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<5.49E+01	0.00E+00	2.37E+02
Sample ID:	431007	Sample Dates:	12/6/2016 - 12/6/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-1.6E+01	0.00E+00	2.48E+02
Sample ID:	431415	Sample Dates:	12/13/2016 - 12/13/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<4.32E+01	0.00E+00	2.57E+02
Sample ID:	431746	Sample Dates:	12/19/2016 - 12/19/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<4.72E+01	0.00E+00	2.50E+02
Sample ID:	432076	Sample Dates:	12/6/2016 - 12/27/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<8.37E+00	0.00E+00	8.37E+00
				Co-58	<9.05E+00	0.00E+00	9.05E+00
				Fe-59	<1.73E+01	0.00E+00	1.73E+01
				Co-60	<7.13E+00	0.00E+00	7.13E+00
				Zn-65	<1.58E+01	0.00E+00	1.58E+01
				Zr-95	<1.40E+01	0.00E+00	1.40E+01
				Nb-95	<1.06E+01	0.00E+00	1.06E+01
				I-131	<2.22E+01	0.00E+00	2.22E+01
				Cs-134	<8.43E+00	0.00E+00	8.43E+00
				Cs-137	<6.87E+00	0.00E+00	6.87E+00
				La-140	<1.47E+03	0.00E+00	1.47E+03
				Ba-140	<5.16E+01	0.00E+00	5.16E+01
				Total-Gam	0.00E+00		
Sample ID:	432147	Sample Dates:	12/27/2016 - 12/27/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-6.6E+01	0.00E+00	2.47E+02

Sample Point 498 [INDICATOR - -- @ 0 miles]

Sample ID:	400461	Sample Dates:	1/6/2016 - 1/6/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<8.85E+01	0.00E+00	2.52E+02
Sample ID:	399958	Sample Dates:	1/12/2016 - 1/12/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-2.8E+02	0.00E+00	2.76E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 498 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400280	1/19/2016 - 1/19/2016	H3SW	<4.34E+01	0.00E+00	2.82E+02
400730	1/6/2016 - 1/26/2016	Mn-54	<7.55E+00	0.00E+00	7.55E+00
		Co-58	<9.27E+00	0.00E+00	9.27E+00
		Fe-59	<1.86E+01	0.00E+00	1.86E+01
		Co-60	<8.17E+00	0.00E+00	8.17E+00
		Zn-65	<1.90E+01	0.00E+00	1.90E+01
		Zr-95	<1.33E+01	0.00E+00	1.33E+01
		Nb-95	<1.03E+01	0.00E+00	1.03E+01
		I-131	<2.65E+01	0.00E+00	2.65E+01
		Cs-134	<7.93E+00	0.00E+00	7.93E+00
		Cs-137	<7.49E+00	0.00E+00	7.49E+00
		La-140	<1.45E+03	0.00E+00	1.45E+03
		Ba-140	<5.90E+01	0.00E+00	5.90E+01
		Total-Gam	0.00E+00		
400931	1/26/2016 - 1/26/2016	H3SW	<8.14E+00	0.00E+00	2.72E+02
401294	2/2/2016 - 2/2/2016	H3SW	<-9.3E+00	0.00E+00	2.61E+02
401757	2/9/2016 - 2/9/2016	H3SW	<-2.5E+01	0.00E+00	2.74E+02
402268	2/16/2016 - 2/16/2016	H3SW	<5.94E+01	0.00E+00	2.59E+02
402977	2/2/2016 - 2/23/2016	Mn-54	<9.15E+00	0.00E+00	9.15E+00
		Co-58	<1.28E+01	0.00E+00	1.28E+01
		Fe-59	<1.92E+01	0.00E+00	1.92E+01
		Co-60	<8.76E+00	0.00E+00	8.76E+00
		Zn-65	<2.15E+01	0.00E+00	2.15E+01
		Zr-95	<1.93E+01	0.00E+00	1.93E+01
		Nb-95	<1.42E+01	0.00E+00	1.42E+01
		I-131	<5.64E+01	0.00E+00	5.64E+01
		Cs-134	<6.46E+00	0.00E+00	6.46E+00
		Cs-137	<8.75E+00	0.00E+00	8.75E+00
		La-140	<2.34E+05	0.00E+00	2.34E+05
		Ba-140	<1.03E+02	0.00E+00	1.03E+02
		Total-Gam	0.00E+00		
402990	2/23/2016 - 2/23/2016	H3SW	<1.67E+01	0.00E+00	2.63E+02
404474	3/1/2016 - 3/1/2016	H3SW	<1.18E+02	0.00E+00	2.58E+02
405360	3/8/2016 - 3/8/2016	H3SW	<-1.6E+02	0.00E+00	2.66E+02
405977	3/15/2016 - 3/15/2016	H3SW	<-1.7E+01	0.00E+00	2.60E+02
406308	3/22/2016 - 3/22/2016	H3SW	<-2.2E+01	0.00E+00	2.53E+02
406652	3/1/2016 - 3/29/2016	Mn-54	<9.92E+00	0.00E+00	9.92E+00
		Co-58	<1.19E+01	0.00E+00	1.19E+01
		Fe-59	<2.64E+01	0.00E+00	2.64E+01
		Co-60	<6.91E+00	0.00E+00	6.91E+00
		Zn-65	<2.02E+01	0.00E+00	2.02E+01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 498 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
406652	3/1/2016 - 3/29/2016	Zr-95	<1.90E+01	0.00E+00	1.90E+01
		Nb-95	<1.26E+01	0.00E+00	1.26E+01
		I-131	<3.75E+01	0.00E+00	3.75E+01
		Cs-134	<7.96E+00	0.00E+00	7.96E+00
		Cs-137	<8.14E+00	0.00E+00	8.14E+00
		La-140	<8.07E+03	0.00E+00	8.07E+03
		Ba-140	<5.96E+01	0.00E+00	5.96E+01
		Total-Gam	0.00E+00		
407505	3/29/2016 - 3/29/2016	H3SW	<0.00E+00	0.00E+00	2.65E+02
408059	4/5/2016 - 4/5/2016	H3SW	<-4.5E+01	0.00E+00	2.70E+02
409398	4/12/2016 - 4/12/2016	H3SW	<-1.0E+02	0.00E+00	2.69E+02
409732	4/19/2016 - 4/19/2016	H3SW	<7.20E+01	0.00E+00	2.49E+02
410172	4/5/2016 - 4/26/2016	Mn-54	<7.55E+00	0.00E+00	7.55E+00
		Co-58	<1.03E+01	0.00E+00	1.03E+01
		Fe-59	<1.98E+01	0.00E+00	1.98E+01
		Co-60	<7.56E+00	0.00E+00	7.56E+00
		Zn-65	<2.00E+01	0.00E+00	2.00E+01
		Zr-95	<1.60E+01	0.00E+00	1.60E+01
		Nb-95	<1.30E+01	0.00E+00	1.30E+01
		I-131	<2.88E+01	0.00E+00	2.88E+01
		Cs-134	<9.23E+00	0.00E+00	9.23E+00
		Cs-137	<8.75E+00	0.00E+00	8.75E+00
		La-140	<1.38E+03	0.00E+00	1.38E+03
		Ba-140	<5.07E+01	0.00E+00	5.07E+01
		Total-Gam	0.00E+00		
410885	4/26/2016 - 4/26/2016	H3SW	<-1.2E+02	0.00E+00	2.71E+02
411385	5/3/2016 - 5/3/2016	H3SW	<-2.1E+02	0.00E+00	2.79E+02
411709	5/10/2016 - 5/10/2016	H3SW	<-8.1E+01	0.00E+00	2.61E+02
412171	5/17/2016 - 5/17/2016	H3SW	<-5.0E+01	0.00E+00	2.78E+02
412679	5/3/2016 - 5/24/2016	Mn-54	<8.54E+00	0.00E+00	8.54E+00
		Co-58	<1.19E+01	0.00E+00	1.19E+01
		Fe-59	<2.47E+01	0.00E+00	2.47E+01
		Co-60	<8.42E+00	0.00E+00	8.42E+00
		Zn-65	<1.88E+01	0.00E+00	1.88E+01
		Zr-95	<1.79E+01	0.00E+00	1.79E+01
		Nb-95	<1.60E+01	0.00E+00	1.60E+01
		I-131	<7.04E+01	0.00E+00	7.04E+01
		Cs-134	<8.37E+00	0.00E+00	8.37E+00
		Cs-137	<8.15E+00	0.00E+00	8.15E+00
		La-140	<6.98E+05	0.00E+00	6.98E+05
		Ba-140	<1.17E+02	0.00E+00	1.17E+02
		Total-Gam	0.00E+00		
412688	5/24/2016 - 5/24/2016	H3SW	<1.88E+01	0.00E+00	2.60E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 498 [INDICATOR - -- @ 0 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
413291	6/1/2016 - 6/1/2016	H3SW	<-1.7E+02	0.00E+00	2.63E+02
413838	6/7/2016 - 6/7/2016	H3SW	<-2.8E+01	0.00E+00	2.52E+02
414978	6/14/2016 - 6/14/2016	H3SW	<-7.8E+01	0.00E+00	2.60E+02
415343	6/21/2016 - 6/21/2016	H3SW	<-2.3E+02	0.00E+00	2.73E+02
415645	6/1/2016 - 6/27/2016	Mn-54	<9.13E+00	0.00E+00	9.13E+00
		Co-58	<1.20E+01	0.00E+00	1.20E+01
		Fe-59	<2.42E+01	0.00E+00	2.42E+01
		Co-60	<9.08E+00	0.00E+00	9.08E+00
		Zn-65	<2.23E+01	0.00E+00	2.23E+01
		Zr-95	<1.77E+01	0.00E+00	1.77E+01
		Nb-95	<1.42E+01	0.00E+00	1.42E+01
		I-131	<5.91E+01	0.00E+00	5.91E+01
		Cs-134	<6.54E+00	0.00E+00	6.53E+00
		Cs-137	<7.49E+00	0.00E+00	7.49E+00
		La-140	<1.10E+05	0.00E+00	1.10E+05
		Ba-140	<9.11E+01	0.00E+00	9.11E+01
		Total-Gam	0.00E+00		
416343	6/28/2016 - 6/28/2016	H3SW	<1.06E+02	0.00E+00	2.55E+02
416967	7/5/2016 - 7/5/2016	H3SW	<-1.9E+00	0.00E+00	2.60E+02
417360	7/12/2016 - 7/12/2016	H3SW	<-3.4E+01	0.00E+00	2.51E+02
417721	7/19/2016 - 7/19/2016	H3SW	<5.28E+01	0.00E+00	2.56E+02
418193	7/5/2016 - 7/26/2016	Mn-54	<7.76E+00	0.00E+00	7.76E+00
		Co-58	<1.11E+01	0.00E+00	1.11E+01
		Fe-59	<2.85E+01	0.00E+00	2.85E+01
		Co-60	<1.13E+01	0.00E+00	1.13E+01
		Zn-65	<2.08E+01	0.00E+00	2.08E+01
		Zr-95	<1.69E+01	0.00E+00	1.69E+01
		Nb-95	<1.85E+01	0.00E+00	1.85E+01
		I-131	<1.06E+02	0.00E+00	1.06E+02
		Cs-134	<8.31E+00	0.00E+00	8.31E+00
		Cs-137	<8.51E+00	0.00E+00	8.50E+00
		La-140	<3.25E+06	0.00E+00	3.25E+06
		Ba-140	<1.50E+02	0.00E+00	1.50E+02
		Total-Gam	0.00E+00		
418207	7/26/2016 - 7/26/2016	H3SW	<-1.5E+01	0.00E+00	2.59E+02
418935	8/2/2016 - 8/2/2016	H3SW	<-1.4E+02	0.00E+00	2.63E+02
423161	8/9/2016 - 8/9/2016	H3SW	<2.56E+01	0.00E+00	2.62E+02
423203	8/16/2016 - 8/16/2016	H3SW	<-8.0E+01	0.00E+00	2.57E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 498 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
423218	8/23/2016 - 8/23/2016	H3SW	<2.58E+01	0.00E+00	2.67E+02
424664	8/2/2016 - 8/30/2016	Mn-54	<1.08E+01	0.00E+00	1.08E+01
		Co-58	<1.21E+01	0.00E+00	1.21E+01
		Fe-59	<2.38E+01	0.00E+00	2.38E+01
		Co-60	<9.12E+00	0.00E+00	9.12E+00
		Zn-65	<2.21E+01	0.00E+00	2.21E+01
		Zr-95	<2.21E+01	0.00E+00	2.21E+01
		Nb-95	<2.03E+01	0.00E+00	2.03E+01
		I-131	<1.72E+02	0.00E+00	1.72E+02
		Cs-134	<8.80E+00	0.00E+00	8.80E+00
		Cs-137	<1.00E+01	0.00E+00	1.00E+01
		La-140	<1.86E+07	0.00E+00	1.86E+07
		Ba-140	<1.71E+02	0.00E+00	1.71E+02
		Total-Gam	0.00E+00		
424345	8/30/2016 - 8/30/2016	H3SW	<3.59E+01	0.00E+00	2.61E+02
427405	9/6/2016 - 9/6/2016	H3SW	<-1.3E+02	0.00E+00	2.39E+02
423259	9/13/2016 - 9/13/2016	H3SW	<-6.8E+00	0.00E+00	2.36E+02
424377	9/21/2016 - 9/21/2016	H3SW	<-6.5E+01	0.00E+00	2.30E+02
424735	9/6/2016 - 9/27/2016	Mn-54	<8.88E+00	0.00E+00	8.88E+00
		Co-58	<1.40E+01	0.00E+00	1.40E+01
		Fe-59	<3.44E+01	0.00E+00	3.44E+01
		Co-60	<8.65E+00	0.00E+00	8.65E+00
		Zn-65	<1.77E+01	0.00E+00	1.77E+01
		Zr-95	<2.35E+01	0.00E+00	2.35E+01
		Nb-95	<1.98E+01	0.00E+00	1.98E+01
		I-131	<9.14E+02	0.00E+00	9.14E+02
		Cs-134	<7.90E+00	0.00E+00	7.90E+00
		Cs-137	<8.66E+00	0.00E+00	8.66E+00
		La-140	<3.96E+10	0.00E+00	3.96E+10
		Ba-140	<3.92E+02	0.00E+00	3.92E+02
		Total-Gam	0.00E+00		
425376	9/27/2016 - 9/27/2016	H3SW	<1.51E+02	0.00E+00	2.44E+02
425938	10/4/2016 - 10/4/2016	H3SW	<2.06E+02	0.00E+00	2.27E+02
426311	10/12/2016 - 10/12/2016	H3SW	<7.41E+01	0.00E+00	2.42E+02
427000	10/18/2016 - 10/18/2016	H3SW	<7.86E+01	0.00E+00	2.51E+02
427648	10/4/2016 - 10/26/2016	Mn-54	<7.55E+00	0.00E+00	7.55E+00
		Co-58	<1.15E+01	0.00E+00	1.15E+01
		Fe-59	<1.79E+01	0.00E+00	1.79E+01
		Co-60	<7.67E+00	0.00E+00	7.67E+00
		Zn-65	<2.07E+01	0.00E+00	2.07E+01
		Zr-95	<2.01E+01	0.00E+00	2.01E+01
		Nb-95	<1.45E+01	0.00E+00	1.45E+01
		I-131	<1.21E+02	0.00E+00	1.21E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 498 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
427648	10/4/2016 - 10/26/2016	Cs-134	<6.60E+00	0.00E+00	6.60E+00
		Cs-137	<7.69E+00	0.00E+00	7.69E+00
		La-140	<3.27E+06	0.00E+00	3.27E+06
		Ba-140	<1.30E+02	0.00E+00	1.30E+02
		Total-Gam	0.00E+00		
427657	10/26/2016 - 10/26/2016	H3SW	<8.47E+01	0.00E+00	2.43E+02
428156	11/1/2016 - 11/1/2016	H3SW	<2.08E+02	0.00E+00	2.38E+02
428831	11/8/2016 - 11/8/2016	H3SW	<1.59E+02	0.00E+00	2.42E+02
429349	11/15/2016 - 11/15/2016	H3SW	<1.43E+02	0.00E+00	2.49E+02
429900	11/21/2016 - 11/21/2016	H3SW	<1.71E+02	0.00E+00	2.42E+02
429891	11/1/2016 - 11/29/2016	Mn-54	<9.76E+00	0.00E+00	9.76E+00
		Co-58	<8.79E+00	0.00E+00	8.79E+00
		Fe-59	<1.95E+01	0.00E+00	1.95E+01
		Co-60	<7.15E+00	0.00E+00	7.15E+00
		Zn-65	<2.34E+01	0.00E+00	2.34E+01
		Zr-95	<1.63E+01	0.00E+00	1.63E+01
		Nb-95	<1.27E+01	0.00E+00	1.27E+01
		I-131	<4.21E+01	0.00E+00	4.21E+01
		Cs-134	<6.60E+00	0.00E+00	6.60E+00
		Cs-137	<6.58E+00	0.00E+00	6.58E+00
		La-140	<4.62E+04	0.00E+00	4.62E+04
		Ba-140	<7.02E+01	0.00E+00	7.02E+01
Total-Gam	0.00E+00				
430520	11/29/2016 - 11/29/2016	H3SW	<6.20E+01	0.00E+00	2.38E+02
431008	12/6/2016 - 12/6/2016	H3SW	<-2.3E+01	0.00E+00	2.49E+02
431416	12/13/2016 - 12/13/2016	H3SW	<2.28E+01	0.00E+00	2.59E+02
431747	12/19/2016 - 12/19/2016	H3SW	<-4.0E+01	0.00E+00	2.51E+02
432077	12/6/2016 - 12/27/2016	Mn-54	<8.86E+00	0.00E+00	8.86E+00
		Co-58	<8.38E+00	0.00E+00	8.38E+00
		Fe-59	<1.62E+01	0.00E+00	1.62E+01
		Co-60	<6.67E+00	0.00E+00	6.67E+00
		Zn-65	<1.39E+01	0.00E+00	1.39E+01
		Zr-95	<1.49E+01	0.00E+00	1.49E+01
		Nb-95	<9.56E+00	0.00E+00	9.56E+00
		I-131	<2.11E+01	0.00E+00	2.11E+01
		Cs-134	<6.68E+00	0.00E+00	6.68E+00
		Cs-137	<8.41E+00	0.00E+00	8.41E+00
		La-140	<1.05E+03	0.00E+00	1.05E+03
		Ba-140	<4.52E+01	0.00E+00	4.52E+01
Total-Gam	0.00E+00				
432148	12/27/2016 - 12/27/2016	H3SW	<-8.6E+00	0.00E+00	2.47E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 499 [CONTROL - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400463	1/6/2016 - 1/6/2016	H3SW	<8.54E+01	0.00E+00	2.54E+02
399959	1/12/2016 - 1/12/2016	H3SW	<-2.8E+02	0.00E+00	2.79E+02
400281	1/19/2016 - 1/19/2016	H3SW	<-3.3E+01	0.00E+00	2.81E+02
400731	1/6/2016 - 1/26/2016	Mn-54	<7.98E+00	0.00E+00	7.98E+00
		Co-58	<9.98E+00	0.00E+00	9.98E+00
		Fe-59	<2.19E+01	0.00E+00	2.19E+01
		Co-60	<9.77E+00	0.00E+00	9.77E+00
		Zn-65	<1.61E+01	0.00E+00	1.61E+01
		Zr-95	<1.53E+01	0.00E+00	1.53E+01
		Nb-95	<9.41E+00	0.00E+00	9.41E+00
		I-131	<3.54E+01	0.00E+00	3.54E+01
		Cs-134	<9.56E+00	0.00E+00	9.56E+00
		Cs-137	<8.45E+00	0.00E+00	8.45E+00
		La-140	<9.32E+03	0.00E+00	9.32E+03
		Ba-140	<5.77E+01	0.00E+00	5.77E+01
		Total-Gam	0.00E+00		
400932	1/26/2016 - 1/26/2016	H3SW	<3.27E+01	0.00E+00	2.73E+02
401295	2/2/2016 - 2/2/2016	H3SW	<-8.4E+01	0.00E+00	2.63E+02
401758	2/9/2016 - 2/9/2016	H3SW	<4.73E+01	0.00E+00	2.74E+02
402269	2/16/2016 - 2/16/2016	H3SW	<-7.6E+01	0.00E+00	2.59E+02
402978	2/2/2016 - 2/23/2016	Mn-54	<8.48E+00	0.00E+00	8.48E+00
		Co-58	<9.95E+00	0.00E+00	9.95E+00
		Fe-59	<2.47E+01	0.00E+00	2.47E+01
		Co-60	<6.87E+00	0.00E+00	6.87E+00
		Zn-65	<1.64E+01	0.00E+00	1.64E+01
		Zr-95	<2.18E+01	0.00E+00	2.18E+01
		Nb-95	<1.25E+01	0.00E+00	1.25E+01
		I-131	<6.31E+01	0.00E+00	6.31E+01
		Cs-134	<8.45E+00	0.00E+00	8.45E+00
		Cs-137	<8.75E+00	0.00E+00	8.75E+00
		La-140	<2.24E+05	0.00E+00	2.24E+05
		Ba-140	<8.38E+01	0.00E+00	8.38E+01
		Total-Gam	0.00E+00		
402991	2/23/2016 - 2/23/2016	H3SW	<-4.5E+01	0.00E+00	2.63E+02
404475	3/1/2016 - 3/1/2016	H3SW	<-7.4E+00	0.00E+00	2.56E+02
405361	3/8/2016 - 3/8/2016	H3SW	<-1.8E+02	0.00E+00	2.66E+02
405978	3/15/2016 - 3/15/2016	H3SW	<-9.5E+01	0.00E+00	2.60E+02
406309	3/22/2016 - 3/22/2016	H3SW	<-1.9E+02	0.00E+00	2.85E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 499 [CONTROL - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
406653	3/1/2016 - 3/29/2016	Mn-54	<1.02E+01	0.00E+00	1.02E+01
		Co-58	<1.16E+01	0.00E+00	1.16E+01
		Fe-59	<1.98E+01	0.00E+00	1.98E+01
		Co-60	<6.85E+00	0.00E+00	6.85E+00
		Zn-65	<1.36E+01	0.00E+00	1.36E+01
		Zr-95	<1.69E+01	0.00E+00	1.69E+01
		Nb-95	<1.23E+01	0.00E+00	1.23E+01
		I-131	<3.77E+01	0.00E+00	3.77E+01
		Cs-134	<8.49E+00	0.00E+00	8.49E+00
		Cs-137	<9.58E+00	0.00E+00	9.58E+00
		La-140	<1.06E+04	0.00E+00	1.06E+04
		Ba-140	<7.40E+01	0.00E+00	7.40E+01
		Total-Gam	0.00E+00		
407506	3/29/2016 - 3/29/2016	H3SW	<2.5E+02	0.00E+00	2.65E+02
408060	4/5/2016 - 4/5/2016	H3SW	<7.0E+01	0.00E+00	2.72E+02
409399	4/12/2016 - 4/12/2016	H3SW	<4.3E+01	0.00E+00	2.69E+02
409733	4/19/2016 - 4/19/2016	H3SW	<4.5E+01	0.00E+00	2.50E+02
410173	4/5/2016 - 4/26/2016	Mn-54	<9.25E+00	0.00E+00	9.25E+00
		Co-58	<6.82E+00	0.00E+00	6.82E+00
		Fe-59	<2.08E+01	0.00E+00	2.08E+01
		Co-60	<8.38E+00	0.00E+00	8.38E+00
		Zn-65	<1.81E+01	0.00E+00	1.81E+01
		Zr-95	<1.60E+01	0.00E+00	1.60E+01
		Nb-95	<1.24E+01	0.00E+00	1.24E+01
		I-131	<2.51E+01	0.00E+00	2.51E+01
		Cs-134	<7.39E+00	0.00E+00	7.39E+00
		Cs-137	<9.31E+00	0.00E+00	9.31E+00
		La-140	<2.33E+03	0.00E+00	2.33E+03
		Ba-140	<4.95E+01	0.00E+00	4.95E+01
		Total-Gam	0.00E+00		
410886	4/26/2016 - 4/26/2016	H3SW	<7.1E+01	0.00E+00	2.71E+02
411386	5/3/2016 - 5/3/2016	H3SW	<1.5E+02	0.00E+00	2.78E+02
411710	5/10/2016 - 5/10/2016	H3SW	<1.9E+01	0.00E+00	2.60E+02
412172	5/17/2016 - 5/17/2016	H3SW	<6.22E+00	0.00E+00	2.77E+02
412680	5/3/2016 - 5/24/2016	Mn-54	<1.17E+01	0.00E+00	1.17E+01
		Co-58	<1.15E+01	0.00E+00	1.15E+01
		Fe-59	<2.49E+01	0.00E+00	2.49E+01
		Co-60	<8.79E+00	0.00E+00	8.79E+00
		Zn-65	<1.79E+01	0.00E+00	1.79E+01
		Zr-95	<2.02E+01	0.00E+00	2.02E+01
		Nb-95	<1.82E+01	0.00E+00	1.82E+01
		I-131	<1.17E+02	0.00E+00	1.17E+02
		Cs-134	<8.06E+00	0.00E+00	8.07E+00
		Cs-137	<6.78E+00	0.00E+00	6.78E+00
		La-140	<3.96E+06	0.00E+00	3.96E+06



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 499 [CONTROL - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
412680	5/3/2016 - 5/24/2016	Ba-140	<1.59E+02	0.00E+00	1.59E+02
		Total-Gam	0.00E+00		
412689	5/24/2016 - 5/24/2016	H3SW	<8.59E+01	0.00E+00	2.60E+02
413292	6/1/2016 - 6/1/2016	H3SW	<-2.7E+02	0.00E+00	2.63E+02
413839	6/7/2016 - 6/7/2016	H3SW	<1.21E+02	0.00E+00	2.47E+02
414979	6/14/2016 - 6/14/2016	H3SW	<-1.3E+02	0.00E+00	2.59E+02
415344	6/21/2016 - 6/21/2016	H3SW	<-7.7E+01	0.00E+00	2.63E+02
415646	6/1/2016 - 6/27/2016	Mn-54	<7.72E+00	0.00E+00	7.71E+00
		Co-58	<9.81E+00	0.00E+00	9.81E+00
		Fe-59	<1.92E+01	0.00E+00	1.92E+01
		Co-60	<8.41E+00	0.00E+00	8.41E+00
		Zn-65	<1.96E+01	0.00E+00	1.96E+01
		Zr-95	<1.63E+01	0.00E+00	1.63E+01
		Nb-95	<1.21E+01	0.00E+00	1.21E+01
		I-131	<6.17E+01	0.00E+00	6.17E+01
		Cs-134	<8.54E+00	0.00E+00	8.54E+00
		Cs-137	<7.14E+00	0.00E+00	7.15E+00
		La-140	<1.04E+05	0.00E+00	1.04E+05
		Ba-140	<9.13E+01	0.00E+00	9.13E+01
		Total-Gam	0.00E+00		
416344	6/28/2016 - 6/28/2016	H3SW	<1.90E+00	0.00E+00	2.55E+02
416968	7/5/2016 - 7/5/2016	H3SW	<-8.0E+01	0.00E+00	2.60E+02
417361	7/12/2016 - 7/12/2016	H3SW	<7.00E+01	0.00E+00	2.51E+02
417722	7/19/2016 - 7/19/2016	H3SW	<-6.2E+01	0.00E+00	2.56E+02
418194	7/5/2016 - 7/26/2016	Mn-54	<1.10E+01	0.00E+00	1.10E+01
		Co-58	<1.41E+01	0.00E+00	1.41E+01
		Fe-59	<1.94E+01	0.00E+00	1.94E+01
		Co-60	<9.10E+00	0.00E+00	9.10E+00
		Zn-65	<2.18E+01	0.00E+00	2.18E+01
		Zr-95	<1.69E+01	0.00E+00	1.69E+01
		Nb-95	<1.73E+01	0.00E+00	1.73E+01
		I-131	<1.24E+02	0.00E+00	1.24E+02
		Cs-134	<7.84E+00	0.00E+00	7.84E+00
		Cs-137	<1.08E+01	0.00E+00	1.08E+01
		La-140	<3.55E+06	0.00E+00	3.55E+06
		Ba-140	<1.47E+02	0.00E+00	1.47E+02
		Total-Gam	0.00E+00		
418208	7/26/2016 - 7/26/2016	H3SW	<-5.1E+01	0.00E+00	2.59E+02
418936	8/2/2016 - 8/2/2016	H3SW	<-1.4E+02	0.00E+00	2.61E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 499 [CONTROL - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
423162	8/9/2016 - 8/9/2016	H3SW	<2.95E+01	0.00E+00	2.61E+02
423204	8/16/2016 - 8/16/2016	H3SW	<6.4E+01	0.00E+00	2.56E+02
423219	8/23/2016 - 8/23/2016	H3SW	<4.2E+01	0.00E+00	2.69E+02
424665	8/2/2016 - 8/30/2016	Mn-54	<1.11E+01	0.00E+00	1.11E+01
		Co-58	<1.17E+01	0.00E+00	1.17E+01
		Fe-59	<3.86E+01	0.00E+00	3.86E+01
		Co-60	<8.53E+00	0.00E+00	8.53E+00
		Zn-65	<1.89E+01	0.00E+00	1.89E+01
		Zr-95	<2.30E+01	0.00E+00	2.30E+01
		Nb-95	<1.79E+01	0.00E+00	1.79E+01
		I-131	<2.05E+02	0.00E+00	2.05E+02
		Cs-134	<8.59E+00	0.00E+00	8.59E+00
		Cs-137	<8.51E+00	0.00E+00	8.51E+00
		La-140	<3.89E+07	0.00E+00	3.89E+07
		Ba-140	<1.91E+02	0.00E+00	1.91E+02
		Total-Gam	0.00E+00		
424347	8/30/2016 - 8/30/2016	H3SW	<2.4E+01	0.00E+00	2.62E+02
427406	9/6/2016 - 9/6/2016	H3SW	<0.00E+00	0.00E+00	2.40E+02
423260	9/13/2016 - 9/13/2016	H3SW	<-1.1E+02	0.00E+00	2.35E+02
424378	9/21/2016 - 9/21/2016	H3SW	<1.32E+02	0.00E+00	2.25E+02
424736	9/6/2016 - 9/27/2016	Mn-54	<7.62E+00	0.00E+00	7.62E+00
		Co-58	<1.40E+01	0.00E+00	1.40E+01
		Fe-59	<2.57E+01	0.00E+00	2.57E+01
		Co-60	<6.70E+00	0.00E+00	6.70E+00
		Zn-65	<2.14E+01	0.00E+00	2.14E+01
		Zr-95	<2.21E+01	0.00E+00	2.21E+01
		Nb-95	<2.09E+01	0.00E+00	2.09E+01
		I-131	<7.82E+02	0.00E+00	7.82E+02
		Cs-134	<7.99E+00	0.00E+00	7.99E+00
		Cs-137	<6.89E+00	0.00E+00	6.89E+00
		La-140	<6.14E+10	0.00E+00	6.14E+10
		Ba-140	<4.49E+02	0.00E+00	4.49E+02
		Total-Gam	0.00E+00		
425377	9/27/2016 - 9/27/2016	H3SW	<2.06E+02	0.00E+00	2.43E+02
425939	10/4/2016 - 10/4/2016	H3SW	<1.41E+02	0.00E+00	2.48E+02
426312	10/12/2016 - 10/12/2016	H3SW	<1.72E+00	0.00E+00	2.41E+02
427001	10/18/2016 - 10/18/2016	H3SW	<8.62E+01	0.00E+00	2.37E+02
427649	10/4/2016 - 10/26/2016	Mn-54	<1.00E+01	0.00E+00	1.00E+01
		Co-58	<8.65E+00	0.00E+00	8.65E+00
		Fe-59	<2.77E+01	0.00E+00	2.77E+01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 499 [CONTROL - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
427649	10/4/2016 - 10/26/2016	Co-60	<7.18E+00	0.00E+00	7.18E+00
		Zn-65	<1.76E+01	0.00E+00	1.76E+01
		Zr-95	<1.59E+01	0.00E+00	1.59E+01
		Nb-95	<1.48E+01	0.00E+00	1.48E+01
		I-131	<1.07E+02	0.00E+00	1.07E+02
		Cs-134	<8.42E+00	0.00E+00	8.42E+00
		Cs-137	<8.65E+00	0.00E+00	8.65E+00
		La-140	<4.07E+06	0.00E+00	4.07E+06
		Ba-140	<1.48E+02	0.00E+00	1.48E+02
		Total-Gam	0.00E+00		
427658	10/26/2016 - 10/26/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<-2.6E+01	0.00E+00	2.43E+02
428157	11/1/2016 - 11/1/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<2.34E+02	0.00E+00	2.40E+02
428832	11/8/2016 - 11/8/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<-7.6E+00	0.00E+00	2.63E+02
429350	11/15/2016 - 11/15/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<2.00E+02	0.00E+00	2.48E+02
429901	11/21/2016 - 11/21/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<1.84E+02	0.00E+00	2.41E+02
429892	11/1/2016 - 11/29/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<7.39E+00	0.00E+00	7.39E+00
		Co-58	<9.51E+00	0.00E+00	9.51E+00
		Fe-59	<1.98E+01	0.00E+00	1.97E+01
		Co-60	<7.92E+00	0.00E+00	7.91E+00
		Zn-65	<1.70E+01	0.00E+00	1.70E+01
		Zr-95	<1.21E+01	0.00E+00	1.21E+01
		Nb-95	<1.15E+01	0.00E+00	1.15E+01
		I-131	<4.52E+01	0.00E+00	4.52E+01
		Cs-134	<7.31E+00	0.00E+00	7.31E+00
		Cs-137	<5.95E+00	0.00E+00	5.95E+00
		La-140	<4.82E+04	0.00E+00	4.82E+04
		Ba-140	<7.55E+01	0.00E+00	7.55E+01
Total-Gam	0.00E+00				
430521	11/29/2016 - 11/29/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<7.36E+01	0.00E+00	2.36E+02
431009	12/6/2016 - 12/6/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<-3.3E+01	0.00E+00	2.49E+02
431417	12/13/2016 - 12/13/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<-1.9E+00	0.00E+00	2.58E+02
431748	12/19/2016 - 12/19/2016	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<7.40E+01	0.00E+00	2.51E+02
432078	12/6/2016 - 12/27/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<7.54E+00	0.00E+00	7.54E+00
		Co-58	<7.49E+00	0.00E+00	7.49E+00
		Fe-59	<1.97E+01	0.00E+00	1.97E+01
		Co-60	<7.30E+00	0.00E+00	7.31E+00
		Zn-65	<1.29E+01	0.00E+00	1.29E+01
		Zr-95	<1.29E+01	0.00E+00	1.29E+01
		Nb-95	<1.09E+01	0.00E+00	1.09E+01
		I-131	<2.25E+01	0.00E+00	2.25E+01
		Cs-134	<7.78E+00	0.00E+00	7.78E+00
		Cs-137	<9.30E+00	0.00E+00	9.30E+00
		La-140	<8.72E+02	0.00E+00	8.72E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 499 [CONTROL - -- @ 0 miles]

Sample ID:	432078	Sample Dates:	12/6/2016 - 12/27/2016	Nuclide	Activity	2 Sigma Error	MDA
				Ba-140	<4.60E+01	0.00E+00	4.60E+01
				Total-Gam	0.00E+00		

Sample ID:	432149	Sample Dates:	12/27/2016 - 12/27/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-7.6E+01	0.00E+00	2.47E+02

Sample Point 604 [INDICATOR - -- @ 0 miles]

Sample ID:	400544	Sample Dates:	1/6/2016 - 1/6/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<2.37E+02	0.00E+00	2.65E+02

Sample ID:	399960	Sample Dates:	1/12/2016 - 1/12/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	5.97E+02	1.71E+02	2.72E+02

Sample ID:	400282	Sample Dates:	1/19/2016 - 1/19/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<1.69E+02	0.00E+00	2.78E+02

Sample ID:	400933	Sample Dates:	1/26/2016 - 1/26/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<2.08E+02	0.00E+00	2.73E+02

Sample ID:	401296	Sample Dates:	2/2/2016 - 2/2/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	1.13E+03	1.83E+02	2.77E+02

Sample ID:	401759	Sample Dates:	2/9/2016 - 2/9/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	5.21E+02	1.63E+02	2.61E+02

Sample ID:	402270	Sample Dates:	2/16/2016 - 2/16/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	1.90E+03	1.86E+02	2.61E+02

Sample ID:	402992	Sample Dates:	2/23/2016 - 2/23/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	6.94E+02	1.76E+02	2.78E+02

Sample ID:	404476	Sample Dates:	3/1/2016 - 3/1/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	3.05E+03	2.03E+02	2.60E+02

Sample ID:	405362	Sample Dates:	3/8/2016 - 3/8/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	6.40E+02	1.70E+02	2.68E+02

Sample ID:	405979	Sample Dates:	3/15/2016 - 3/15/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-9.4E+01	0.00E+00	2.84E+02

Sample ID:	406310	Sample Dates:	3/22/2016 - 3/22/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	1.11E+03	1.72E+02	2.58E+02

Sample ID:	407507	Sample Dates:	3/29/2016 - 3/29/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<2.62E+01	0.00E+00	2.72E+02

Sample ID:	408061	Sample Dates:	4/5/2016 - 4/5/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<6.67E+01	0.00E+00	2.67E+02

Sample ID:	409400	Sample Dates:	4/12/2016 - 4/12/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-1.1E+01	0.00E+00	2.60E+02

Sample ID:	409734	Sample Dates:	4/19/2016 - 4/19/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<6.70E+01	0.00E+00	2.52E+02

Sample ID:	410887	Sample Dates:	4/26/2016 - 4/26/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<1.69E+02	0.00E+00	2.76E+02

Sample ID:	411387	Sample Dates:	5/3/2016 - 5/3/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<2.05E+02	0.00E+00	2.58E+02

Sample ID:	411711	Sample Dates:	5/10/2016 - 5/10/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<6.93E+01	0.00E+00	2.56E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 604 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
412173	5/17/2016 - 5/17/2016	H3SW	<2.03E+02	0.00E+00	2.58E+02
412690	5/24/2016 - 5/24/2016	H3SW	<9.53E+01	0.00E+00	2.60E+02
413293	6/1/2016 - 6/1/2016	H3SW	<-7.3E+01	0.00E+00	2.63E+02
413840	6/7/2016 - 6/7/2016	H3SW	1.64E+03	1.75E+02	2.46E+02
414980	6/14/2016 - 6/14/2016	H3SW	<4.37E+01	0.00E+00	2.76E+02
415345	6/21/2016 - 6/21/2016	H3SW	<2.09E+02	0.00E+00	2.48E+02
416345	6/28/2016 - 6/28/2016	H3SW	<1.32E+01	0.00E+00	2.62E+02
416969	7/5/2016 - 7/5/2016	H3SW	<1.10E+02	0.00E+00	2.71E+02
417362	7/12/2016 - 7/12/2016	H3SW	9.10E+02	1.68E+02	2.57E+02
417723	7/19/2016 - 7/19/2016	H3SW	<2.09E+02	0.00E+00	2.53E+02
418209	7/26/2016 - 7/26/2016	H3SW	<3.24E+01	0.00E+00	2.61E+02
418937	8/2/2016 - 8/2/2016	H3SW	<-7.0E+01	0.00E+00	2.78E+02
423169	8/9/2016 - 8/9/2016	H3SW	5.17E+02	1.34E+02	2.12E+02
423211	8/16/2016 - 8/16/2016	H3SW	<1.23E+02	0.00E+00	2.55E+02
423225	8/23/2016 - 8/23/2016	H3SW	<2.17E+01	0.00E+00	2.66E+02
424355	8/30/2016 - 8/30/2016	H3SW	<1.71E+02	0.00E+00	2.61E+02
427536	9/6/2016 - 9/6/2016	H3SW	<3.85E+01	0.00E+00	2.38E+02
423261	9/13/2016 - 9/13/2016	H3SW	<1.78E+02	0.00E+00	2.27E+02
424379	9/21/2016 - 9/21/2016	H3SW	<5.05E+01	0.00E+00	2.47E+02
425378	9/27/2016 - 9/27/2016	H3SW	<1.93E+02	0.00E+00	2.36E+02
425940	10/4/2016 - 10/4/2016	H3SW	2.55E+02	1.50E+02	2.48E+02
426313	10/12/2016 - 10/12/2016	H3SW	6.41E+03	2.47E+02	2.52E+02
427002	10/18/2016 - 10/18/2016	H3SW	<8.62E+00	0.00E+00	2.50E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 604 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
427659	10/26/2016 - 10/26/2016	H3SW	<9.28E+01	0.00E+00	2.47E+02
428158	11/1/2016 - 11/1/2016	H3SW	<1.67E+02	0.00E+00	2.30E+02
428833	11/8/2016 - 11/8/2016	H3SW	8.35E+02	1.59E+02	2.45E+02
429351	11/15/2016 - 11/15/2016	H3SW	<1.10E+02	0.00E+00	2.41E+02
429902	11/21/2016 - 11/21/2016	H3SW	3.37E+03	2.02E+02	2.43E+02
430522	11/29/2016 - 11/29/2016	H3SW	3.17E+02	1.48E+02	2.42E+02
431010	12/6/2016 - 12/6/2016	H3SW	2.85E+02	1.49E+02	2.45E+02
431418	12/13/2016 - 12/13/2016	H3SW	1.06E+03	1.70E+02	2.55E+02
431749	12/19/2016 - 12/19/2016	H3SW	2.88E+02	1.43E+02	2.34E+02
432150	12/27/2016 - 12/27/2016	H3SW	1.93E+03	1.71E+02	2.33E+02

Sample Point 605 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400464	1/6/2016 - 1/6/2016	H3SW	<2.41E+01	0.00E+00	2.53E+02
399961	1/12/2016 - 1/12/2016	H3SW	<-1.7E+02	0.00E+00	2.78E+02
400283	1/19/2016 - 1/19/2016	H3SW	<3.91E+01	0.00E+00	2.81E+02
400934	1/26/2016 - 1/26/2016	H3SW	<1.11E+02	0.00E+00	2.74E+02
401297	2/2/2016 - 2/2/2016	H3SW	<-6.3E+00	0.00E+00	2.82E+02
401760	2/9/2016 - 2/9/2016	H3SW	<0.00E+00	0.00E+00	2.74E+02
402271	2/16/2016 - 2/16/2016	H3SW	<8.78E+01	0.00E+00	2.61E+02
402993	2/23/2016 - 2/23/2016	H3SW	<-6.7E+01	0.00E+00	2.64E+02
404477	3/1/2016 - 3/1/2016	H3SW	<1.13E+02	0.00E+00	2.59E+02
405363	3/8/2016 - 3/8/2016	H3SW	<-1.7E+02	0.00E+00	2.65E+02
405980	3/15/2016 - 3/15/2016	H3SW	<-1.0E+02	0.00E+00	2.60E+02
406311	3/22/2016 - 3/22/2016	H3SW	<-3.6E+02	0.00E+00	2.84E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 605 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
407508	3/29/2016 - 3/29/2016	H3SW	<-1.6E+02	0.00E+00	2.65E+02
408062	4/5/2016 - 4/5/2016	H3SW	<4.45E+01	0.00E+00	2.67E+02
409401	4/12/2016 - 4/12/2016	H3SW	<-5.6E+01	0.00E+00	2.61E+02
409735	4/19/2016 - 4/19/2016	H3SW	<1.48E+02	0.00E+00	2.49E+02
410888	4/26/2016 - 4/26/2016	H3SW	<7.25E+01	0.00E+00	2.58E+02
411388	5/3/2016 - 5/3/2016	H3SW	<-2.3E+02	0.00E+00	2.78E+02
411712	5/10/2016 - 5/10/2016	H3SW	<-6.7E+01	0.00E+00	2.56E+02
412174	5/17/2016 - 5/17/2016	H3SW	<1.70E+01	0.00E+00	2.60E+02
412691	5/24/2016 - 5/24/2016	H3SW	<-1.9E+00	0.00E+00	2.61E+02
413294	6/1/2016 - 6/1/2016	H3SW	<-1.9E+02	0.00E+00	2.63E+02
413841	6/7/2016 - 6/7/2016	H3SW	<1.67E+01	0.00E+00	2.47E+02
414981	6/14/2016 - 6/14/2016	H3SW	<-2.9E+01	0.00E+00	2.61E+02
415346	6/21/2016 - 6/21/2016	H3SW	<-5.7E+01	0.00E+00	2.55E+02
416346	6/28/2016 - 6/28/2016	H3SW	<-1.9E+00	0.00E+00	2.54E+02
416970	7/5/2016 - 7/5/2016	H3SW	<-1.2E+02	0.00E+00	2.58E+02
417363	7/12/2016 - 7/12/2016	H3SW	<2.46E+01	0.00E+00	2.51E+02
417724	7/19/2016 - 7/19/2016	H3SW	<-1.8E+02	0.00E+00	2.83E+02
418210	7/26/2016 - 7/26/2016	H3SW	<7.92E+01	0.00E+00	2.58E+02
418938	8/2/2016 - 8/2/2016	H3SW	<6.77E+01	0.00E+00	2.49E+02
423163	8/9/2016 - 8/9/2016	H3SW	<8.90E+01	0.00E+00	2.63E+02
423205	8/16/2016 - 8/16/2016	H3SW	<1.32E+02	0.00E+00	2.56E+02
423220	8/23/2016 - 8/23/2016	H3SW	<-8.2E+01	0.00E+00	2.77E+02
424348	8/30/2016 - 8/30/2016	H3SW	<7.35E+01	0.00E+00	2.60E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 605 [INDICATOR - -- @ 0 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
427407	9/6/2016 - 9/6/2016	H3SW	<-8.2E+01	0.00E+00	2.39E+02
423262	9/13/2016 - 9/13/2016	H3SW	<1.87E+01	0.00E+00	2.34E+02
424380	9/21/2016 - 9/21/2016	H3SW	<2.87E+01	0.00E+00	2.24E+02
425379	9/27/2016 - 9/27/2016	H3SW	<1.05E+02	0.00E+00	2.46E+02
425941	10/4/2016 - 10/4/2016	H3SW	<1.33E+02	0.00E+00	2.46E+02
426314	10/12/2016 - 10/12/2016	H3SW	3.03E+02	1.46E+02	2.39E+02
427003	10/18/2016 - 10/18/2016	H3SW	<1.85E+02	0.00E+00	2.50E+02
427660	10/26/2016 - 10/26/2016	H3SW	<-3.5E+00	0.00E+00	2.43E+02
428159	11/1/2016 - 11/1/2016	H3SW	<1.29E+02	0.00E+00	2.28E+02
428834	11/8/2016 - 11/8/2016	H3SW	<6.83E+01	0.00E+00	2.45E+02
429352	11/15/2016 - 11/15/2016	H3SW	<6.28E+01	0.00E+00	2.49E+02
429903	11/21/2016 - 11/21/2016	H3SW	<2.25E+02	0.00E+00	2.41E+02
430523	11/29/2016 - 11/29/2016	H3SW	<1.44E+02	0.00E+00	2.37E+02
431011	12/6/2016 - 12/6/2016	H3SW	<4.65E+01	0.00E+00	2.46E+02
431419	12/13/2016 - 12/13/2016	H3SW	<-3.8E+01	0.00E+00	2.59E+02
431750	12/19/2016 - 12/19/2016	H3SW	<-2.1E+01	0.00E+00	2.52E+02
432151	12/27/2016 - 12/27/2016	H3SW	<1.39E+02	0.00E+00	2.48E+02

Sample Point 606 [INDICATOR - -- @ 0 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
400465	1/6/2016 - 1/6/2016	H3SW	<4.47E+01	0.00E+00	2.55E+02
399962	1/12/2016 - 1/12/2016	H3SW	<-2.6E+02	0.00E+00	2.77E+02
400284	1/19/2016 - 1/19/2016	H3SW	<-4.2E+01	0.00E+00	2.83E+02
400935	1/26/2016 - 1/26/2016	H3SW	<-5.1E+01	0.00E+00	2.74E+02
401298	2/2/2016 - 2/2/2016	H3SW	<-3.7E+01	0.00E+00	2.79E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 606 [INDICATOR - -- @ 0 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
401761	2/9/2016 - 2/9/2016	H3SW	<-5.9E+01	0.00E+00	2.70E+02
402272	2/16/2016 - 2/16/2016	H3SW	<-6.1E+01	0.00E+00	2.59E+02
402994	2/23/2016 - 2/23/2016	H3SW	<-2.8E+01	0.00E+00	2.63E+02
404478	3/1/2016 - 3/1/2016	H3SW	<1.59E+02	0.00E+00	2.58E+02
405364	3/8/2016 - 3/8/2016	H3SW	<-1.8E+02	0.00E+00	2.66E+02
405981	3/15/2016 - 3/15/2016	H3SW	<-9.1E+01	0.00E+00	2.60E+02
406312	3/22/2016 - 3/22/2016	H3SW	<-3.2E+02	0.00E+00	2.82E+02
407509	3/29/2016 - 3/29/2016	H3SW	<-1.4E+02	0.00E+00	2.63E+02
408063	4/5/2016 - 4/5/2016	H3SW	<-6.9E+01	0.00E+00	2.68E+02
409402	4/12/2016 - 4/12/2016	H3SW	<-1.6E+02	0.00E+00	2.59E+02
409736	4/19/2016 - 4/19/2016	H3SW	<-1.1E+02	0.00E+00	2.50E+02
410889	4/26/2016 - 4/26/2016	H3SW	<-5.0E+01	0.00E+00	2.57E+02
411389	5/3/2016 - 5/3/2016	H3SW	<-3.2E+02	0.00E+00	2.78E+02
411713	5/10/2016 - 5/10/2016	H3SW	<-4.7E+01	0.00E+00	2.54E+02
412175	5/17/2016 - 5/17/2016	H3SW	<4.87E+01	0.00E+00	2.58E+02
412692	5/24/2016 - 5/24/2016	H3SW	<0.00E+00	0.00E+00	2.63E+02
413295	6/1/2016 - 6/1/2016	H3SW	<-1.4E+02	0.00E+00	2.63E+02
413842	6/7/2016 - 6/7/2016	H3SW	<1.09E+02	0.00E+00	2.47E+02
414982	6/14/2016 - 6/14/2016	H3SW	<-1.1E+02	0.00E+00	2.58E+02
415347	6/21/2016 - 6/21/2016	H3SW	<-5.7E+01	0.00E+00	2.57E+02
416347	6/28/2016 - 6/28/2016	H3SW	<1.32E+01	0.00E+00	2.52E+02
416971	7/5/2016 - 7/5/2016	H3SW	<7.96E+01	0.00E+00	2.72E+02
417364	7/12/2016 - 7/12/2016	H3SW	<1.89E+00	0.00E+00	2.51E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 606 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
417725	7/19/2016 - 7/19/2016	H3SW	<2.68E+01	0.00E+00	2.74E+02
418211	7/26/2016 - 7/26/2016	H3SW	<8.6E+01	0.00E+00	2.57E+02
418939	8/2/2016 - 8/2/2016	H3SW	<3.01E+01	0.00E+00	2.49E+02
423164	8/9/2016 - 8/9/2016	H3SW	<1.09E+02	0.00E+00	2.63E+02
423206	8/16/2016 - 8/16/2016	H3SW	<6.8E+01	0.00E+00	2.56E+02
423227	8/23/2016 - 8/23/2016	H3SW	<4.56E+01	0.00E+00	2.67E+02
424349	8/30/2016 - 8/30/2016	H3SW	<5.2E+01	0.00E+00	2.60E+02
427408	9/6/2016 - 9/6/2016	H3SW	<1.2E+02	0.00E+00	2.39E+02
423263	9/13/2016 - 9/13/2016	H3SW	<9.5E+01	0.00E+00	2.34E+02
424381	9/21/2016 - 9/21/2016	H3SW	<3.2E+01	0.00E+00	2.25E+02
425380	9/27/2016 - 9/27/2016	H3SW	<4.77E+01	0.00E+00	2.46E+02
425942	10/4/2016 - 10/4/2016	H3SW	<1.80E+02	0.00E+00	2.25E+02
426315	10/12/2016 - 10/12/2016	H3SW	3.52E+02	1.47E+02	2.38E+02
427004	10/18/2016 - 10/18/2016	H3SW	<1.73E+02	0.00E+00	2.50E+02
427661	10/26/2016 - 10/26/2016	H3SW	<1.15E+02	0.00E+00	2.43E+02
428160	11/1/2016 - 11/1/2016	H3SW	<1.91E+02	0.00E+00	2.28E+02
428835	11/8/2016 - 11/8/2016	H3SW	<4.89E+01	0.00E+00	2.44E+02
429353	11/15/2016 - 11/15/2016	H3SW	<2.42E+02	0.00E+00	2.46E+02
429904	11/21/2016 - 11/21/2016	H3SW	<1.72E+02	0.00E+00	2.43E+02
430524	11/29/2016 - 11/29/2016	H3SW	<3.24E+01	0.00E+00	2.35E+02
431012	12/6/2016 - 12/6/2016	H3SW	<2.02E+02	0.00E+00	2.47E+02
431420	12/13/2016 - 12/13/2016	H3SW	<9.5E+00	0.00E+00	2.58E+02
431751	12/19/2016 - 12/19/2016	H3SW	<5.50E+01	0.00E+00	2.51E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 606 [INDICATOR - -- @ 0 miles]

Sample ID:	432152	Sample Dates:	12/27/2016 - 12/27/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-8.8E+01	0.00E+00	2.46E+02

Sample Point 607 [INDICATOR - -- @ 0 miles]

Sample ID:	400466	Sample Dates:	1/6/2016 - 1/6/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<8.72E+01	0.00E+00	2.54E+02
Sample ID:	399963	Sample Dates:	1/12/2016 - 1/12/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-2.0E+02	0.00E+00	2.76E+02
Sample ID:	400285	Sample Dates:	1/19/2016 - 1/19/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<2.88E+01	0.00E+00	2.81E+02
Sample ID:	400936	Sample Dates:	1/26/2016 - 1/26/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<2.05E+00	0.00E+00	2.74E+02
Sample ID:	401299	Sample Dates:	2/2/2016 - 2/2/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<6.36E+01	0.00E+00	2.78E+02
Sample ID:	401762	Sample Dates:	2/9/2016 - 2/9/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-6.4E+01	0.00E+00	2.75E+02
Sample ID:	402273	Sample Dates:	2/16/2016 - 2/16/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<2.41E+01	0.00E+00	2.60E+02
Sample ID:	402995	Sample Dates:	2/23/2016 - 2/23/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-2.6E+01	0.00E+00	2.65E+02
Sample ID:	404479	Sample Dates:	3/1/2016 - 3/1/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<1.87E+02	0.00E+00	2.57E+02
Sample ID:	405365	Sample Dates:	3/8/2016 - 3/8/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-2.1E+02	0.00E+00	2.66E+02
Sample ID:	405982	Sample Dates:	3/15/2016 - 3/15/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-1.7E+02	0.00E+00	2.60E+02
Sample ID:	406313	Sample Dates:	3/22/2016 - 3/22/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-2.5E+02	0.00E+00	2.81E+02
Sample ID:	407510	Sample Dates:	3/29/2016 - 3/29/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-7.2E+01	0.00E+00	2.64E+02
Sample ID:	408064	Sample Dates:	4/5/2016 - 4/5/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-3.7E+01	0.00E+00	2.69E+02
Sample ID:	409403	Sample Dates:	4/12/2016 - 4/12/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-6.0E+01	0.00E+00	2.72E+02
Sample ID:	409737	Sample Dates:	4/19/2016 - 4/19/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<7.99E+01	0.00E+00	2.50E+02
Sample ID:	410890	Sample Dates:	4/26/2016 - 4/26/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-1.6E+02	0.00E+00	2.56E+02
Sample ID:	411390	Sample Dates:	5/3/2016 - 5/3/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-2.2E+02	0.00E+00	2.78E+02
Sample ID:	411714	Sample Dates:	5/10/2016 - 5/10/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<6.76E+01	0.00E+00	2.57E+02
Sample ID:	412176	Sample Dates:	5/17/2016 - 5/17/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-3.6E+01	0.00E+00	2.58E+02
Sample ID:	412693	Sample Dates:	5/24/2016 - 5/24/2016	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	<-1.9E+01	0.00E+00	2.61E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 607 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
413296	6/1/2016 - 6/1/2016	H3SW	<-1.3E+02	0.00E+00	2.62E+02
413843	6/7/2016 - 6/7/2016	H3SW	<2.96E+01	0.00E+00	2.46E+02
414983	6/14/2016 - 6/14/2016	H3SW	<-2.6E+01	0.00E+00	2.58E+02
415348	6/21/2016 - 6/21/2016	H3SW	<-1.6E+02	0.00E+00	2.56E+02
416348	6/28/2016 - 6/28/2016	H3SW	<1.50E+01	0.00E+00	2.52E+02
416972	7/5/2016 - 7/5/2016	H3SW	<2.87E+01	0.00E+00	2.73E+02
417365	7/12/2016 - 7/12/2016	H3SW	<3.21E+01	0.00E+00	2.56E+02
417726	7/19/2016 - 7/19/2016	H3SW	<1.29E+02	0.00E+00	2.77E+02
418212	7/26/2016 - 7/26/2016	H3SW	<-7.9E+01	0.00E+00	2.58E+02
418940	8/2/2016 - 8/2/2016	H3SW	<1.62E+02	0.00E+00	2.49E+02
423165	8/9/2016 - 8/9/2016	H3SW	<3.55E+01	0.00E+00	2.62E+02
423207	8/16/2016 - 8/16/2016	H3SW	<6.67E+01	0.00E+00	2.57E+02
423221	8/23/2016 - 8/23/2016	H3SW	<-2.6E+01	0.00E+00	2.69E+02
424350	8/30/2016 - 8/30/2016	H3SW	<-2.2E+01	0.00E+00	2.59E+02
427409	9/6/2016 - 9/6/2016	H3SW	<-7.7E+01	0.00E+00	2.39E+02
423264	9/13/2016 - 9/13/2016	H3SW	<-3.4E+01	0.00E+00	2.34E+02
424382	9/21/2016 - 9/21/2016	H3SW	<5.77E+01	0.00E+00	2.25E+02
425381	9/27/2016 - 9/27/2016	H3SW	<1.68E+02	0.00E+00	2.47E+02
425943	10/4/2016 - 10/4/2016	H3SW	<2.01E+02	0.00E+00	2.26E+02
426316	10/12/2016 - 10/12/2016	H3SW	3.17E+02	1.46E+02	2.39E+02
427005	10/18/2016 - 10/18/2016	H3SW	<1.33E+02	0.00E+00	2.49E+02
427662	10/26/2016 - 10/26/2016	H3SW	<9.79E+01	0.00E+00	2.42E+02
428161	11/1/2016 - 11/1/2016	H3SW	<1.96E+02	0.00E+00	2.27E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 607 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
428836	11/8/2016 - 11/8/2016	H3SW	<-4.1E+01	0.00E+00	2.46E+02
429354	11/15/2016 - 11/15/2016	H3SW	<7.41E+01	0.00E+00	2.43E+02
429905	11/21/2016 - 11/21/2016	H3SW	<5.16E+00	0.00E+00	2.48E+02
430525	11/29/2016 - 11/29/2016	H3SW	<3.08E+01	0.00E+00	2.40E+02
431013	12/6/2016 - 12/6/2016	H3SW	<4.99E+01	0.00E+00	2.46E+02
431421	12/13/2016 - 12/13/2016	H3SW	<-9.1E+01	0.00E+00	2.58E+02
431752	12/19/2016 - 12/19/2016	H3SW	<5.71E+01	0.00E+00	2.52E+02
432153	12/27/2016 - 12/27/2016	H3SW	<5.18E+01	0.00E+00	2.47E+02

Sample Point 608 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400541	1/6/2016 - 1/6/2016	H3SW	<2.78E+01	0.00E+00	2.66E+02
399964	1/12/2016 - 1/12/2016	H3SW	<1.12E+02	0.00E+00	2.73E+02
400286	1/19/2016 - 1/19/2016	H3SW	<8.18E+00	0.00E+00	2.79E+02
400937	1/26/2016 - 1/26/2016	H3SW	<-7.4E+01	0.00E+00	2.74E+02
401300	2/2/2016 - 2/2/2016	H3SW	<6.57E+01	0.00E+00	2.78E+02
401763	2/9/2016 - 2/9/2016	H3SW	<-5.4E+01	0.00E+00	2.76E+02
402274	2/16/2016 - 2/16/2016	H3SW	<-5.2E+01	0.00E+00	2.59E+02
402996	2/23/2016 - 2/23/2016	H3SW	<8.49E+01	0.00E+00	2.71E+02
404480	3/1/2016 - 3/1/2016	H3SW	<1.68E+02	0.00E+00	2.62E+02
405366	3/8/2016 - 3/8/2016	H3SW	<-9.2E+01	0.00E+00	2.71E+02
405983	3/15/2016 - 3/15/2016	H3SW	<-2.0E+02	0.00E+00	2.85E+02
406314	3/22/2016 - 3/22/2016	H3SW	<1.32E+01	0.00E+00	2.58E+02
407511	3/29/2016 - 3/29/2016	H3SW	<1.01E+01	0.00E+00	2.73E+02
408065	4/5/2016 - 4/5/2016	H3SW	<-7.8E+01	0.00E+00	2.70E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 608 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
409404	4/12/2016 - 4/12/2016	H3SW	<-4.5E+01	0.00E+00	2.74E+02
409738	4/19/2016 - 4/19/2016	H3SW	<-1.3E+02	0.00E+00	2.65E+02
410891	4/26/2016 - 4/26/2016	H3SW	<-1.3E+02	0.00E+00	2.57E+02
411391	5/3/2016 - 5/3/2016	H3SW	<1.86E+00	0.00E+00	2.58E+02
411715	5/10/2016 - 5/10/2016	H3SW	<1.33E+01	0.00E+00	2.59E+02
412177	5/17/2016 - 5/17/2016	H3SW	<6.41E+01	0.00E+00	2.59E+02
412694	5/24/2016 - 5/24/2016	H3SW	<2.62E+01	0.00E+00	2.60E+02
413297	6/1/2016 - 6/1/2016	H3SW	<6.75E+01	0.00E+00	2.65E+02
413844	6/7/2016 - 6/7/2016	H3SW	<7.98E+01	0.00E+00	2.45E+02
414984	6/14/2016 - 6/14/2016	H3SW	<-1.1E+02	0.00E+00	2.74E+02
415349	6/21/2016 - 6/21/2016	H3SW	<-4.9E+01	0.00E+00	2.57E+02
416349	6/28/2016 - 6/28/2016	H3SW	<-1.9E+01	0.00E+00	2.62E+02
416973	7/5/2016 - 7/5/2016	H3SW	<-1.0E+01	0.00E+00	2.74E+02
417366	7/12/2016 - 7/12/2016	H3SW	<3.99E+01	0.00E+00	2.57E+02
417727	7/19/2016 - 7/19/2016	H3SW	<1.45E+02	0.00E+00	2.56E+02
418213	7/26/2016 - 7/26/2016	H3SW	<1.13E+01	0.00E+00	2.58E+02
418941	8/2/2016 - 8/2/2016	H3SW	<-1.9E+02	0.00E+00	2.85E+02
423166	8/9/2016 - 8/9/2016	H3SW	<1.07E+02	0.00E+00	2.59E+02
423208	8/16/2016 - 8/16/2016	H3SW	<-5.9E+01	0.00E+00	2.56E+02
423223	8/23/2016 - 8/23/2016	H3SW	<-4.3E+01	0.00E+00	2.66E+02
424351	8/30/2016 - 8/30/2016	H3SW	<1.45E+02	0.00E+00	2.59E+02
427537	9/6/2016 - 9/6/2016	H3SW	<-3.0E+01	0.00E+00	2.38E+02
423265	9/13/2016 - 9/13/2016	H3SW	<1.02E+02	0.00E+00	2.28E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 608 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
424383	9/21/2016 - 9/21/2016	H3SW	<5.42E+01	0.00E+00	2.47E+02
425382	9/27/2016 - 9/27/2016	H3SW	<3.59E+01	0.00E+00	2.36E+02
425944	10/4/2016 - 10/4/2016	H3SW	<2.24E+02	0.00E+00	2.47E+02
426317	10/12/2016 - 10/12/2016	H3SW	<1.22E+02	0.00E+00	2.52E+02
427006	10/18/2016 - 10/18/2016	H3SW	<-8.7E+01	0.00E+00	2.51E+02
427663	10/26/2016 - 10/26/2016	H3SW	<-1.1E+02	0.00E+00	2.47E+02
428162	11/1/2016 - 11/1/2016	H3SW	<1.69E+02	0.00E+00	2.28E+02
428837	11/8/2016 - 11/8/2016	H3SW	<1.23E+01	0.00E+00	2.45E+02
429355	11/15/2016 - 11/15/2016	H3SW	<-4.9E+01	0.00E+00	2.44E+02
429906	11/21/2016 - 11/21/2016	H3SW	<2.21E+02	0.00E+00	2.43E+02
430526	11/29/2016 - 11/29/2016	H3SW	<3.26E+01	0.00E+00	2.41E+02
431014	12/6/2016 - 12/6/2016	H3SW	<6.05E+01	0.00E+00	2.47E+02
431422	12/13/2016 - 12/13/2016	H3SW	<-4.1E+01	0.00E+00	2.53E+02
431753	12/19/2016 - 12/19/2016	H3SW	<1.33E+02	0.00E+00	2.33E+02
432154	12/27/2016 - 12/27/2016	H3SW	<1.37E+02	0.00E+00	2.35E+02

Sample Point 609 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400542	1/6/2016 - 1/6/2016	H3SW	<-9.1E+01	0.00E+00	2.66E+02
399965	1/12/2016 - 1/12/2016	H3SW	<3.67E+01	0.00E+00	2.72E+02
400287	1/19/2016 - 1/19/2016	H3SW	<-6.8E+01	0.00E+00	2.81E+02
400938	1/26/2016 - 1/26/2016	H3SW	<6.77E+01	0.00E+00	2.74E+02
401301	2/2/2016 - 2/2/2016	H3SW	<3.71E+01	0.00E+00	2.79E+02
401764	2/9/2016 - 2/9/2016	H3SW	<-3.7E+01	0.00E+00	2.76E+02
402275	2/16/2016 - 2/16/2016	H3SW	<6.68E+01	0.00E+00	2.60E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 609 [INDICATOR - -- @ 0 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
402997	2/23/2016 - 2/23/2016	H3SW	<9.77E+01	0.00E+00	2.72E+02
404481	3/1/2016 - 3/1/2016	H3SW	<1.05E+02	0.00E+00	2.60E+02
405367	3/8/2016 - 3/8/2016	H3SW	<1.42E+01	0.00E+00	2.70E+02
405984	3/15/2016 - 3/15/2016	H3SW	<-1.8E+02	0.00E+00	2.84E+02
406315	3/22/2016 - 3/22/2016	H3SW	<-5.5E+01	0.00E+00	2.58E+02
407512	3/29/2016 - 3/29/2016	H3SW	<-2.2E+02	0.00E+00	2.74E+02
408066	4/5/2016 - 4/5/2016	H3SW	<1.22E+01	0.00E+00	2.69E+02
409405	4/12/2016 - 4/12/2016	H3SW	<-1.5E+02	0.00E+00	2.71E+02
409739	4/19/2016 - 4/19/2016	H3SW	<2.37E+02	0.00E+00	2.51E+02
410892	4/26/2016 - 4/26/2016	H3SW	<-8.9E+01	0.00E+00	2.57E+02
411392	5/3/2016 - 5/3/2016	H3SW	<-1.0E+02	0.00E+00	2.58E+02
411716	5/10/2016 - 5/10/2016	H3SW	<1.41E+02	0.00E+00	2.57E+02
412178	5/17/2016 - 5/17/2016	H3SW	<-1.1E+01	0.00E+00	2.58E+02
412695	5/24/2016 - 5/24/2016	H3SW	<2.98E+01	0.00E+00	2.60E+02
413298	6/1/2016 - 6/1/2016	H3SW	<-2.0E+02	0.00E+00	2.64E+02
413845	6/7/2016 - 6/7/2016	H3SW	<7.82E+01	0.00E+00	2.46E+02
414985	6/14/2016 - 6/14/2016	H3SW	<-1.7E+02	0.00E+00	2.76E+02
415350	6/21/2016 - 6/21/2016	H3SW	<-2.3E+01	0.00E+00	2.56E+02
416350	6/28/2016 - 6/28/2016	H3SW	<5.52E+01	0.00E+00	2.65E+02
416974	7/5/2016 - 7/5/2016	H3SW	<-9.3E+01	0.00E+00	2.76E+02
417367	7/12/2016 - 7/12/2016	H3SW	<3.41E+01	0.00E+00	2.57E+02
417728	7/19/2016 - 7/19/2016	H3SW	<6.29E+01	0.00E+00	2.56E+02
418214	7/26/2016 - 7/26/2016	H3SW	<-1.0E+02	0.00E+00	2.60E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 609 [INDICATOR - -- @ 0 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
418942	8/2/2016 - 8/2/2016	H3SW	<-2.0E+02	0.00E+00	2.75E+02
423167	8/9/2016 - 8/9/2016	H3SW	<2.08E+02	0.00E+00	2.21E+02
423209	8/16/2016 - 8/16/2016	H3SW	<-4.2E+01	0.00E+00	2.59E+02
423224	8/23/2016 - 8/23/2016	H3SW	<-7.7E+01	0.00E+00	2.67E+02
424352	8/30/2016 - 8/30/2016	H3SW	<1.69E+02	0.00E+00	2.60E+02
427538	9/6/2016 - 9/6/2016	H3SW	<-6.0E+01	0.00E+00	2.38E+02
423266	9/13/2016 - 9/13/2016	H3SW	<-2.0E+01	0.00E+00	2.28E+02
424384	9/21/2016 - 9/21/2016	H3SW	<3.79E+00	0.00E+00	2.50E+02
425383	9/27/2016 - 9/27/2016	H3SW	<-5.2E+00	0.00E+00	2.37E+02
425945	10/4/2016 - 10/4/2016	H3SW	<9.37E+01	0.00E+00	2.49E+02
426318	10/12/2016 - 10/12/2016	H3SW	<7.21E+01	0.00E+00	2.51E+02
427007	10/18/2016 - 10/18/2016	H3SW	<-5.9E+01	0.00E+00	2.52E+02
427664	10/26/2016 - 10/26/2016	H3SW	<3.98E+01	0.00E+00	2.48E+02
428163	11/1/2016 - 11/1/2016	H3SW	<2.23E+02	0.00E+00	2.29E+02
428838	11/8/2016 - 11/8/2016	H3SW	<5.25E+01	0.00E+00	2.45E+02
429356	11/15/2016 - 11/15/2016	H3SW	<-2.4E+01	0.00E+00	2.43E+02
429907	11/21/2016 - 11/21/2016	H3SW	<1.90E+02	0.00E+00	2.43E+02
430527	11/29/2016 - 11/29/2016	H3SW	<1.33E+02	0.00E+00	2.40E+02
431015	12/6/2016 - 12/6/2016	H3SW	<-6.2E+01	0.00E+00	2.47E+02
431423	12/13/2016 - 12/13/2016	H3SW	<9.63E+01	0.00E+00	2.33E+02
431754	12/19/2016 - 12/19/2016	H3SW	<6.41E+01	0.00E+00	2.34E+02
432155	12/27/2016 - 12/27/2016	H3SW	<8.29E+01	0.00E+00	2.34E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 610 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400543	1/6/2016 - 1/6/2016	H3SW	<-5.8E+01	0.00E+00	2.67E+02
399966	1/12/2016 - 1/12/2016	H3SW	<3.07E+01	0.00E+00	2.73E+02
400288	1/19/2016 - 1/19/2016	H3SW	<-1.7E+02	0.00E+00	2.80E+02
400939	1/26/2016 - 1/26/2016	H3SW	<-1.4E+01	0.00E+00	2.74E+02
401302	2/2/2016 - 2/2/2016	H3SW	<7.77E+01	0.00E+00	2.77E+02
401765	2/9/2016 - 2/9/2016	H3SW	<-2.1E+00	0.00E+00	2.76E+02
402276	2/16/2016 - 2/16/2016	H3SW	<9.25E+00	0.00E+00	2.59E+02
402998	2/23/2016 - 2/23/2016	H3SW	<6.29E+01	0.00E+00	2.71E+02
404482	3/1/2016 - 3/1/2016	H3SW	<1.97E+02	0.00E+00	2.61E+02
405368	3/8/2016 - 3/8/2016	H3SW	<5.07E+01	0.00E+00	2.70E+02
405985	3/15/2016 - 3/15/2016	H3SW	<-2.9E+02	0.00E+00	2.84E+02
406316	3/22/2016 - 3/22/2016	H3SW	<1.19E+02	0.00E+00	2.58E+02
407513	3/29/2016 - 3/29/2016	H3SW	<-1.1E+02	0.00E+00	2.72E+02
408067	4/5/2016 - 4/5/2016	H3SW	<-8.5E+01	0.00E+00	2.68E+02
409406	4/12/2016 - 4/12/2016	H3SW	<-7.6E+01	0.00E+00	2.72E+02
409740	4/19/2016 - 4/19/2016	H3SW	<5.75E+01	0.00E+00	2.51E+02
410893	4/26/2016 - 4/26/2016	H3SW	<-1.9E+00	0.00E+00	2.56E+02
411393	5/3/2016 - 5/3/2016	H3SW	<-7.3E+01	0.00E+00	2.58E+02
411717	5/10/2016 - 5/10/2016	H3SW	<7.12E+01	0.00E+00	2.56E+02
412179	5/17/2016 - 5/17/2016	H3SW	<4.68E+01	0.00E+00	2.58E+02
412696	5/24/2016 - 5/24/2016	H3SW	<-5.2E+01	0.00E+00	2.60E+02
413299	6/1/2016 - 6/1/2016	H3SW	<-2.2E+02	0.00E+00	2.62E+02
413846	6/7/2016 - 6/7/2016	H3SW	<8.75E+01	0.00E+00	2.46E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 610 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
414986	6/14/2016 - 6/14/2016	H3SW	<-1.3E+02	0.00E+00	2.75E+02
415351	6/21/2016 - 6/21/2016	H3SW	<-5.4E+01	0.00E+00	2.54E+02
416351	6/28/2016 - 6/28/2016	H3SW	<-7.6E+00	0.00E+00	2.63E+02
416975	7/5/2016 - 7/5/2016	H3SW	<2.04E+01	0.00E+00	2.72E+02
417368	7/12/2016 - 7/12/2016	H3SW	<0.00E+00	0.00E+00	2.57E+02
417729	7/19/2016 - 7/19/2016	H3SW	<1.00E+02	0.00E+00	2.54E+02
418215	7/26/2016 - 7/26/2016	H3SW	<-1.0E+02	0.00E+00	2.58E+02
418943	8/2/2016 - 8/2/2016	H3SW	<-1.8E+02	0.00E+00	2.80E+02
423168	8/9/2016 - 8/9/2016	H3SW	<-2.6E+01	0.00E+00	2.65E+02
423210	8/16/2016 - 8/16/2016	H3SW	<-7.6E+00	0.00E+00	2.56E+02
423222	8/23/2016 - 8/23/2016	H3SW	<-1.2E+02	0.00E+00	2.74E+02
424353	8/30/2016 - 8/30/2016	H3SW	<9.50E+01	0.00E+00	2.59E+02
427539	9/6/2016 - 9/6/2016	H3SW	<-4.2E+01	0.00E+00	2.39E+02
423267	9/13/2016 - 9/13/2016	H3SW	<7.61E+01	0.00E+00	2.26E+02
424385	9/21/2016 - 9/21/2016	H3SW	<1.89E+00	0.00E+00	2.50E+02
425384	9/27/2016 - 9/27/2016	H3SW	<5.30E+01	0.00E+00	2.36E+02
425946	10/4/2016 - 10/4/2016	H3SW	<1.96E+02	0.00E+00	2.48E+02
426319	10/12/2016 - 10/12/2016	H3SW	<6.43E+01	0.00E+00	2.50E+02
427008	10/18/2016 - 10/18/2016	H3SW	<-1.4E+01	0.00E+00	2.50E+02
427665	10/26/2016 - 10/26/2016	H3SW	<-1.1E+02	0.00E+00	2.46E+02
428164	11/1/2016 - 11/1/2016	H3SW	<1.84E+02	0.00E+00	2.27E+02
428839	11/8/2016 - 11/8/2016	H3SW	<-2.6E+01	0.00E+00	2.45E+02
429357	11/15/2016 - 11/15/2016	H3SW	<-8.2E+01	0.00E+00	2.42E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 610 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
429908	11/21/2016 - 11/21/2016	H3SW	<6.12E+01	0.00E+00	2.71E+02
430528	11/29/2016 - 11/29/2016	H3SW	<-1.9E+01	0.00E+00	2.41E+02
431016	12/6/2016 - 12/6/2016	H3SW	<7.08E+01	0.00E+00	2.47E+02
431424	12/13/2016 - 12/13/2016	H3SW	<2.14E+02	0.00E+00	2.34E+02
431755	12/19/2016 - 12/19/2016	H3SW	<1.87E+02	0.00E+00	2.34E+02
432156	12/27/2016 - 12/27/2016	H3SW	<5.36E+01	0.00E+00	2.34E+02

Sample Point 1065 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400097	1/6/2016 - 1/6/2016	Mn-54	<9.97E+00	0.00E+00	9.97E+00
		Co-58	<1.02E+01	0.00E+00	1.02E+01
		Fe-59	<2.38E+01	0.00E+00	2.38E+01
		Co-60	<9.24E+00	0.00E+00	9.24E+00
		Zn-65	<3.96E+01	0.00E+00	3.96E+01
		Zr-95	<2.46E+01	0.00E+00	2.46E+01
		Nb-95	<1.02E+01	0.00E+00	1.02E+01
		I-131	<2.08E+01	0.00E+00	2.08E+01
		Cs-134	<9.53E+00	0.00E+00	9.53E+00
		Cs-137	<1.92E+01	0.00E+00	1.92E+01
		La-140	<2.25E+02	0.00E+00	2.25E+02
		Ba-140	<6.87E+01	0.00E+00	6.87E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
399951	1/12/2016 - 1/12/2016	Mn-54	<1.87E+01	0.00E+00	1.87E+01
		Co-58	<1.64E+01	0.00E+00	1.64E+01
		Fe-59	<2.99E+01	0.00E+00	2.99E+01
		Co-60	<1.60E+01	0.00E+00	1.60E+01
		Zn-65	<3.56E+01	0.00E+00	3.56E+01
		Zr-95	<2.51E+01	0.00E+00	2.51E+01
		Nb-95	<2.11E+01	0.00E+00	2.11E+01
		I-131	<3.10E+01	0.00E+00	3.10E+01
		Cs-134	<1.37E+01	0.00E+00	1.37E+01
		Cs-137	<1.17E+01	0.00E+00	1.17E+01
		La-140	<3.86E+02	0.00E+00	3.86E+02
		Ba-140	<9.41E+01	0.00E+00	9.41E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400273	1/19/2016 - 1/19/2016	Mn-54	<1.21E+01	0.00E+00	1.21E+01
		Co-58	<1.54E+01	0.00E+00	1.54E+01
		Fe-59	<3.14E+01	0.00E+00	3.14E+01
		Co-60	<9.22E+00	0.00E+00	9.22E+00
		Zn-65	<3.50E+01	0.00E+00	3.50E+01
		Zr-95	<2.03E+01	0.00E+00	2.03E+01
		Nb-95	<9.37E+00	0.00E+00	9.37E+00
		I-131	<1.84E+01	0.00E+00	1.84E+01
		Cs-134	<1.36E+01	0.00E+00	1.36E+01
		Cs-137	<1.79E+01	0.00E+00	1.79E+01
		La-140	<4.41E+01	0.00E+00	4.41E+01
		Ba-140	<4.09E+01	0.00E+00	4.09E+01
		Total-Gam	0.00E+00		



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1065 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400924	1/26/2016 - 1/26/2016	Mn-54	<1.73E+01	0.00E+00	1.73E+01
		Co-58	<1.78E+01	0.00E+00	1.78E+01
		Fe-59	<2.95E+01	0.00E+00	2.95E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<3.07E+01	0.00E+00	3.07E+01
		Zr-95	<1.24E+01	0.00E+00	1.24E+01
		Nb-95	<1.80E+01	0.00E+00	1.80E+01
		I-131	<1.96E+01	0.00E+00	1.96E+01
		Cs-134	<1.12E+01	0.00E+00	1.12E+01
		Cs-137	<1.66E+01	0.00E+00	1.66E+01
		La-140	<2.19E+02	0.00E+00	2.19E+02
		Ba-140	<8.56E+01	0.00E+00	8.56E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
401287	2/2/2016 - 2/2/2016	Mn-54	<2.13E+01	0.00E+00	2.13E+01
		Co-58	<1.28E+01	0.00E+00	1.28E+01
		Fe-59	<1.75E+01	0.00E+00	1.75E+01
		Co-60	<9.24E+00	0.00E+00	9.24E+00
		Zn-65	<1.78E+01	0.00E+00	1.78E+01
		Zr-95	<3.10E+01	0.00E+00	3.10E+01
		Nb-95	<1.70E+01	0.00E+00	1.70E+01
		I-131	<3.37E+01	0.00E+00	3.37E+01
		Cs-134	<1.66E+01	0.00E+00	1.66E+01
		Cs-137	<1.17E+01	0.00E+00	1.17E+01
		La-140	<4.69E+02	0.00E+00	4.69E+02
		Ba-140	<9.46E+01	0.00E+00	9.46E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
401750	2/9/2016 - 2/9/2016	Mn-54	<0.00E+00	0.00E+00	0.00E+00
		Co-58	<1.50E+01	0.00E+00	1.50E+01
		Fe-59	<1.78E+01	0.00E+00	1.78E+01
		Co-60	<9.25E+00	0.00E+00	9.25E+00
		Zn-65	<1.79E+01	0.00E+00	1.79E+01
		Zr-95	<2.22E+01	0.00E+00	2.22E+01
		Nb-95	<1.74E+01	0.00E+00	1.74E+01
		I-131	<3.49E+01	0.00E+00	3.49E+01
		Cs-134	<1.46E+01	0.00E+00	1.46E+01
		Cs-137	<1.79E+01	0.00E+00	1.79E+01
		La-140	<9.85E+02	0.00E+00	9.85E+02
		Ba-140	<7.14E+01	0.00E+00	7.14E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
402261	2/16/2016 - 2/16/2016	Mn-54	<1.23E+01	0.00E+00	1.23E+01
		Co-58	<1.06E+01	0.00E+00	1.06E+01
		Fe-59	<3.56E+01	0.00E+00	3.56E+01
		Co-60	<1.85E+01	0.00E+00	1.85E+01
		Zn-65	<1.79E+01	0.00E+00	1.79E+01
		Zr-95	<2.56E+01	0.00E+00	2.56E+01
		Nb-95	<1.74E+01	0.00E+00	1.74E+01
		I-131	<2.86E+01	0.00E+00	2.86E+01
		Cs-134	<1.10E+01	0.00E+00	1.10E+01
		Cs-137	<1.51E+01	0.00E+00	1.51E+01
		La-140	<5.13E+02	0.00E+00	5.13E+02
		Ba-140	<8.38E+01	0.00E+00	8.38E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
402983	2/23/2016 - 2/23/2016	Mn-54	<1.59E+01	0.00E+00	1.59E+01
		Co-58	<1.30E+01	0.00E+00	1.30E+01
		Fe-59	<2.52E+01	0.00E+00	2.52E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1065 [INDICATOR - @ 0 miles]

Sample ID: 402983 Sample Dates: 2/23/2016 - 2/23/2016

Nuclide	Activity	2 Sigma Error	MDA
Zn-65	<2.53E+01	0.00E+00	2.53E+01
Zr-95	<2.57E+01	0.00E+00	2.57E+01
Nb-95	<1.56E+01	0.00E+00	1.56E+01
I-131	<2.90E+01	0.00E+00	2.90E+01
Cs-134	<1.10E+01	0.00E+00	1.10E+01
Cs-137	<9.58E+00	0.00E+00	9.58E+00
La-140	<7.75E+02	0.00E+00	7.75E+02
Ba-140	<7.82E+01	0.00E+00	7.82E+01
Total-Gam	0.00E+00		

Sample ID: 404467 Sample Dates: 3/1/2016 - 3/1/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.22E+01	0.00E+00	1.22E+01
Co-58	<1.78E+01	0.00E+00	1.78E+01
Fe-59	<1.70E+01	0.00E+00	1.70E+01
Co-60	<1.02E+01	0.00E+00	1.02E+01
Zn-65	<3.97E+01	0.00E+00	3.97E+01
Zr-95	<1.51E+01	0.00E+00	1.51E+01
Nb-95	<1.80E+01	0.00E+00	1.80E+01
I-131	<2.57E+01	0.00E+00	2.57E+01
Cs-134	<1.46E+01	0.00E+00	1.46E+01
Cs-137	<1.66E+01	0.00E+00	1.66E+01
La-140	<3.06E+02	0.00E+00	3.06E+02
Ba-140	<5.40E+01	0.00E+00	5.40E+01
Total-Gam	0.00E+00		

Sample ID: 405353 Sample Dates: 3/8/2016 - 3/8/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.24E+01	0.00E+00	1.24E+01
Co-58	<1.35E+01	0.00E+00	1.35E+01
Fe-59	<2.69E+01	0.00E+00	2.69E+01
Co-60	<1.03E+01	0.00E+00	1.03E+01
Zn-65	<2.56E+01	0.00E+00	2.56E+01
Zr-95	<2.32E+01	0.00E+00	2.32E+01
Nb-95	<1.46E+01	0.00E+00	1.46E+01
I-131	<4.36E+01	0.00E+00	4.36E+01
Cs-134	<1.24E+01	0.00E+00	1.24E+01
Cs-137	<2.44E+01	0.00E+00	2.44E+01
La-140	<3.01E+03	0.00E+00	3.01E+03
Ba-140	<1.06E+02	0.00E+00	1.06E+02
Total-Gam	0.00E+00		

Sample ID: 405970 Sample Dates: 3/15/2016 - 3/15/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.87E+01	0.00E+00	1.87E+01
Co-58	<1.04E+01	0.00E+00	1.04E+01
Fe-59	<4.23E+01	0.00E+00	4.23E+01
Co-60	<1.02E+01	0.00E+00	1.02E+01
Zn-65	<1.78E+01	0.00E+00	1.78E+01
Zr-95	<2.51E+01	0.00E+00	2.51E+01
Nb-95	<1.98E+01	0.00E+00	1.98E+01
I-131	<2.28E+01	0.00E+00	2.28E+01
Cs-134	<1.56E+01	0.00E+00	1.56E+01
Cs-137	<9.58E+00	0.00E+00	9.58E+00
La-140	<3.22E+02	0.00E+00	3.22E+02
Ba-140	<4.93E+01	0.00E+00	4.93E+01
Total-Gam	0.00E+00		

Sample ID: 406301 Sample Dates: 3/22/2016 - 3/22/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.85E+01	0.00E+00	1.85E+01
Co-58	<1.55E+01	0.00E+00	1.55E+01
Fe-59	<2.73E+01	0.00E+00	2.73E+01
Co-60	<1.45E+01	0.00E+00	1.45E+01
Zn-65	<4.28E+01	0.00E+00	4.28E+01
Zr-95	<2.49E+01	0.00E+00	2.49E+01
Nb-95	<1.49E+01	0.00E+00	1.49E+01
I-131	<1.83E+01	0.00E+00	1.83E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1065 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
406301	3/22/2016 - 3/22/2016	Cs-134	<1.34E+01	0.00E+00	1.34E+01
		Cs-137	<2.03E+01	0.00E+00	2.03E+01
		La-140	<4.71E+01	0.00E+00	4.71E+01
		Ba-140	<5.88E+01	0.00E+00	5.88E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
407498	3/29/2016 - 3/29/2016	Mn-54	<9.87E+00	0.00E+00	9.87E+00
		Co-58	<1.54E+01	0.00E+00	1.54E+01
		Fe-59	<1.57E+01	0.00E+00	1.57E+01
		Co-60	<1.30E+01	0.00E+00	1.30E+01
		Zn-65	<3.03E+01	0.00E+00	3.03E+01
		Zr-95	<2.35E+01	0.00E+00	2.35E+01
		Nb-95	<1.62E+01	0.00E+00	1.62E+01
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<1.11E+01	0.00E+00	1.11E+01
		Cs-137	<2.14E+01	0.00E+00	2.14E+01
		La-140	<3.21E+01	0.00E+00	3.21E+01
		Ba-140	<5.77E+01	0.00E+00	5.77E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
408052	4/5/2016 - 4/5/2016	Mn-54	<1.85E+01	0.00E+00	1.85E+01
		Co-58	<1.19E+01	0.00E+00	1.19E+01
		Fe-59	<2.20E+01	0.00E+00	2.20E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<3.49E+01	0.00E+00	3.49E+01
		Zr-95	<2.33E+01	0.00E+00	2.33E+01
		Nb-95	<1.31E+01	0.00E+00	1.31E+01
		I-131	<1.43E+01	0.00E+00	1.43E+01
		Cs-134	<1.34E+01	0.00E+00	1.34E+01
		Cs-137	<9.57E+00	0.00E+00	9.57E+00
		La-140	<3.20E+01	0.00E+00	3.20E+01
		Ba-140	<3.43E+01	0.00E+00	3.43E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
409391	4/12/2016 - 4/12/2016	Mn-54	<1.40E+01	0.00E+00	1.40E+01
		Co-58	<6.91E+00	0.00E+00	6.91E+00
		Fe-59	<3.51E+01	0.00E+00	3.51E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<3.50E+01	0.00E+00	3.50E+01
		Zr-95	<2.48E+01	0.00E+00	2.48E+01
		Nb-95	<2.10E+01	0.00E+00	2.10E+01
		I-131	<1.51E+01	0.00E+00	1.51E+01
		Cs-134	<1.10E+01	0.00E+00	1.10E+01
		Cs-137	<9.57E+00	0.00E+00	9.57E+00
		La-140	<4.16E+01	0.00E+00	4.16E+01
		Ba-140	<4.09E+01	0.00E+00	4.09E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
409725	4/19/2016 - 4/19/2016	Mn-54	<1.71E+01	0.00E+00	1.71E+01
		Co-58	<1.55E+01	0.00E+00	1.55E+01
		Fe-59	<3.32E+01	0.00E+00	3.32E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<2.47E+01	0.00E+00	2.47E+01
		Zr-95	<2.88E+01	0.00E+00	2.88E+01
		Nb-95	<1.88E+01	0.00E+00	1.88E+01
		I-131	<1.53E+01	0.00E+00	1.53E+01
		Cs-134	<9.50E+00	0.00E+00	9.50E+00
		Cs-137	<9.57E+00	0.00E+00	9.57E+00
		La-140	<1.97E+01	0.00E+00	1.97E+01
		Ba-140	<5.46E+01	0.00E+00	5.46E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1065 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
409725	4/19/2016 - 4/19/2016	Total-Gam	0.00E+00		
410878	4/26/2016 - 4/26/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.40E+01	0.00E+00	1.40E+01
		Co-58	<1.21E+01	0.00E+00	1.21E+01
		Fe-59	<3.36E+01	0.00E+00	3.36E+01
		Co-60	<9.22E+00	0.00E+00	9.22E+00
		Zn-65	<3.04E+01	0.00E+00	3.04E+01
		Zr-95	<2.05E+01	0.00E+00	2.05E+01
		Nb-95	<1.51E+01	0.00E+00	1.51E+01
		I-131	<1.87E+01	0.00E+00	1.87E+01
		Cs-134	<1.73E+01	0.00E+00	1.73E+01
		Cs-137	<1.91E+01	0.00E+00	1.91E+01
		La-140	<6.12E+01	0.00E+00	6.12E+01
		Ba-140	<7.47E+01	0.00E+00	7.47E+01
		Total-Gam	0.00E+00		
411378	5/3/2016 - 5/3/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.22E+01	0.00E+00	1.22E+01
		Co-58	<7.27E+00	0.00E+00	7.27E+00
		Fe-59	<2.54E+01	0.00E+00	2.54E+01
		Co-60	<9.24E+00	0.00E+00	9.24E+00
		Zn-65	<3.55E+01	0.00E+00	3.55E+01
		Zr-95	<3.04E+01	0.00E+00	3.04E+01
		Nb-95	<1.47E+01	0.00E+00	1.47E+01
		I-131	<2.26E+01	0.00E+00	2.26E+01
		Cs-134	<1.12E+01	0.00E+00	1.12E+01
		Cs-137	<1.35E+01	0.00E+00	1.35E+01
		La-140	<2.32E+02	0.00E+00	2.32E+02
		Ba-140	<4.72E+01	0.00E+00	4.72E+01
		Total-Gam	0.00E+00		
411702	5/10/2016 - 5/10/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.22E+01	0.00E+00	1.22E+01
		Co-58	<1.03E+01	0.00E+00	1.03E+01
		Fe-59	<2.94E+01	0.00E+00	2.94E+01
		Co-60	<1.31E+01	0.00E+00	1.31E+01
		Zn-65	<2.51E+01	0.00E+00	2.51E+01
		Zr-95	<2.77E+01	0.00E+00	2.77E+01
		Nb-95	<1.64E+01	0.00E+00	1.64E+01
		I-131	<2.09E+01	0.00E+00	2.09E+01
		Cs-134	<1.74E+01	0.00E+00	1.74E+01
		Cs-137	<1.35E+01	0.00E+00	1.35E+01
		La-140	<3.23E+02	0.00E+00	3.23E+02
		Ba-140	<7.64E+01	0.00E+00	7.64E+01
		Total-Gam	0.00E+00		
412164	5/17/2016 - 5/17/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.58E+01	0.00E+00	1.58E+01
		Co-58	<2.06E+01	0.00E+00	2.06E+01
		Fe-59	<2.95E+01	0.00E+00	2.95E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<3.97E+01	0.00E+00	3.97E+01
		Zr-95	<3.73E+01	0.00E+00	3.73E+01
		Nb-95	<1.04E+01	0.00E+00	1.04E+01
		I-131	<2.47E+01	0.00E+00	2.47E+01
		Cs-134	<1.23E+01	0.00E+00	1.23E+01
		Cs-137	<1.51E+01	0.00E+00	1.51E+01
		La-140	<2.71E+02	0.00E+00	2.71E+02
		Ba-140	<7.66E+01	0.00E+00	7.66E+01
		Total-Gam	0.00E+00		
412681	5/24/2016 - 5/24/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.76E+01	0.00E+00	1.76E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1065 [INDICATOR - @ 0 miles]

Sample ID: 412681 Sample Dates: 5/24/2016 - 5/24/2016

Nuclide	Activity	2 Sigma Error	MDA
Co-58	<2.33E+01	0.00E+00	2.33E+01
Fe-59	<4.23E+01	0.00E+00	4.23E+01
Co-60	<9.26E+00	0.00E+00	9.26E+00
Zn-65	<1.81E+01	0.00E+00	1.81E+01
Zr-95	<3.78E+01	0.00E+00	3.78E+01
Nb-95	<2.52E+01	0.00E+00	2.52E+01
I-131	<5.38E+01	0.00E+00	5.38E+01
Cs-134	<1.11E+01	0.00E+00	1.11E+01
Cs-137	<1.66E+01	0.00E+00	1.66E+01
La-140	<6.75E+03	0.00E+00	6.75E+03
Ba-140	<1.11E+02	0.00E+00	1.11E+02
Total-Gam	0.00E+00		

Sample ID: 413284 Sample Dates: 6/1/2016 - 6/1/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.41E+01	0.00E+00	1.41E+01
Co-58	<1.45E+01	0.00E+00	1.45E+01
Fe-59	<2.54E+01	0.00E+00	2.54E+01
Co-60	<1.60E+01	0.00E+00	1.60E+01
Zn-65	<3.97E+01	0.00E+00	3.97E+01
Zr-95	<1.76E+01	0.00E+00	1.76E+01
Nb-95	<2.08E+01	0.00E+00	2.08E+01
I-131	<2.47E+01	0.00E+00	2.47E+01
Cs-134	<1.46E+01	0.00E+00	1.46E+01
Cs-137	<2.14E+01	0.00E+00	2.14E+01
La-140	<2.22E+02	0.00E+00	2.22E+02
Ba-140	<6.64E+01	0.00E+00	6.64E+01
Total-Gam	0.00E+00		

Sample ID: 413831 Sample Dates: 6/7/2016 - 6/7/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.00E+01	0.00E+00	1.00E+01
Co-58	<2.32E+01	0.00E+00	2.32E+01
Fe-59	<3.64E+01	0.00E+00	3.64E+01
Co-60	<1.02E+01	0.00E+00	1.02E+01
Zn-65	<1.78E+01	0.00E+00	1.78E+01
Zr-95	<1.77E+01	0.00E+00	1.77E+01
Nb-95	<1.83E+01	0.00E+00	1.83E+01
I-131	<1.98E+01	0.00E+00	1.98E+01
Cs-134	<1.46E+01	0.00E+00	1.46E+01
Cs-137	<1.35E+01	0.00E+00	1.35E+01
La-140	<2.34E+02	0.00E+00	2.34E+02
Ba-140	<8.57E+01	0.00E+00	8.57E+01
Total-Gam	0.00E+00		

Sample ID: 414971 Sample Dates: 6/14/2016 - 6/14/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<9.98E+00	0.00E+00	9.98E+00
Co-58	<1.62E+01	0.00E+00	1.62E+01
Fe-59	<2.94E+01	0.00E+00	2.94E+01
Co-60	<1.31E+01	0.00E+00	1.31E+01
Zn-65	<3.07E+01	0.00E+00	3.07E+01
Zr-95	<2.14E+01	0.00E+00	2.14E+01
Nb-95	<1.46E+01	0.00E+00	1.46E+01
I-131	<2.18E+01	0.00E+00	2.18E+01
Cs-134	<1.65E+01	0.00E+00	1.65E+01
Cs-137	<1.66E+01	0.00E+00	1.66E+01
La-140	<2.44E+02	0.00E+00	2.44E+02
Ba-140	<7.07E+01	0.00E+00	7.07E+01
Total-Gam	0.00E+00		

Sample ID: 415336 Sample Dates: 6/21/2016 - 6/21/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.58E+01	0.00E+00	1.58E+01
Co-58	<1.26E+01	0.00E+00	1.26E+01
Fe-59	<3.59E+01	0.00E+00	3.59E+01
Co-60	<1.77E+01	0.00E+00	1.77E+01
Zn-65	<2.51E+01	0.00E+00	2.51E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1065 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415336	6/21/2016 - 6/21/2016	Zr-95	<3.04E+01	0.00E+00	3.04E+01
		Nb-95	<1.04E+01	0.00E+00	1.04E+01
		I-131	<2.58E+01	0.00E+00	2.58E+01
		Cs-134	<1.65E+01	0.00E+00	1.65E+01
		Cs-137	<2.14E+01	0.00E+00	2.14E+01
		La-140	<3.11E+02	0.00E+00	3.11E+02
		Ba-140	<6.06E+01	0.00E+00	6.06E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
416336	6/28/2016 - 6/28/2016	Mn-54	<2.21E+01	0.00E+00	2.21E+01
		Co-58	<1.56E+01	0.00E+00	1.56E+01
		Fe-59	<1.59E+01	0.00E+00	1.59E+01
		Co-60	<1.45E+01	0.00E+00	1.45E+01
		Zn-65	<2.48E+01	0.00E+00	2.48E+01
		Zr-95	<2.06E+01	0.00E+00	2.06E+01
		Nb-95	<2.03E+01	0.00E+00	2.03E+01
		I-131	<1.37E+01	0.00E+00	1.37E+01
		Cs-134	<1.36E+01	0.00E+00	1.36E+01
		Cs-137	<1.66E+01	0.00E+00	1.66E+01
		La-140	<2.78E+01	0.00E+00	2.78E+01
		Ba-140	<6.11E+01	0.00E+00	6.11E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
416960	7/5/2016 - 7/5/2016	Mn-54	<1.56E+01	0.00E+00	1.56E+01
		Co-58	<1.56E+01	0.00E+00	1.56E+01
		Fe-59	<2.38E+01	0.00E+00	2.38E+01
		Co-60	<1.45E+01	0.00E+00	1.45E+01
		Zn-65	<3.51E+01	0.00E+00	3.51E+01
		Zr-95	<2.90E+01	0.00E+00	2.90E+01
		Nb-95	<1.91E+01	0.00E+00	1.91E+01
		I-131	<2.01E+01	0.00E+00	2.01E+01
		Cs-134	<1.11E+01	0.00E+00	1.11E+01
		Cs-137	<1.35E+01	0.00E+00	1.35E+01
		La-140	<3.12E+01	0.00E+00	3.12E+01
		Ba-140	<7.16E+01	0.00E+00	7.16E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
417353	7/12/2016 - 7/12/2016	Mn-54	<1.88E+01	0.00E+00	1.88E+01
		Co-58	<1.28E+01	0.00E+00	1.28E+01
		Fe-59	<3.03E+01	0.00E+00	3.03E+01
		Co-60	<1.45E+01	0.00E+00	1.45E+01
		Zn-65	<1.78E+01	0.00E+00	1.78E+01
		Zr-95	<3.09E+01	0.00E+00	3.09E+01
		Nb-95	<2.01E+01	0.00E+00	2.01E+01
		I-131	<3.25E+01	0.00E+00	3.25E+01
		Cs-134	<1.46E+01	0.00E+00	1.46E+01
		Cs-137	<1.66E+01	0.00E+00	1.66E+01
		La-140	<5.71E+02	0.00E+00	5.71E+02
		Ba-140	<5.17E+01	0.00E+00	5.17E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
417714	7/19/2016 - 7/19/2016	Mn-54	<1.59E+01	0.00E+00	1.59E+01
		Co-58	<1.06E+01	0.00E+00	1.06E+01
		Fe-59	<2.52E+01	0.00E+00	2.52E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<3.58E+01	0.00E+00	3.58E+01
		Zr-95	<3.39E+01	0.00E+00	3.39E+01
		Nb-95	<1.35E+01	0.00E+00	1.35E+01
		I-131	<2.86E+01	0.00E+00	2.86E+01
		Cs-134	<9.56E+00	0.00E+00	9.56E+00



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1065 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
417714	7/19/2016 - 7/19/2016	Cs-137	<1.66E+01	0.00E+00	1.66E+01
		La-140	<7.24E+02	0.00E+00	7.24E+02
		Ba-140	<1.00E+02	0.00E+00	1.00E+02
		Total-Gam	0.00E+00		
418200	7/26/2016 - 7/26/2016	Mn-54	<2.00E+01	0.00E+00	2.00E+01
		Co-58	<1.03E+01	0.00E+00	1.03E+01
		Fe-59	<3.32E+02	0.00E+00	3.32E+02
		Co-60	<1.31E+01	0.00E+00	1.31E+01
		Zn-65	<3.07E+01	0.00E+00	3.07E+01
		Zr-95	<2.62E+01	0.00E+00	2.62E+01
		Nb-95	<1.46E+01	0.00E+00	1.46E+01
		I-131	<2.44E+01	0.00E+00	2.44E+01
		Cs-134	<7.89E+00	0.00E+00	7.89E+00
		Cs-137	<1.92E+01	0.00E+00	1.92E+01
		La-140	<2.59E+02	0.00E+00	2.59E+02
		Ba-140	<5.39E+01	0.00E+00	5.39E+01
		Total-Gam	0.00E+00		
418928	8/2/2016 - 8/2/2016	Mn-54	<1.96E+01	0.00E+00	1.96E+01
		Co-58	<2.34E+01	0.00E+00	2.34E+01
		Fe-59	<3.21E+01	0.00E+00	3.21E+01
		Co-60	<1.35E+01	0.00E+00	1.35E+01
		Zn-65	<2.62E+01	0.00E+00	2.62E+01
		Zr-95	<3.27E+01	0.00E+00	3.27E+01
		Nb-95	<1.99E+01	0.00E+00	1.99E+01
		I-131	<2.86E+01	0.00E+00	2.86E+01
		Cs-134	<1.41E+01	0.00E+00	1.41E+01
		Cs-137	<1.87E+01	0.00E+00	1.87E+01
		La-140	<5.84E+02	0.00E+00	5.84E+02
		Ba-140	<8.85E+01	0.00E+00	8.85E+01
		Total-Gam	0.00E+00		
424037	8/16/2016 - 8/16/2016	Mn-54	<1.55E+01	0.00E+00	1.55E+01
		Co-58	<9.50E+00	0.00E+00	9.50E+00
		Fe-59	<3.58E+01	0.00E+00	3.58E+01
		Co-60	<1.85E+01	0.00E+00	1.85E+01
		Zn-65	<2.78E+01	0.00E+00	2.78E+01
		Zr-95	<3.33E+01	0.00E+00	3.33E+01
		Nb-95	<2.42E+01	0.00E+00	2.42E+01
		I-131	<1.72E+02	0.00E+00	1.72E+02
		Cs-134	<1.45E+01	0.00E+00	1.45E+01
		Cs-137	<1.87E+01	0.00E+00	1.87E+01
		La-140	<2.39E+06	0.00E+00	2.39E+06
		Ba-140	<2.23E+02	0.00E+00	2.23E+02
		Total-Gam	0.00E+00		
424333	8/23/2016 - 8/23/2016	Mn-54	<1.87E+01	0.00E+00	1.87E+01
		Co-58	<2.96E+01	0.00E+00	2.96E+01
		Fe-59	<3.98E+01	0.00E+00	3.98E+01
		Co-60	<1.93E+01	0.00E+00	1.93E+01
		Zn-65	<2.73E+01	0.00E+00	2.73E+01
		Zr-95	<4.92E+01	0.00E+00	4.92E+01
		Nb-95	<3.86E+01	0.00E+00	3.86E+01
		I-131	<1.06E+02	0.00E+00	1.06E+02
		Cs-134	<8.34E+00	0.00E+00	8.34E+00
		Cs-137	<2.45E+01	0.00E+00	2.45E+01
		La-140	<2.57E+05	0.00E+00	2.57E+05
		Ba-140	<1.23E+02	0.00E+00	1.23E+02
		Total-Gam	0.00E+00		



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1065 [INDICATOR - @ 0 miles]

Sample ID: 424358 Sample Dates: 8/30/2016 - 8/30/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.07E+01	0.00E+00	1.07E+01
Co-58	<1.74E+01	0.00E+00	1.74E+01
Fe-59	<3.81E+01	0.00E+00	3.81E+01
Co-60	<1.67E+01	0.00E+00	1.67E+01
Zn-65	<4.69E+01	0.00E+00	4.69E+01
Zr-95	<3.02E+01	0.00E+00	3.02E+01
Nb-95	<2.48E+01	0.00E+00	2.48E+01
I-131	<9.09E+01	0.00E+00	9.09E+01
Cs-134	<1.65E+01	0.00E+00	1.65E+01
Cs-137	<1.73E+01	0.00E+00	1.73E+01
La-140	<7.92E+04	0.00E+00	7.92E+04
Ba-140	<1.93E+02	0.00E+00	1.93E+02
Total-Gam	0.00E+00		

Sample ID: 427619 Sample Dates: 9/6/2016 - 9/6/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<9.80E+00	0.00E+00	9.80E+00
Co-58	<2.56E+01	0.00E+00	2.56E+01
Fe-59	<4.87E+01	0.00E+00	4.87E+01
Co-60	<9.09E+00	0.00E+00	9.09E+00
Zn-65	<3.10E+01	0.00E+00	3.10E+01
Zr-95	<3.99E+01	0.00E+00	3.99E+01
Nb-95	<3.04E+01	0.00E+00	3.04E+01
I-131	<1.65E+03	0.00E+00	1.65E+03
Cs-134	<1.13E+01	0.00E+00	1.13E+01
Cs-137	<1.33E+01	0.00E+00	1.33E+01
La-140	<3.24E+11	0.00E+00	3.24E+11
Ba-140	<1.05E+03	0.00E+00	1.05E+03
Total-Gam	0.00E+00		

Sample ID: 423252 Sample Dates: 9/13/2016 - 9/13/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.93E+01	0.00E+00	1.93E+01
Co-58	<1.70E+01	0.00E+00	1.70E+01
Fe-59	<2.95E+01	0.00E+00	2.95E+01
Co-60	<8.19E+00	0.00E+00	8.19E+00
Zn-65	<3.51E+01	0.00E+00	3.51E+01
Zr-95	<3.71E+01	0.00E+00	3.71E+01
Nb-95	<4.07E+01	0.00E+00	4.07E+01
I-131	<1.09E+03	0.00E+00	1.09E+03
Cs-134	<1.23E+01	0.00E+00	1.23E+01
Cs-137	<1.89E+01	0.00E+00	1.89E+01
La-140	<2.43E+10	0.00E+00	2.43E+10
Ba-140	<6.87E+02	0.00E+00	6.87E+02
Total-Gam	0.00E+00		

Sample ID: 424370 Sample Dates: 9/21/2016 - 9/21/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<0.00E+00	0.00E+00	0.00E+00
Co-58	<1.29E+01	0.00E+00	1.29E+01
Fe-59	<3.73E+01	0.00E+00	3.73E+01
Co-60	<2.00E+01	0.00E+00	2.00E+01
Zn-65	<2.43E+01	0.00E+00	2.43E+01
Zr-95	<1.98E+01	0.00E+00	1.98E+01
Nb-95	<2.31E+01	0.00E+00	2.31E+01
I-131	<6.10E+02	0.00E+00	6.10E+02
Cs-134	<1.23E+01	0.00E+00	1.23E+01
Cs-137	<1.03E+01	0.00E+00	1.03E+01
La-140	<8.22E+08	0.00E+00	8.22E+08
Ba-140	<2.49E+02	0.00E+00	2.49E+02
Total-Gam	0.00E+00		

Sample ID: 425369 Sample Dates: 9/27/2016 - 9/27/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.76E+01	0.00E+00	1.76E+01
Co-58	<1.93E+01	0.00E+00	1.93E+01
Fe-59	<3.59E+01	0.00E+00	3.59E+01
Co-60	<1.81E+01	0.00E+00	1.81E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1065 [INDICATOR - @ 0 miles]

Sample ID: 425369 Sample Dates: 9/27/2016 - 9/27/2016

Nuclide	Activity	2 Sigma Error	MDA
Zn-65	<0.00E+00	0.00E+00	0.00E+00
Zr-95	<3.73E+01	0.00E+00	3.73E+01
Nb-95	<3.77E+01	0.00E+00	3.77E+01
I-131	<3.73E+02	0.00E+00	3.73E+02
Cs-134	<8.62E+00	0.00E+00	8.62E+00
Cs-137	<1.33E+01	0.00E+00	1.33E+01
La-140	<7.76E+07	0.00E+00	7.76E+07
Ba-140	<3.65E+02	0.00E+00	3.65E+02
Total-Gam	0.00E+00		

Sample ID: 425931 Sample Dates: 10/4/2016 - 10/4/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.48E+01	0.00E+00	1.48E+01
Co-58	<1.71E+01	0.00E+00	1.71E+01
Fe-59	<5.28E+01	0.00E+00	5.28E+01
Co-60	<9.02E+00	0.00E+00	9.02E+00
Zn-65	<3.37E+01	0.00E+00	3.37E+01
Zr-95	<2.61E+01	0.00E+00	2.61E+01
Nb-95	<2.01E+01	0.00E+00	2.01E+01
I-131	<3.20E+02	0.00E+00	3.20E+02
Cs-134	<1.01E+01	0.00E+00	1.01E+01
Cs-137	<1.88E+01	0.00E+00	1.88E+01
La-140	<6.97E+07	0.00E+00	6.97E+07
Ba-140	<2.68E+02	0.00E+00	2.68E+02
Total-Gam	0.00E+00		

Sample ID: 426304 Sample Dates: 10/12/2016 - 10/12/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<9.19E+00	0.00E+00	9.19E+00
Co-58	<2.09E+01	0.00E+00	2.09E+01
Fe-59	<4.41E+01	0.00E+00	4.41E+01
Co-60	<1.27E+01	0.00E+00	1.27E+01
Zn-65	<1.65E+01	0.00E+00	1.65E+01
Zr-95	<2.77E+01	0.00E+00	2.77E+01
Nb-95	<1.99E+01	0.00E+00	1.99E+01
I-131	<1.64E+02	0.00E+00	1.64E+02
Cs-134	<1.56E+01	0.00E+00	1.56E+01
Cs-137	<1.58E+01	0.00E+00	1.58E+01
La-140	<2.45E+06	0.00E+00	2.45E+06
Ba-140	<2.08E+02	0.00E+00	2.08E+02
Total-Gam	0.00E+00		

Sample ID: 426993 Sample Dates: 10/18/2016 - 10/18/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.82E+01	0.00E+00	1.82E+01
Co-58	<1.84E+01	0.00E+00	1.84E+01
Fe-59	<3.35E+01	0.00E+00	3.35E+01
Co-60	<1.27E+01	0.00E+00	1.27E+01
Zn-65	<3.64E+01	0.00E+00	3.64E+01
Zr-95	<1.85E+01	0.00E+00	1.85E+01
Nb-95	<2.21E+01	0.00E+00	2.21E+01
I-131	<1.14E+02	0.00E+00	1.14E+02
Cs-134	<9.93E+00	0.00E+00	9.93E+00
Cs-137	<1.03E+01	0.00E+00	1.03E+01
La-140	<2.71E+05	0.00E+00	2.71E+05
Ba-140	<1.34E+02	0.00E+00	1.34E+02
Total-Gam	0.00E+00		

Sample ID: 427650 Sample Dates: 10/26/2016 - 10/26/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.27E+01	0.00E+00	1.27E+01
Co-58	<1.45E+01	0.00E+00	1.45E+01
Fe-59	<3.15E+01	0.00E+00	3.15E+01
Co-60	<8.97E+00	0.00E+00	8.97E+00
Zn-65	<0.00E+00	0.00E+00	0.00E+00
Zr-95	<3.76E+01	0.00E+00	3.76E+01
Nb-95	<1.86E+01	0.00E+00	1.86E+01
I-131	<5.99E+01	0.00E+00	5.99E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1065 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
427650	10/26/2016 - 10/26/2016	Cs-134	<8.48E+00	0.00E+00	8.48E+00
		Cs-137	<5.95E+00	0.00E+00	5.95E+00
		La-140	<7.02E+04	0.00E+00	7.02E+04
		Ba-140	<1.59E+02	0.00E+00	1.59E+02
		Total-Gam	0.00E+00		
428149	11/1/2016 - 11/1/2016	Mn-54	<8.67E+00	0.00E+00	8.67E+00
		Co-58	<1.06E+01	0.00E+00	1.06E+01
		Fe-59	<2.41E+01	0.00E+00	2.41E+01
		Co-60	<1.54E+01	0.00E+00	1.54E+01
		Zn-65	<2.65E+01	0.00E+00	2.65E+01
		Zr-95	<2.08E+01	0.00E+00	2.08E+01
		Nb-95	<1.03E+01	0.00E+00	1.03E+01
		I-131	<1.44E+01	0.00E+00	1.44E+01
		Cs-134	<1.54E+01	0.00E+00	1.54E+01
		Cs-137	<1.33E+01	0.00E+00	1.33E+01
		La-140	<3.42E+01	0.00E+00	3.42E+01
		Ba-140	<5.69E+01	0.00E+00	5.69E+01
		Total-Gam	0.00E+00		
428824	11/8/2016 - 11/8/2016	Mn-54	<1.37E+01	0.00E+00	1.37E+01
		Co-58	<1.06E+01	0.00E+00	1.06E+01
		Fe-59	<2.93E+01	0.00E+00	2.93E+01
		Co-60	<1.54E+01	0.00E+00	1.54E+01
		Zn-65	<2.65E+01	0.00E+00	2.65E+01
		Zr-95	<1.47E+01	0.00E+00	1.47E+01
		Nb-95	<1.78E+01	0.00E+00	1.78E+01
		I-131	<1.50E+01	0.00E+00	1.50E+01
		Cs-134	<1.45E+01	0.00E+00	1.45E+01
		Cs-137	<1.19E+01	0.00E+00	1.19E+01
		La-140	<3.33E+01	0.00E+00	3.33E+01
		Ba-140	<5.67E+01	0.00E+00	5.67E+01
		Total-Gam	0.00E+00		
429342	11/15/2016 - 11/15/2016	Mn-54	<1.50E+01	0.00E+00	1.50E+01
		Co-58	<1.47E+01	0.00E+00	1.47E+01
		Fe-59	<1.36E+01	0.00E+00	1.36E+01
		Co-60	<8.05E+00	0.00E+00	8.05E+00
		Zn-65	<4.31E+01	0.00E+00	4.31E+01
		Zr-95	<1.77E+01	0.00E+00	1.77E+01
		Nb-95	<9.92E+00	0.00E+00	9.92E+00
		I-131	<1.11E+01	0.00E+00	1.11E+01
		Cs-134	<9.62E+00	0.00E+00	9.62E+00
		Cs-137	<1.33E+01	0.00E+00	1.33E+01
		La-140	<3.03E+01	0.00E+00	3.03E+01
		Ba-140	<4.23E+01	0.00E+00	4.23E+01
		Total-Gam	0.00E+00		
429893	11/21/2016 - 11/21/2016	Mn-54	<5.39E+00	0.00E+00	5.39E+00
		Co-58	<6.93E+00	0.00E+00	6.93E+00
		Fe-59	<1.10E+01	0.00E+00	1.10E+01
		Co-60	<6.57E+00	0.00E+00	6.57E+00
		Zn-65	<1.34E+01	0.00E+00	1.34E+01
		Zr-95	<1.18E+01	0.00E+00	1.18E+01
		Nb-95	<6.86E+00	0.00E+00	6.86E+00
		I-131	<7.64E+00	0.00E+00	7.64E+00
		Cs-134	<7.35E+00	0.00E+00	7.35E+00
		Cs-137	<6.57E+00	0.00E+00	6.57E+00
		La-140	<9.80E+00	0.00E+00	9.80E+00
		Ba-140	<2.49E+01	0.00E+00	2.49E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1065 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
429893	11/21/2016 - 11/21/2016	Total-Gam	0.00E+00		
430513	11/29/2016 - 11/29/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.62E+01	0.00E+00	1.62E+01
		Co-58	<1.05E+01	0.00E+00	1.05E+01
		Fe-59	<2.90E+01	0.00E+00	2.90E+01
		Co-60	<8.91E+00	0.00E+00	8.91E+00
		Zn-65	<3.42E+01	0.00E+00	3.42E+01
		Zr-95	<2.73E+01	0.00E+00	2.73E+01
		Nb-95	<1.84E+01	0.00E+00	1.84E+01
		I-131	<1.28E+01	0.00E+00	1.28E+01
		Cs-134	<1.18E+01	0.00E+00	1.18E+01
		Cs-137	<1.19E+01	0.00E+00	1.19E+01
		La-140	<1.73E+01	0.00E+00	1.73E+01
		Ba-140	<4.45E+01	0.00E+00	4.45E+01
		Total-Gam	0.00E+00		
431001	12/6/2016 - 12/6/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.62E+01	0.00E+00	1.62E+01
		Co-58	<1.59E+01	0.00E+00	1.59E+01
		Fe-59	<2.71E+01	0.00E+00	2.71E+01
		Co-60	<8.05E+00	0.00E+00	8.05E+00
		Zn-65	<1.52E+01	0.00E+00	1.52E+01
		Zr-95	<2.16E+01	0.00E+00	2.16E+01
		Nb-95	<1.51E+01	0.00E+00	1.51E+01
		I-131	<1.60E+01	0.00E+00	1.60E+01
		Cs-134	<1.38E+01	0.00E+00	1.38E+01
		Cs-137	<1.46E+01	0.00E+00	1.46E+01
		La-140	<1.92E+01	0.00E+00	1.92E+01
		Ba-140	<4.85E+01	0.00E+00	4.85E+01
		Total-Gam	0.00E+00		
431409	12/13/2016 - 12/13/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.06E+01	0.00E+00	1.06E+01
		Co-58	<8.50E+00	0.00E+00	8.50E+00
		Fe-59	<1.92E+01	0.00E+00	1.92E+01
		Co-60	<1.78E+01	0.00E+00	1.78E+01
		Zn-65	<1.52E+01	0.00E+00	1.52E+01
		Zr-95	<2.28E+01	0.00E+00	2.28E+01
		Nb-95	<9.92E+00	0.00E+00	9.92E+00
		I-131	<1.62E+01	0.00E+00	1.62E+01
		Cs-134	<9.73E+00	0.00E+00	9.73E+00
		Cs-137	<5.94E+00	0.00E+00	5.94E+00
		La-140	<1.66E+01	0.00E+00	1.66E+01
		Ba-140	<4.88E+01	0.00E+00	4.88E+01
		Total-Gam	0.00E+00		
431740	12/19/2016 - 12/19/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.06E+01	0.00E+00	1.06E+01
		Co-58	<1.21E+01	0.00E+00	1.21E+01
		Fe-59	<1.37E+01	0.00E+00	1.37E+01
		Co-60	<8.91E+00	0.00E+00	8.91E+00
		Zn-65	<3.74E+01	0.00E+00	3.74E+01
		Zr-95	<1.46E+01	0.00E+00	1.46E+01
		Nb-95	<1.54E+01	0.00E+00	1.54E+01
		I-131	<1.02E+01	0.00E+00	1.02E+01
		Cs-134	<1.19E+01	0.00E+00	1.19E+01
		Cs-137	<1.57E+01	0.00E+00	1.57E+01
		La-140	<3.06E+01	0.00E+00	3.06E+01
		Ba-140	<5.06E+01	0.00E+00	5.06E+01
		Total-Gam	0.00E+00		
432141	12/27/2016 - 12/27/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.37E+01	0.00E+00	1.37E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1065 [INDICATOR - @ 0 miles]

Sample ID: 432141 Sample Dates: 12/27/2016 - 12/27/2016

Nuclide	Activity	2 Sigma Error	MDA
Co-58	<1.59E+01	0.00E+00	1.59E+01
Fe-59	<3.03E+01	0.00E+00	3.03E+01
Co-60	<1.54E+01	0.00E+00	1.54E+01
Zn-65	<4.03E+01	0.00E+00	4.03E+01
Zr-95	<2.49E+01	0.00E+00	2.49E+01
Nb-95	<1.72E+01	0.00E+00	1.72E+01
I-131	<1.17E+01	0.00E+00	1.17E+01
Cs-134	<1.27E+01	0.00E+00	1.27E+01
Cs-137	<8.40E+00	0.00E+00	8.40E+00
La-140	<1.63E+01	0.00E+00	1.63E+01
Ba-140	<4.56E+01	0.00E+00	4.56E+01
Total-Gam	0.00E+00		

Sample Point 1066 [INDICATOR - @ 0 miles]

Sample ID: 400098 Sample Dates: 1/6/2016 - 1/6/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.41E+01	0.00E+00	1.41E+01
Co-58	<1.26E+01	0.00E+00	1.26E+01
Fe-59	<3.58E+01	0.00E+00	3.58E+01
Co-60	<1.31E+01	0.00E+00	1.31E+01
Zn-65	<1.77E+01	0.00E+00	1.77E+01
Zr-95	<3.92E+01	0.00E+00	3.92E+01
Nb-95	<1.64E+01	0.00E+00	1.64E+01
I-131	<2.21E+01	0.00E+00	2.21E+01
Cs-134	<7.79E+00	0.00E+00	7.79E+00
Cs-137	<1.79E+01	0.00E+00	1.79E+01
La-140	<1.50E+02	0.00E+00	1.50E+02
Ba-140	<5.39E+01	0.00E+00	5.39E+01
Total-Gam	0.00E+00		

Sample ID: 399952 Sample Dates: 1/12/2016 - 1/12/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.23E+01	0.00E+00	1.23E+01
Co-58	<1.27E+01	0.00E+00	1.27E+01
Fe-59	<3.56E+02	0.00E+00	3.56E+02
Co-60	<1.02E+01	0.00E+00	1.02E+01
Zn-65	<3.08E+01	0.00E+00	3.08E+01
Zr-95	<4.33E+01	0.00E+00	4.33E+01
Nb-95	<1.29E+01	0.00E+00	1.29E+01
I-131	<2.41E+01	0.00E+00	2.41E+01
Cs-134	<1.37E+01	0.00E+00	1.37E+01
Cs-137	<1.17E+01	0.00E+00	1.17E+01
La-140	<3.92E+02	0.00E+00	3.92E+02
Ba-140	<8.04E+01	0.00E+00	8.04E+01
Total-Gam	0.00E+00		

Sample ID: 400274 Sample Dates: 1/19/2016 - 1/19/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.40E+01	0.00E+00	1.40E+01
Co-58	<1.69E+01	0.00E+00	1.69E+01
Fe-59	<2.22E+01	0.00E+00	2.22E+01
Co-60	<1.30E+01	0.00E+00	1.30E+01
Zn-65	<3.03E+01	0.00E+00	3.03E+01
Zr-95	<2.35E+01	0.00E+00	2.35E+01
Nb-95	<1.33E+01	0.00E+00	1.33E+01
I-131	<1.51E+01	0.00E+00	1.51E+01
Cs-134	<1.34E+01	0.00E+00	1.34E+01
Cs-137	<1.51E+01	0.00E+00	1.51E+01
La-140	<3.91E+01	0.00E+00	3.91E+01
Ba-140	<5.02E+01	0.00E+00	5.02E+01
Total-Gam	0.00E+00		

Sample ID: 400925 Sample Dates: 1/26/2016 - 1/26/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<9.99E+00	0.00E+00	9.99E+00
Co-58	<1.26E+01	0.00E+00	1.26E+01
Fe-59	<2.41E+01	0.00E+00	2.41E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1066 [INDICATOR - @ 0 miles]

Sample ID: 400925 Sample Dates: 1/26/2016 - 1/26/2016

Nuclide	Activity	2 Sigma Error	MDA
Co-60	<1.31E+01	0.00E+00	1.31E+01
Zn-65	<3.55E+01	0.00E+00	3.55E+01
Zr-95	<1.24E+01	0.00E+00	1.24E+01
Nb-95	<1.47E+01	0.00E+00	1.47E+01
I-131	<2.35E+01	0.00E+00	2.35E+01
Cs-134	<1.56E+01	0.00E+00	1.56E+01
Cs-137	<1.17E+01	0.00E+00	1.17E+01
La-140	<1.55E+02	0.00E+00	1.55E+02
Ba-140	<9.76E+01	0.00E+00	9.76E+01
Total-Gam	0.00E+00		

Sample ID: 401288 Sample Dates: 2/2/2016 - 2/2/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.00E+01	0.00E+00	1.00E+01
Co-58	<1.28E+01	0.00E+00	1.28E+01
Fe-59	<1.75E+01	0.00E+00	1.75E+01
Co-60	<1.45E+01	0.00E+00	1.45E+01
Zn-65	<5.04E+01	0.00E+00	5.04E+01
Zr-95	<2.53E+01	0.00E+00	2.53E+01
Nb-95	<1.52E+01	0.00E+00	1.52E+01
I-131	<2.90E+01	0.00E+00	2.90E+01
Cs-134	<1.10E+01	0.00E+00	1.10E+01
Cs-137	<1.51E+01	0.00E+00	1.51E+01
La-140	<3.84E+02	0.00E+00	3.84E+02
Ba-140	<9.00E+01	0.00E+00	9.00E+01
Total-Gam	0.00E+00		

Sample ID: 401751 Sample Dates: 2/9/2016 - 2/9/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.59E+01	0.00E+00	1.59E+01
Co-58	<1.30E+01	0.00E+00	1.30E+01
Fe-59	<5.32E+01	0.00E+00	5.32E+01
Co-60	<1.45E+01	0.00E+00	1.45E+01
Zn-65	<1.79E+01	0.00E+00	1.79E+01
Zr-95	<2.87E+01	0.00E+00	2.87E+01
Nb-95	<1.56E+01	0.00E+00	1.56E+01
I-131	<3.35E+01	0.00E+00	3.35E+01
Cs-134	<1.35E+01	0.00E+00	1.35E+01
Cs-137	<1.79E+01	0.00E+00	1.79E+01
La-140	<5.53E+02	0.00E+00	5.53E+02
Ba-140	<1.11E+02	0.00E+00	1.11E+02
Total-Gam	0.00E+00		

Sample ID: 402262 Sample Dates: 2/16/2016 - 2/16/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.25E+01	0.00E+00	1.25E+01
Co-58	<1.37E+01	0.00E+00	1.37E+01
Fe-59	<4.77E+01	0.00E+00	4.77E+01
Co-60	<1.45E+01	0.00E+00	1.45E+01
Zn-65	<4.06E+01	0.00E+00	4.06E+01
Zr-95	<2.73E+01	0.00E+00	2.73E+01
Nb-95	<1.51E+01	0.00E+00	1.51E+01
I-131	<6.08E+01	0.00E+00	6.08E+01
Cs-134	<1.24E+01	0.00E+00	1.24E+01
Cs-137	<1.66E+01	0.00E+00	1.66E+01
La-140	<1.10E+04	0.00E+00	1.10E+04
Ba-140	<1.15E+02	0.00E+00	1.15E+02
Total-Gam	0.00E+00		

Sample ID: 402984 Sample Dates: 2/23/2016 - 2/23/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.13E+01	0.00E+00	2.13E+01
Co-58	<1.50E+01	0.00E+00	1.50E+01
Fe-59	<2.52E+01	0.00E+00	2.52E+01
Co-60	<1.45E+01	0.00E+00	1.45E+01
Zn-65	<4.00E+01	0.00E+00	4.00E+01
Zr-95	<3.14E+01	0.00E+00	3.14E+01
Nb-95	<1.10E+01	0.00E+00	1.10E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1066 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
402984	2/23/2016 - 2/23/2016	I-131	<2.74E+01	0.00E+00	2.74E+01
		Cs-134	<1.10E+01	0.00E+00	1.10E+01
		Cs-137	<2.25E+01	0.00E+00	2.25E+01
		La-140	<7.78E+02	0.00E+00	7.78E+02
		Ba-140	<6.39E+01	0.00E+00	6.39E+01
		Total-Gam	0.00E+00		
404468	3/1/2016 - 3/1/2016	Mn-54	<1.42E+01	0.00E+00	1.42E+01
		Co-58	<1.27E+01	0.00E+00	1.27E+01
		Fe-59	<3.85E+01	0.00E+00	3.85E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<3.98E+01	0.00E+00	3.97E+01
		Zr-95	<2.16E+01	0.00E+00	2.16E+01
		Nb-95	<2.11E+01	0.00E+00	2.11E+01
		I-131	<2.39E+01	0.00E+00	2.39E+01
		Cs-134	<1.37E+01	0.00E+00	1.37E+01
		Cs-137	<1.66E+01	0.00E+00	1.66E+01
		La-140	<3.50E+02	0.00E+00	3.50E+02
		Ba-140	<6.33E+01	0.00E+00	6.33E+01
		Total-Gam	0.00E+00		
405354	3/8/2016 - 3/8/2016	Mn-54	<1.24E+01	0.00E+00	1.24E+01
		Co-58	<1.11E+01	0.00E+00	1.11E+01
		Fe-59	<4.05E+01	0.00E+00	4.05E+01
		Co-60	<1.78E+01	0.00E+00	1.78E+01
		Zn-65	<3.14E+01	0.00E+00	3.14E+01
		Zr-95	<3.02E+01	0.00E+00	3.02E+01
		Nb-95	<1.71E+01	0.00E+00	1.71E+01
		I-131	<2.93E+01	0.00E+00	2.93E+01
		Cs-134	<1.57E+01	0.00E+00	1.57E+01
		Cs-137	<1.66E+01	0.00E+00	1.66E+01
		La-140	<6.99E+03	0.00E+00	6.99E+03
		Ba-140	<1.10E+02	0.00E+00	1.10E+02
		Total-Gam	0.00E+00		
405971	3/15/2016 - 3/15/2016	Mn-54	<1.58E+01	0.00E+00	1.58E+01
		Co-58	<1.04E+01	0.00E+00	1.04E+01
		Fe-59	<3.86E+01	0.00E+00	3.86E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<3.56E+01	0.00E+00	3.56E+01
		Zr-95	<1.25E+01	0.00E+00	1.25E+01
		Nb-95	<2.24E+01	0.00E+00	2.24E+01
		I-131	<2.78E+01	0.00E+00	2.78E+01
		Cs-134	<1.56E+01	0.00E+00	1.56E+01
		Cs-137	<1.51E+01	0.00E+00	1.51E+01
		La-140	<2.24E+02	0.00E+00	2.24E+02
		Ba-140	<8.03E+01	0.00E+00	8.03E+01
		Total-Gam	0.00E+00		
406302	3/22/2016 - 3/22/2016	Mn-54	<1.73E+01	0.00E+00	1.73E+01
		Co-58	<1.78E+01	0.00E+00	1.78E+01
		Fe-59	<2.40E+01	0.00E+00	2.40E+01
		Co-60	<1.45E+01	0.00E+00	1.45E+01
		Zn-65	<3.55E+01	0.00E+00	3.55E+01
		Zr-95	<2.15E+01	0.00E+00	2.15E+01
		Nb-95	<2.54E+01	0.00E+00	2.54E+01
		I-131	<2.65E+01	0.00E+00	2.65E+01
		Cs-134	<1.46E+01	0.00E+00	1.46E+01
		Cs-137	<1.66E+01	0.00E+00	1.66E+01
La-140	<3.32E+02	0.00E+00	3.32E+02		



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1066 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
406302	3/22/2016 - 3/22/2016	Ba-140	<6.59E+01	0.00E+00	6.59E+01
		Total-Gam	0.00E+00		
407499	3/29/2016 - 3/29/2016	Mn-54	<1.71E+01	0.00E+00	1.71E+01
		Co-58	<6.90E+00	0.00E+00	6.90E+00
		Fe-59	<1.57E+01	0.00E+00	1.57E+01
		Co-60	<1.84E+01	0.00E+00	1.84E+01
		Zn-65	<4.28E+01	0.00E+00	4.28E+01
		Zr-95	<2.03E+01	0.00E+00	2.03E+01
		Nb-95	<1.48E+01	0.00E+00	1.48E+01
		I-131	<1.84E+01	0.00E+00	1.84E+01
		Cs-134	<1.10E+01	0.00E+00	1.10E+01
		Cs-137	<1.51E+01	0.00E+00	1.51E+01
		La-140	<1.80E+01	0.00E+00	1.80E+01
		Ba-140	<5.40E+01	0.00E+00	5.40E+01
		Total-Gam	0.00E+00		
408053	4/5/2016 - 4/5/2016	Mn-54	<1.71E+01	0.00E+00	1.71E+01
		Co-58	<1.69E+01	0.00E+00	1.69E+01
		Fe-59	<1.57E+01	0.00E+00	1.57E+01
		Co-60	<9.22E+00	0.00E+00	9.22E+00
		Zn-65	<3.03E+01	0.00E+00	3.03E+01
		Zr-95	<3.52E+01	0.00E+00	3.52E+01
		Nb-95	<2.10E+01	0.00E+00	2.10E+01
		I-131	<1.67E+01	0.00E+00	1.67E+01
		Cs-134	<1.10E+01	0.00E+00	1.10E+01
		Cs-137	<1.35E+01	0.00E+00	1.35E+01
		La-140	<4.13E+01	0.00E+00	4.13E+01
		Ba-140	<5.46E+01	0.00E+00	5.46E+01
		Total-Gam	0.00E+00		
409392	4/12/2016 - 4/12/2016	Mn-54	<1.85E+01	0.00E+00	1.85E+01
		Co-58	<2.07E+01	0.00E+00	2.07E+01
		Fe-59	<2.22E+01	0.00E+00	2.22E+01
		Co-60	<1.60E+01	0.00E+00	1.60E+01
		Zn-65	<3.50E+01	0.00E+00	3.50E+01
		Zr-95	<2.35E+01	0.00E+00	2.35E+01
		Nb-95	<1.75E+01	0.00E+00	1.75E+01
		I-131	<1.58E+01	0.00E+00	1.58E+01
		Cs-134	<1.36E+01	0.00E+00	1.36E+01
		Cs-137	<1.91E+01	0.00E+00	1.91E+01
		La-140	<2.63E+01	0.00E+00	2.63E+01
		Ba-140	<4.58E+01	0.00E+00	4.58E+01
		Total-Gam	0.00E+00		
409726	4/19/2016 - 4/19/2016	Mn-54	<1.40E+01	0.00E+00	1.40E+01
		Co-58	<1.55E+01	0.00E+00	1.55E+01
		Fe-59	<2.73E+01	0.00E+00	2.73E+01
		Co-60	<1.30E+01	0.00E+00	1.30E+01
		Zn-65	<2.47E+01	0.00E+00	2.47E+01
		Zr-95	<2.03E+01	0.00E+00	2.03E+01
		Nb-95	<1.99E+01	0.00E+00	1.99E+01
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<1.11E+01	0.00E+00	1.11E+01
		Cs-137	<1.79E+01	0.00E+00	1.79E+01
		La-140	<1.98E+01	0.00E+00	1.98E+01
		Ba-140	<4.62E+01	0.00E+00	4.62E+01
		Total-Gam	0.00E+00		



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1066 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
410879	4/26/2016 - 4/26/2016	Mn-54	<1.21E+01	0.00E+00	1.21E+01
		Co-58	<1.97E+01	0.00E+00	1.97E+01
		Fe-59	<2.77E+01	0.00E+00	2.77E+01
		Co-60	<1.45E+01	0.00E+00	1.45E+01
		Zn-65	<2.48E+01	0.00E+00	2.48E+01
		Zr-95	<2.06E+01	0.00E+00	2.06E+01
		Nb-95	<2.53E+01	0.00E+00	2.53E+01
		I-131	<1.57E+01	0.00E+00	1.57E+01
		Cs-134	<1.55E+01	0.00E+00	1.55E+01
		Cs-137	<2.14E+01	0.00E+00	2.14E+01
		La-140	<4.04E+01	0.00E+00	4.04E+01
		Ba-140	<4.86E+01	0.00E+00	4.86E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
411379	5/3/2016 - 5/3/2016	Mn-54	<9.99E+00	0.00E+00	9.99E+00
		Co-58	<1.78E+01	0.00E+00	1.78E+01
		Fe-59	<3.41E+01	0.00E+00	3.41E+01
		Co-60	<9.24E+00	0.00E+00	9.24E+00
		Zn-65	<3.07E+01	0.00E+00	3.07E+01
		Zr-95	<3.05E+01	0.00E+00	3.05E+01
		Nb-95	<2.21E+01	0.00E+00	2.21E+01
		I-131	<2.82E+01	0.00E+00	2.82E+01
		Cs-134	<1.12E+01	0.00E+00	1.12E+01
		Cs-137	<6.77E+00	0.00E+00	6.77E+00
		La-140	<1.66E+02	0.00E+00	1.66E+02
		Ba-140	<7.22E+01	0.00E+00	7.22E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
411703	5/10/2016 - 5/10/2016	Mn-54	<1.41E+01	0.00E+00	1.41E+01
		Co-58	<1.92E+01	0.00E+00	1.92E+01
		Fe-59	<3.40E+01	0.00E+00	3.40E+01
		Co-60	<1.31E+01	0.00E+00	1.31E+01
		Zn-65	<1.77E+01	0.00E+00	1.77E+01
		Zr-95	<2.62E+01	0.00E+00	2.62E+01
		Nb-95	<2.20E+01	0.00E+00	2.20E+01
		I-131	<2.10E+01	0.00E+00	2.10E+01
		Cs-134	<9.54E+00	0.00E+00	9.54E+00
		Cs-137	<1.92E+01	0.00E+00	1.92E+01
		La-140	<1.53E+02	0.00E+00	1.53E+02
		Ba-140	<9.36E+01	0.00E+00	9.36E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
412165	5/17/2016 - 5/17/2016	Mn-54	<1.42E+01	0.00E+00	1.42E+01
		Co-58	<1.64E+01	0.00E+00	1.64E+01
		Fe-59	<1.73E+01	0.00E+00	1.73E+01
		Co-60	<1.77E+01	0.00E+00	1.77E+01
		Zn-65	<4.36E+01	0.00E+00	4.36E+01
		Zr-95	<3.06E+01	0.00E+00	3.07E+01
		Nb-95	<1.98E+01	0.00E+00	1.98E+01
		I-131	<2.93E+01	0.00E+00	2.93E+01
		Cs-134	<1.77E+01	0.00E+00	1.77E+01
		Cs-137	<9.58E+00	0.00E+00	9.58E+00
		La-140	<3.39E+02	0.00E+00	3.39E+02
		Ba-140	<8.59E+01	0.00E+00	8.59E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
412682	5/24/2016 - 5/24/2016	Mn-54	<2.03E+01	0.00E+00	2.03E+01
		Co-58	<1.35E+01	0.00E+00	1.35E+01
		Fe-59	<1.89E+01	0.00E+00	1.89E+01
		Co-60	<1.45E+01	0.00E+00	1.45E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1066 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
412682	5/24/2016 - 5/24/2016	Zn-65	<2.56E+01	0.00E+00	2.56E+01
		Zr-95	<2.68E+01	0.00E+00	2.68E+01
		Nb-95	<1.88E+01	0.00E+00	1.88E+01
		I-131	<2.69E+01	0.00E+00	2.69E+01
		Cs-134	<9.60E+00	0.00E+00	9.60E+00
		Cs-137	<1.35E+01	0.00E+00	1.35E+01
		La-140	<2.69E+03	0.00E+00	2.69E+03
		Ba-140	<9.63E+01	0.00E+00	9.63E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
413285	6/1/2016 - 6/1/2016	Mn-54	<1.58E+01	0.00E+00	1.58E+01
		Co-58	<1.92E+01	0.00E+00	1.92E+01
		Fe-59	<2.54E+01	0.00E+00	2.54E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<1.77E+01	0.00E+00	1.77E+01
		Zr-95	<2.15E+01	0.00E+00	2.15E+01
		Nb-95	<1.65E+01	0.00E+00	1.65E+01
		I-131	<1.68E+01	0.00E+00	1.68E+01
		Cs-134	<1.46E+01	0.00E+00	1.46E+01
		Cs-137	<1.51E+01	0.00E+00	1.51E+01
		La-140	<2.95E+02	0.00E+00	2.95E+02
		Ba-140	<6.68E+01	0.00E+00	6.68E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
413832	6/7/2016 - 6/7/2016	Mn-54	<1.23E+01	0.00E+00	1.23E+01
		Co-58	<1.79E+01	0.00E+00	1.79E+01
		Fe-59	<3.85E+01	0.00E+00	3.85E+01
		Co-60	<2.05E+01	0.00E+00	2.05E+01
		Zn-65	<3.98E+01	0.00E+00	3.98E+01
		Zr-95	<2.17E+01	0.00E+00	2.17E+01
		Nb-95	<1.67E+01	0.00E+00	1.67E+01
		I-131	<2.53E+01	0.00E+00	2.53E+01
		Cs-134	<1.23E+01	0.00E+00	1.23E+01
		Cs-137	<1.66E+01	0.00E+00	1.66E+01
		La-140	<3.80E+02	0.00E+00	3.80E+02
		Ba-140	<5.67E+01	0.00E+00	5.67E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
414972	6/14/2016 - 6/14/2016	Mn-54	<1.22E+01	0.00E+00	1.22E+01
		Co-58	<1.45E+01	0.00E+00	1.45E+01
		Fe-59	<1.70E+01	0.00E+00	1.70E+01
		Co-60	<1.60E+01	0.00E+00	1.60E+01
		Zn-65	<2.51E+01	0.00E+00	2.51E+01
		Zr-95	<2.14E+01	0.00E+00	2.14E+01
		Nb-95	<1.46E+01	0.00E+00	1.46E+01
		I-131	<2.42E+01	0.00E+00	2.42E+01
		Cs-134	<1.35E+01	0.00E+00	1.35E+01
		Cs-137	<1.51E+01	0.00E+00	1.51E+01
		La-140	<3.41E+02	0.00E+00	3.41E+02
		Ba-140	<6.55E+01	0.00E+00	6.55E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415337	6/21/2016 - 6/21/2016	Mn-54	<1.23E+01	0.00E+00	1.23E+01
		Co-58	<1.04E+01	0.00E+00	1.04E+01
		Fe-59	<2.44E+01	0.00E+00	2.44E+01
		Co-60	<1.31E+01	0.00E+00	1.31E+01
		Zn-65	<5.34E+01	0.00E+00	5.34E+01
		Zr-95	<2.51E+01	0.00E+00	2.51E+01
		Nb-95	<2.25E+01	0.00E+00	2.25E+01
		I-131	<2.56E+01	0.00E+00	2.56E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1066 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415337	6/21/2016 - 6/21/2016	Cs-134	<1.35E+01	0.00E+00	1.35E+01
		Cs-137	<1.79E+01	0.00E+00	1.79E+01
		La-140	<2.36E+02	0.00E+00	2.36E+02
		Ba-140	<7.01E+01	0.00E+00	7.01E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
416337	6/28/2016 - 6/28/2016	Mn-54	<1.40E+01	0.00E+00	1.40E+01
		Co-58	<1.97E+01	0.00E+00	1.97E+01
		Fe-59	<3.36E+01	0.00E+00	3.36E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<2.48E+01	0.00E+00	2.48E+01
		Zr-95	<2.51E+01	0.00E+00	2.51E+01
		Nb-95	<1.66E+01	0.00E+00	1.66E+01
		I-131	<2.01E+01	0.00E+00	2.01E+01
		Cs-134	<1.76E+01	0.00E+00	1.76E+01
		Cs-137	<2.03E+01	0.00E+00	2.03E+01
		La-140	<4.83E+01	0.00E+00	4.83E+01
		Ba-140	<3.74E+01	0.00E+00	3.74E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
416961	7/5/2016 - 7/5/2016	Mn-54	<1.71E+01	0.00E+00	1.71E+01
		Co-58	<1.21E+01	0.00E+00	1.21E+01
		Fe-59	<2.26E+01	0.00E+00	2.26E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<3.04E+01	0.00E+00	3.04E+01
		Zr-95	<2.06E+01	0.00E+00	2.06E+01
		Nb-95	<1.51E+01	0.00E+00	1.51E+01
		I-131	<2.09E+01	0.00E+00	2.09E+01
		Cs-134	<1.55E+01	0.00E+00	1.55E+01
		Cs-137	<1.79E+01	0.00E+00	1.79E+01
		La-140	<4.01E+01	0.00E+00	4.01E+01
		Ba-140	<5.31E+01	0.00E+00	5.31E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
417354	7/12/2016 - 7/12/2016	Mn-54	<1.43E+01	0.00E+00	1.43E+01
		Co-58	<1.34E+01	0.00E+00	1.34E+01
		Fe-59	<3.27E+01	0.00E+00	3.27E+01
		Co-60	<1.85E+01	0.00E+00	1.85E+01
		Zn-65	<3.13E+01	0.00E+00	3.13E+01
		Zr-95	<2.31E+01	0.00E+00	2.31E+01
		Nb-95	<8.36E+00	0.00E+00	8.36E+00
		I-131	<3.95E+01	0.00E+00	3.95E+01
		Cs-134	<1.36E+01	0.00E+00	1.36E+01
		Cs-137	<9.58E+00	0.00E+00	9.58E+00
		La-140	<3.33E+03	0.00E+00	3.33E+03
		Ba-140	<6.71E+01	0.00E+00	6.71E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
417715	7/19/2016 - 7/19/2016	Mn-54	<1.42E+01	0.00E+00	1.42E+01
		Co-58	<1.98E+01	0.00E+00	1.98E+01
		Fe-59	<3.08E+01	0.00E+00	3.08E+01
		Co-60	<1.31E+01	0.00E+00	1.31E+01
		Zn-65	<3.10E+01	0.00E+00	3.10E+01
		Zr-95	<2.56E+01	0.00E+00	2.56E+01
		Nb-95	<1.55E+01	0.00E+00	1.55E+01
		I-131	<2.53E+01	0.00E+00	2.53E+01
		Cs-134	<1.35E+01	0.00E+00	1.35E+01
		Cs-137	<1.79E+01	0.00E+00	1.79E+01
		La-140	<5.89E+02	0.00E+00	5.89E+02
		Ba-140	<8.97E+01	0.00E+00	8.97E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1066 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
417715	7/19/2016 - 7/19/2016	Total-Gam	0.00E+00		
418201	7/26/2016 - 7/26/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.04E+01	0.00E+00	1.04E+01
		Co-58	<1.89E+01	0.00E+00	1.89E+01
		Fe-59	<4.06E+01	0.00E+00	4.06E+01
		Co-60	<1.66E+01	0.00E+00	1.66E+01
		Zn-65	<3.70E+01	0.00E+00	3.70E+01
		Zr-95	<2.95E+01	0.00E+00	2.95E+01
		Nb-95	<2.10E+01	0.00E+00	2.10E+01
		I-131	<2.04E+01	0.00E+00	2.04E+01
		Cs-134	<2.23E+01	0.00E+00	2.23E+01
		Cs-137	<7.07E+00	0.00E+00	7.07E+00
		La-140	<5.02E+02	0.00E+00	5.02E+02
		Ba-140	<9.40E+01	0.00E+00	9.40E+01
		Total-Gam	0.00E+00		
418929	8/2/2016 - 8/2/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.83E+01	0.00E+00	1.83E+01
		Co-58	<1.62E+01	0.00E+00	1.62E+01
		Fe-59	<2.77E+01	0.00E+00	2.77E+01
		Co-60	<1.50E+01	0.00E+00	1.50E+01
		Zn-65	<2.65E+01	0.00E+00	2.65E+01
		Zr-95	<3.94E+01	0.00E+00	3.94E+01
		Nb-95	<2.63E+01	0.00E+00	2.63E+01
		I-131	<4.41E+01	0.00E+00	4.41E+01
		Cs-134	<8.18E+00	0.00E+00	8.18E+00
		Cs-137	<1.41E+01	0.00E+00	1.41E+01
		La-140	<4.42E+03	0.00E+00	4.42E+03
		Ba-140	<7.10E+01	0.00E+00	7.10E+01
		Total-Gam	0.00E+00		
424038	8/16/2016 - 8/16/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.73E+01	0.00E+00	1.73E+01
		Co-58	<1.92E+01	0.00E+00	1.92E+01
		Fe-59	<3.63E+01	0.00E+00	3.63E+01
		Co-60	<1.07E+01	0.00E+00	1.07E+01
		Zn-65	<3.41E+01	0.00E+00	3.41E+01
		Zr-95	<2.90E+01	0.00E+00	2.90E+01
		Nb-95	<4.27E+01	0.00E+00	4.27E+01
		I-131	<2.32E+02	0.00E+00	2.32E+02
		Cs-134	<1.31E+01	0.00E+00	1.31E+01
		Cs-137	<1.23E+01	0.00E+00	1.23E+01
		La-140	<4.96E+06	0.00E+00	4.96E+06
		Ba-140	<3.77E+02	0.00E+00	3.77E+02
		Total-Gam	0.00E+00		
424334	8/23/2016 - 8/23/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.54E+01	0.00E+00	1.54E+01
		Co-58	<1.61E+01	0.00E+00	1.61E+01
		Fe-59	<4.88E+01	0.00E+00	4.88E+01
		Co-60	<1.36E+01	0.00E+00	1.36E+01
		Zn-65	<4.36E+01	0.00E+00	4.36E+01
		Zr-95	<1.98E+01	0.00E+00	1.98E+01
		Nb-95	<2.58E+01	0.00E+00	2.58E+01
		I-131	<1.32E+02	0.00E+00	1.32E+02
		Cs-134	<1.17E+01	0.00E+00	1.17E+01
		Cs-137	<2.24E+01	0.00E+00	2.24E+01
		La-140	<9.06E+05	0.00E+00	9.06E+05
		Ba-140	<1.96E+02	0.00E+00	1.96E+02
		Total-Gam	0.00E+00		
424359	8/30/2016 - 8/30/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.70E+01	0.00E+00	1.70E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1066 [INDICATOR - @ 0 miles]

Sample ID: 424359 Sample Dates: 8/30/2016 - 8/30/2016

Nuclide	Activity	2 Sigma Error	MDA
Co-58	<1.23E+01	0.00E+00	1.23E+01
Fe-59	<3.11E+01	0.00E+00	3.11E+01
Co-60	<1.84E+01	0.00E+00	1.84E+01
Zn-65	<1.91E+01	0.00E+00	1.91E+01
Zr-95	<3.37E+01	0.00E+00	3.37E+01
Nb-95	<2.86E+01	0.00E+00	2.86E+01
I-131	<6.96E+01	0.00E+00	6.96E+01
Cs-134	<1.54E+01	0.00E+00	1.54E+01
Cs-137	<1.22E+01	0.00E+00	1.22E+01
La-140	<9.89E+04	0.00E+00	9.89E+04
Ba-140	<1.83E+02	0.00E+00	1.83E+02
Total-Gam	0.00E+00		

Sample ID: 427620 Sample Dates: 9/6/2016 - 9/6/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.39E+01	0.00E+00	1.39E+01
Co-58	<1.81E+01	0.00E+00	1.81E+01
Fe-59	<3.27E+01	0.00E+00	3.27E+01
Co-60	<1.29E+01	0.00E+00	1.29E+01
Zn-65	<3.58E+01	0.00E+00	3.58E+01
Zr-95	<4.62E+01	0.00E+00	4.62E+01
Nb-95	<5.27E+01	0.00E+00	5.27E+01
I-131	<1.73E+03	0.00E+00	1.73E+03
Cs-134	<7.24E+00	0.00E+00	7.25E+00
Cs-137	<1.46E+01	0.00E+00	1.46E+01
La-140	<1.80E+11	0.00E+00	1.80E+11
Ba-140	<6.46E+02	0.00E+00	6.46E+02
Total-Gam	0.00E+00		

Sample ID: 423253 Sample Dates: 9/13/2016 - 9/13/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.81E+01	0.00E+00	1.81E+01
Co-58	<2.40E+01	0.00E+00	2.40E+01
Fe-59	<6.59E+01	0.00E+00	6.59E+01
Co-60	<1.28E+01	0.00E+00	1.28E+01
Zn-65	<1.76E+01	0.00E+00	1.76E+01
Zr-95	<3.04E+01	0.00E+00	3.04E+01
Nb-95	<2.67E+01	0.00E+00	2.67E+01
I-131	<5.86E+02	0.00E+00	5.86E+02
Cs-134	<1.02E+01	0.00E+00	1.02E+01
Cs-137	<1.58E+01	0.00E+00	1.58E+01
La-140	<1.62E+10	0.00E+00	1.62E+10
Ba-140	<5.81E+02	0.00E+00	5.81E+02
Total-Gam	0.00E+00		

Sample ID: 424371 Sample Dates: 9/21/2016 - 9/21/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.34E+01	0.00E+00	1.34E+01
Co-58	<1.58E+01	0.00E+00	1.58E+01
Fe-59	<5.28E+01	0.00E+00	5.28E+01
Co-60	<1.16E+01	0.00E+00	1.16E+01
Zn-65	<2.43E+01	0.00E+00	2.43E+01
Zr-95	<2.80E+01	0.00E+00	2.80E+01
Nb-95	<3.78E+01	0.00E+00	3.78E+01
I-131	<5.90E+02	0.00E+00	5.90E+02
Cs-134	<1.32E+01	0.00E+00	1.32E+01
Cs-137	<1.19E+01	0.00E+00	1.19E+01
La-140	<1.17E+09	0.00E+00	1.17E+09
Ba-140	<4.31E+02	0.00E+00	4.31E+02
Total-Gam	0.00E+00		

Sample ID: 425370 Sample Dates: 9/27/2016 - 9/27/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.62E+01	0.00E+00	1.62E+01
Co-58	<1.50E+01	0.00E+00	1.50E+01
Fe-59	<5.90E+01	0.00E+00	5.90E+01
Co-60	<1.63E+01	0.00E+00	1.63E+01
Zn-65	<2.39E+01	0.00E+00	2.39E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1066 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
425370	9/27/2016 - 9/27/2016	Zr-95	<3.05E+01	0.00E+00	3.05E+01
		Nb-95	<1.68E+01	0.00E+00	1.68E+01
		I-131	<3.43E+02	0.00E+00	3.43E+02
		Cs-134	<1.01E+01	0.00E+00	1.01E+01
		Cs-137	<1.33E+01	0.00E+00	1.33E+01
		La-140	<9.36E+07	0.00E+00	9.36E+07
		Ba-140	<2.22E+02	0.00E+00	2.22E+02
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
425932	10/4/2016 - 10/4/2016	Mn-54	<1.75E+01	0.00E+00	1.75E+01
		Co-58	<1.21E+01	0.00E+00	1.21E+01
		Fe-59	<3.35E+01	0.00E+00	3.35E+01
		Co-60	<8.15E+00	0.00E+00	8.15E+00
		Zn-65	<1.69E+01	0.00E+00	1.69E+01
		Zr-95	<2.61E+01	0.00E+00	2.61E+01
		Nb-95	<3.08E+01	0.00E+00	3.08E+01
		I-131	<2.86E+02	0.00E+00	2.86E+02
		Cs-134	<1.57E+01	0.00E+00	1.57E+01
		Cs-137	<1.33E+01	0.00E+00	1.33E+01
		La-140	<5.61E+07	0.00E+00	5.61E+07
		Ba-140	<3.62E+02	0.00E+00	3.62E+02
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
426305	10/12/2016 - 10/12/2016	Mn-54	<1.59E+01	0.00E+00	1.59E+01
		Co-58	<1.78E+01	0.00E+00	1.78E+01
		Fe-59	<2.99E+01	0.00E+00	2.99E+01
		Co-60	<1.82E+01	0.00E+00	1.82E+01
		Zn-65	<2.86E+01	0.00E+00	2.86E+01
		Zr-95	<1.39E+01	0.00E+00	1.39E+01
		Nb-95	<2.02E+01	0.00E+00	2.02E+01
		I-131	<1.61E+02	0.00E+00	1.61E+02
		Cs-134	<1.40E+01	0.00E+00	1.40E+01
		Cs-137	<1.03E+01	0.00E+00	1.03E+01
		La-140	<3.37E+06	0.00E+00	3.37E+06
		Ba-140	<2.31E+02	0.00E+00	2.31E+02
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
426994	10/18/2016 - 10/18/2016	Mn-54	<1.57E+01	0.00E+00	1.57E+01
		Co-58	<1.06E+01	0.00E+00	1.06E+01
		Fe-59	<3.88E+01	0.00E+00	3.88E+01
		Co-60	<1.27E+01	0.00E+00	1.27E+01
		Zn-65	<2.82E+01	0.00E+00	2.82E+01
		Zr-95	<1.85E+01	0.00E+00	1.85E+01
		Nb-95	<2.21E+01	0.00E+00	2.21E+01
		I-131	<8.06E+01	0.00E+00	8.06E+01
		Cs-134	<9.83E+00	0.00E+00	9.83E+00
		Cs-137	<1.33E+01	0.00E+00	1.33E+01
		La-140	<2.26E+05	0.00E+00	2.26E+05
		Ba-140	<1.70E+02	0.00E+00	1.70E+02
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
427651	10/26/2016 - 10/26/2016	Mn-54	<1.10E+01	0.00E+00	1.10E+01
		Co-58	<2.17E+01	0.00E+00	2.17E+01
		Fe-59	<5.41E+01	0.00E+00	5.41E+01
		Co-60	<1.15E+01	0.00E+00	1.15E+01
		Zn-65	<3.94E+01	0.00E+00	3.94E+01
		Zr-95	<2.16E+01	0.00E+00	2.16E+01
		Nb-95	<2.20E+01	0.00E+00	2.20E+01
		I-131	<6.00E+01	0.00E+00	6.00E+01
		Cs-134	<1.20E+01	0.00E+00	1.20E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1066 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
427651	10/26/2016 - 10/26/2016	Cs-137	<1.57E+01	0.00E+00	1.57E+01
		La-140	<4.13E+04	0.00E+00	4.13E+04
		Ba-140	<1.18E+02	0.00E+00	1.18E+02
		Total-Gam	0.00E+00		
428150	11/1/2016 - 11/1/2016	Mn-54	<1.37E+01	0.00E+00	1.37E+01
		Co-58	<1.06E+01	0.00E+00	1.06E+01
		Fe-59	<1.97E+01	0.00E+00	1.97E+01
		Co-60	<1.14E+01	0.00E+00	1.14E+01
		Zn-65	<1.53E+01	0.00E+00	1.53E+01
		Zr-95	<2.75E+01	0.00E+00	2.75E+01
		Nb-95	<8.39E+00	0.00E+00	8.39E+00
		I-131	<1.77E+01	0.00E+00	1.77E+01
		Cs-134	<1.36E+01	0.00E+00	1.36E+01
		Cs-137	<1.46E+01	0.00E+00	1.46E+01
		La-140	<4.82E+01	0.00E+00	4.82E+01
		Ba-140	<5.70E+01	0.00E+00	5.70E+01
		Total-Gam	0.00E+00		
428825	11/8/2016 - 11/8/2016	Mn-54	<1.62E+01	0.00E+00	1.62E+01
		Co-58	<1.22E+01	0.00E+00	1.22E+01
		Fe-59	<1.39E+01	0.00E+00	1.39E+01
		Co-60	<1.14E+01	0.00E+00	1.14E+01
		Zn-65	<3.06E+01	0.00E+00	3.06E+01
		Zr-95	<1.04E+01	0.00E+00	1.04E+01
		Nb-95	<1.57E+01	0.00E+00	1.57E+01
		I-131	<1.11E+01	0.00E+00	1.11E+01
		Cs-134	<1.36E+01	0.00E+00	1.36E+01
		Cs-137	<1.03E+01	0.00E+00	1.03E+01
		La-140	<3.35E+01	0.00E+00	3.35E+01
		Ba-140	<6.28E+01	0.00E+00	6.28E+01
		Total-Gam	0.00E+00		
429343	11/15/2016 - 11/15/2016	Mn-54	<8.64E+00	0.00E+00	8.64E+00
		Co-58	<1.34E+01	0.00E+00	1.34E+01
		Fe-59	<3.03E+01	0.00E+00	3.03E+01
		Co-60	<1.14E+01	0.00E+00	1.14E+01
		Zn-65	<2.64E+01	0.00E+00	2.64E+01
		Zr-95	<2.29E+01	0.00E+00	2.29E+01
		Nb-95	<1.15E+01	0.00E+00	1.15E+01
		I-131	<1.47E+01	0.00E+00	1.47E+01
		Cs-134	<8.33E+00	0.00E+00	8.33E+00
		Cs-137	<1.68E+01	0.00E+00	1.68E+01
		La-140	<1.20E+01	0.00E+00	1.20E+01
		Ba-140	<5.47E+01	0.00E+00	5.47E+01
		Total-Gam	0.00E+00		
429894	11/21/2016 - 11/21/2016	Mn-54	<1.64E+01	0.00E+00	1.64E+01
		Co-58	<1.44E+01	0.00E+00	1.44E+01
		Fe-59	<3.01E+01	0.00E+00	3.01E+01
		Co-60	<8.07E+00	0.00E+00	8.07E+00
		Zn-65	<2.20E+01	0.00E+00	2.20E+01
		Zr-95	<1.90E+01	0.00E+00	1.90E+01
		Nb-95	<1.46E+01	0.00E+00	1.46E+01
		I-131	<2.53E+01	0.00E+00	2.53E+01
		Cs-134	<1.28E+01	0.00E+00	1.28E+01
		Cs-137	<1.46E+01	0.00E+00	1.46E+01
		La-140	<2.73E+02	0.00E+00	2.73E+02
		Ba-140	<7.88E+01	0.00E+00	7.88E+01
		Total-Gam	0.00E+00		



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1066 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
430514	11/29/2016 - 11/29/2016	Mn-54	<1.94E+01	0.00E+00	1.94E+01
		Co-58	<1.37E+01	0.00E+00	1.37E+01
		Fe-59	<3.41E+01	0.00E+00	3.41E+01
		Co-60	<1.78E+01	0.00E+00	1.78E+01
		Zn-65	<4.33E+01	0.00E+00	4.33E+01
		Zr-95	<1.47E+01	0.00E+00	1.47E+01
		Nb-95	<1.68E+01	0.00E+00	1.68E+01
		I-131	<7.89E+00	0.00E+00	7.89E+00
		Cs-134	<1.18E+01	0.00E+00	1.18E+01
		Cs-137	<1.19E+01	0.00E+00	1.19E+01
		La-140	<3.42E+01	0.00E+00	3.42E+01
		Ba-140	<4.24E+01	0.00E+00	4.24E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431002	12/6/2016 - 12/6/2016	Mn-54	<8.64E+00	0.00E+00	8.64E+00
		Co-58	<1.34E+01	0.00E+00	1.34E+01
		Fe-59	<1.91E+01	0.00E+00	1.91E+01
		Co-60	<1.39E+01	0.00E+00	1.39E+01
		Zn-65	<3.73E+01	0.00E+00	3.73E+01
		Zr-95	<2.70E+01	0.00E+00	2.70E+01
		Nb-95	<1.14E+01	0.00E+00	1.14E+01
		I-131	<1.40E+01	0.00E+00	1.40E+01
		Cs-134	<1.18E+01	0.00E+00	1.18E+01
		Cs-137	<1.78E+01	0.00E+00	1.78E+01
		La-140	<2.23E+01	0.00E+00	2.23E+01
		Ba-140	<4.20E+01	0.00E+00	4.20E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431410	12/13/2016 - 12/13/2016	Mn-54	<1.83E+01	0.00E+00	1.83E+01
		Co-58	<1.20E+01	0.00E+00	1.20E+01
		Fe-59	<2.02E+01	0.00E+00	2.02E+01
		Co-60	<1.14E+01	0.00E+00	1.14E+01
		Zn-65	<2.64E+01	0.00E+00	2.64E+01
		Zr-95	<1.44E+01	0.00E+00	1.44E+01
		Nb-95	<1.15E+01	0.00E+00	1.15E+01
		I-131	<1.67E+01	0.00E+00	1.67E+01
		Cs-134	<1.27E+01	0.00E+00	1.27E+01
		Cs-137	<1.19E+01	0.00E+00	1.19E+01
		La-140	<1.67E+01	0.00E+00	1.67E+01
		Ba-140	<4.23E+01	0.00E+00	4.23E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431741	12/19/2016 - 12/19/2016	Mn-54	<1.06E+01	0.00E+00	1.06E+01
		Co-58	<1.05E+01	0.00E+00	1.05E+01
		Fe-59	<2.04E+01	0.00E+00	2.04E+01
		Co-60	<1.14E+01	0.00E+00	1.14E+01
		Zn-65	<2.64E+01	0.00E+00	2.64E+01
		Zr-95	<2.18E+01	0.00E+00	2.18E+01
		Nb-95	<1.84E+01	0.00E+00	1.84E+01
		I-131	<1.33E+01	0.00E+00	1.33E+01
		Cs-134	<1.27E+01	0.00E+00	1.27E+01
		Cs-137	<1.57E+01	0.00E+00	1.57E+01
		La-140	<2.30E+01	0.00E+00	2.30E+01
		Ba-140	<4.41E+01	0.00E+00	4.41E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
432142	12/27/2016 - 12/27/2016	Mn-54	<1.50E+01	0.00E+00	1.50E+01
		Co-58	<1.04E+01	0.00E+00	1.04E+01
		Fe-59	<1.36E+01	0.00E+00	1.36E+01
		Co-60	<1.61E+01	0.00E+00	1.61E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1066 [INDICATOR - @ 0 miles]

Sample ID: 432142 Sample Dates: 12/27/2016 - 12/27/2016

Nuclide	Activity	2 Sigma Error	MDA
Zn-65	<3.73E+01	0.00E+00	3.73E+01
Zr-95	<2.89E+01	0.00E+00	2.89E+01
Nb-95	<1.28E+01	0.00E+00	1.28E+01
I-131	<1.17E+01	0.00E+00	1.17E+01
Cs-134	<1.19E+01	0.00E+00	1.19E+01
Cs-137	<1.46E+01	0.00E+00	1.46E+01
La-140	<1.64E+01	0.00E+00	1.64E+01
Ba-140	<3.45E+01	0.00E+00	3.45E+01
Total-Gam	0.00E+00		

Sample Point 1067 [INDICATOR - @ 0 miles]

Sample ID: 400099 Sample Dates: 1/6/2016 - 1/6/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<9.99E+00	0.00E+00	9.99E+00
Co-58	<1.45E+01	0.00E+00	1.45E+01
Fe-59	<2.95E+01	0.00E+00	2.95E+01
Co-60	<1.45E+01	0.00E+00	1.45E+01
Zn-65	<3.07E+01	0.00E+00	3.07E+01
Zr-95	<2.15E+01	0.00E+00	2.15E+01
Nb-95	<2.08E+01	0.00E+00	2.08E+01
I-131	<2.57E+01	0.00E+00	2.57E+01
Cs-134	<1.76E+01	0.00E+00	1.76E+01
Cs-137	<1.17E+01	0.00E+00	1.17E+01
La-140	<2.19E+02	0.00E+00	2.19E+02
Ba-140	<9.37E+01	0.00E+00	9.37E+01
Total-Gam	0.00E+00		

Sample ID: 399953 Sample Dates: 1/12/2016 - 1/12/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.58E+01	0.00E+00	1.58E+01
Co-58	<1.47E+01	0.00E+00	1.47E+01
Fe-59	<1.73E+01	0.00E+00	1.73E+01
Co-60	<1.45E+01	0.00E+00	1.45E+01
Zn-65	<2.51E+01	0.00E+00	2.52E+01
Zr-95	<2.65E+01	0.00E+00	2.65E+01
Nb-95	<1.30E+01	0.00E+00	1.30E+01
I-131	<2.68E+01	0.00E+00	2.68E+01
Cs-134	<1.37E+01	0.00E+00	1.37E+01
Cs-137	<1.66E+01	0.00E+00	1.66E+01
La-140	<4.55E+02	0.00E+00	4.55E+02
Ba-140	<8.56E+01	0.00E+00	8.56E+01
Total-Gam	0.00E+00		

Sample ID: 400275 Sample Dates: 1/19/2016 - 1/19/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<7.00E+00	0.00E+00	7.00E+00
Co-58	<1.21E+01	0.00E+00	1.21E+01
Fe-59	<2.75E+01	0.00E+00	2.75E+01
Co-60	<1.30E+01	0.00E+00	1.30E+01
Zn-65	<3.50E+01	0.00E+00	3.50E+01
Zr-95	<2.37E+01	0.00E+00	2.37E+01
Nb-95	<1.35E+01	0.00E+00	1.35E+01
I-131	<1.77E+01	0.00E+00	1.77E+01
Cs-134	<1.10E+01	0.00E+00	1.10E+01
Cs-137	<1.79E+01	0.00E+00	1.79E+01
La-140	<6.50E+01	0.00E+00	6.50E+01
Ba-140	<4.28E+01	0.00E+00	4.28E+01
Total-Gam	0.00E+00		

Sample ID: 400926 Sample Dates: 1/26/2016 - 1/26/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.22E+01	0.00E+00	1.22E+01
Co-58	<1.78E+01	0.00E+00	1.78E+01
Fe-59	<2.41E+01	0.00E+00	2.41E+01
Co-60	<9.24E+00	0.00E+00	9.24E+00
Zn-65	<2.51E+01	0.00E+00	2.51E+01
Zr-95	<2.48E+01	0.00E+00	2.49E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1067 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400926	1/26/2016 - 1/26/2016	Nb-95	<1.64E+01	0.00E+00	1.64E+01
		I-131	<2.70E+01	0.00E+00	2.70E+01
		Cs-134	<1.12E+01	0.00E+00	1.12E+01
		Cs-137	<0.00E+00	0.00E+00	0.00E+00
		La-140	<1.60E+02	0.00E+00	1.60E+02
		Ba-140	<6.66E+01	0.00E+00	6.66E+01
		Total-Gam	0.00E+00		
401289	2/2/2016 - 2/2/2016	Mn-54	<2.01E+01	0.00E+00	2.01E+01
		Co-58	<1.49E+01	0.00E+00	1.49E+01
		Fe-59	<3.08E+01	0.00E+00	3.08E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<4.38E+01	0.00E+00	4.38E+01
		Zr-95	<2.22E+01	0.00E+00	2.22E+01
		Nb-95	<2.33E+01	0.00E+00	2.33E+01
		I-131	<2.85E+01	0.00E+00	2.85E+01
		Cs-134	<1.12E+01	0.00E+00	1.12E+01
		Cs-137	<1.92E+01	0.00E+00	1.92E+01
		La-140	<5.01E+02	0.00E+00	5.01E+02
		Ba-140	<7.73E+01	0.00E+00	7.73E+01
		Total-Gam	0.00E+00		
401752	2/9/2016 - 2/9/2016	Mn-54	<1.59E+01	0.00E+00	1.59E+01
		Co-58	<1.30E+01	0.00E+00	1.30E+01
		Fe-59	<2.53E+01	0.00E+00	2.53E+01
		Co-60	<1.60E+01	0.00E+00	1.60E+01
		Zn-65	<3.10E+01	0.00E+00	3.10E+01
		Zr-95	<1.28E+01	0.00E+00	1.28E+01
		Nb-95	<1.56E+01	0.00E+00	1.56E+01
		I-131	<3.51E+01	0.00E+00	3.51E+01
		Cs-134	<1.12E+01	0.00E+00	1.12E+01
		Cs-137	<1.51E+01	0.00E+00	1.51E+01
		La-140	<5.67E+02	0.00E+00	5.67E+02
		Ba-140	<7.86E+01	0.00E+00	7.86E+01
		Total-Gam	0.00E+00		
402263	2/16/2016 - 2/16/2016	Mn-54	<1.76E+01	0.00E+00	1.76E+01
		Co-58	<2.38E+01	0.00E+00	2.38E+01
		Fe-59	<3.38E+01	0.00E+00	3.38E+01
		Co-60	<1.45E+01	0.00E+00	1.45E+01
		Zn-65	<3.64E+01	0.00E+00	3.64E+01
		Zr-95	<2.37E+01	0.00E+00	2.37E+01
		Nb-95	<1.96E+01	0.00E+00	1.96E+01
		I-131	<5.55E+01	0.00E+00	5.55E+01
		Cs-134	<1.47E+01	0.00E+00	1.47E+01
		Cs-137	<1.66E+01	0.00E+00	1.66E+01
		La-140	<8.76E+03	0.00E+00	8.76E+03
		Ba-140	<9.81E+01	0.00E+00	9.81E+01
		Total-Gam	0.00E+00		
402985	2/23/2016 - 2/23/2016	Mn-54	<1.74E+01	0.00E+00	1.74E+01
		Co-58	<1.06E+01	0.00E+00	1.06E+01
		Fe-59	<2.53E+01	0.00E+00	2.53E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<2.53E+01	0.00E+00	2.53E+01
		Zr-95	<3.15E+01	0.00E+00	3.15E+01
		Nb-95	<2.34E+01	0.00E+00	2.34E+01
		I-131	<2.75E+01	0.00E+00	2.75E+01
		Cs-134	<1.35E+01	0.00E+00	1.35E+01
Cs-137	<1.35E+01	0.00E+00	1.35E+01		



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1067 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
402985	2/23/2016 - 2/23/2016	La-140	<1.11E+03	0.00E+00	1.11E+03
		Ba-140	<7.85E+01	0.00E+00	7.85E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
404469	3/1/2016 - 3/1/2016	Mn-54	<2.24E+01	0.00E+00	2.24E+01
		Co-58	<1.94E+01	0.00E+00	1.94E+01
		Fe-59	<2.98E+01	0.00E+00	2.98E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<2.51E+01	0.00E+00	2.51E+01
		Zr-95	<1.77E+01	0.00E+00	1.77E+01
		Nb-95	<2.11E+01	0.00E+00	2.11E+01
		I-131	<2.10E+01	0.00E+00	2.10E+01
		Cs-134	<1.35E+01	0.00E+00	1.35E+01
		Cs-137	<1.79E+01	0.00E+00	1.79E+01
		La-140	<3.71E+02	0.00E+00	3.71E+02
		Ba-140	<5.65E+01	0.00E+00	5.65E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
405355	3/8/2016 - 3/8/2016	Mn-54	<2.03E+01	0.00E+00	2.03E+01
		Co-58	<1.36E+01	0.00E+00	1.36E+01
		Fe-59	<2.87E+01	0.00E+00	2.87E+01
		Co-60	<9.26E+00	0.00E+00	9.27E+00
		Zn-65	<3.14E+01	0.00E+00	3.14E+01
		Zr-95	<2.86E+01	0.00E+00	2.86E+01
		Nb-95	<2.10E+01	0.00E+00	2.10E+01
		I-131	<4.66E+01	0.00E+00	4.66E+01
		Cs-134	<9.61E+00	0.00E+00	9.61E+00
		Cs-137	<1.52E+01	0.00E+00	1.51E+01
		La-140	<5.88E+03	0.00E+00	5.88E+03
		Ba-140	<9.31E+01	0.00E+00	9.31E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
405972	3/15/2016 - 3/15/2016	Mn-54	<1.59E+01	0.00E+00	1.59E+01
		Co-58	<1.65E+01	0.00E+00	1.65E+01
		Fe-59	<1.75E+01	0.00E+00	1.75E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<2.52E+01	0.00E+00	2.52E+01
		Zr-95	<3.10E+01	0.00E+00	3.10E+01
		Nb-95	<2.15E+01	0.00E+00	2.15E+01
		I-131	<2.58E+01	0.00E+00	2.58E+01
		Cs-134	<1.65E+01	0.00E+00	1.65E+01
		Cs-137	<9.58E+00	0.00E+00	9.58E+00
		La-140	<4.45E+02	0.00E+00	4.45E+02
		Ba-140	<8.91E+01	0.00E+00	8.91E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
406303	3/22/2016 - 3/22/2016	Mn-54	<1.58E+01	0.00E+00	1.58E+01
		Co-58	<1.45E+01	0.00E+00	1.45E+01
		Fe-59	<3.40E+01	0.00E+00	3.40E+01
		Co-60	<1.31E+01	0.00E+00	1.31E+01
		Zn-65	<2.51E+01	0.00E+00	2.51E+01
		Zr-95	<2.62E+01	0.00E+00	2.62E+01
		Nb-95	<1.47E+01	0.00E+00	1.47E+01
		I-131	<2.67E+01	0.00E+00	2.67E+01
		Cs-134	<1.23E+01	0.00E+00	1.23E+01
		Cs-137	<1.51E+01	0.00E+00	1.51E+01
		La-140	<2.63E+02	0.00E+00	2.63E+02
		Ba-140	<6.04E+01	0.00E+00	6.04E+01
		Total-Gam	0.00E+00		



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1067 [INDICATOR - @ 0 miles]

Sample ID: 407500 Sample Dates: 3/29/2016 - 3/29/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.40E+01	0.00E+00	1.40E+01
Co-58	<9.77E+00	0.00E+00	9.77E+00
Fe-59	<3.51E+01	0.00E+00	3.51E+01
Co-60	<1.02E+01	0.00E+00	1.02E+01
Zn-65	<2.47E+01	0.00E+00	2.47E+01
Zr-95	<2.03E+01	0.00E+00	2.03E+01
Nb-95	<1.88E+01	0.00E+00	1.88E+01
I-131	<1.58E+01	0.00E+00	1.58E+01
Cs-134	<9.49E+00	0.00E+00	9.49E+00
Cs-137	<1.17E+01	0.00E+00	1.17E+01
La-140	<1.86E+01	0.00E+00	1.86E+01
Ba-140	<6.48E+01	0.00E+00	6.48E+01
Total-Gam	0.00E+00		

Sample ID: 408054 Sample Dates: 4/5/2016 - 4/5/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.21E+01	0.00E+00	1.21E+01
Co-58	<9.79E+00	0.00E+00	9.79E+00
Fe-59	<2.73E+01	0.00E+00	2.73E+01
Co-60	<1.02E+01	0.00E+00	1.02E+01
Zn-65	<3.03E+01	0.00E+00	3.03E+01
Zr-95	<1.18E+01	0.00E+00	1.18E+01
Nb-95	<1.63E+01	0.00E+00	1.63E+01
I-131	<1.82E+01	0.00E+00	1.82E+01
Cs-134	<1.36E+01	0.00E+00	1.36E+01
Cs-137	<9.57E+00	0.00E+00	9.57E+00
La-140	<4.02E+01	0.00E+00	4.02E+01
Ba-140	<6.87E+01	0.00E+00	6.87E+01
Total-Gam	0.00E+00		

Sample ID: 409393 Sample Dates: 4/12/2016 - 4/12/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<9.88E+00	0.00E+00	9.88E+00
Co-58	<1.95E+01	0.00E+00	1.95E+01
Fe-59	<3.14E+01	0.00E+00	3.14E+01
Co-60	<1.02E+01	0.00E+00	1.02E+01
Zn-65	<3.91E+01	0.00E+00	3.91E+01
Zr-95	<2.63E+01	0.00E+00	2.63E+01
Nb-95	<1.75E+01	0.00E+00	1.75E+01
I-131	<1.59E+01	0.00E+00	1.59E+01
Cs-134	<1.34E+01	0.00E+00	1.34E+01
Cs-137	<1.35E+01	0.00E+00	1.35E+01
La-140	<6.37E+01	0.00E+00	6.37E+01
Ba-140	<5.03E+01	0.00E+00	5.03E+01
Total-Gam	0.00E+00		

Sample ID: 409727 Sample Dates: 4/19/2016 - 4/19/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.71E+01	0.00E+00	1.71E+01
Co-58	<1.55E+01	0.00E+00	1.55E+01
Fe-59	<3.16E+01	0.00E+00	3.16E+01
Co-60	<1.30E+01	0.00E+00	1.30E+01
Zn-65	<3.03E+01	0.00E+00	3.03E+01
Zr-95	<1.18E+01	0.00E+00	1.18E+01
Nb-95	<2.00E+01	0.00E+00	2.00E+01
I-131	<1.63E+01	0.00E+00	1.63E+01
Cs-134	<1.34E+01	0.00E+00	1.34E+01
Cs-137	<1.35E+01	0.00E+00	1.35E+01
La-140	<4.24E+01	0.00E+00	4.24E+01
Ba-140	<5.11E+01	0.00E+00	5.11E+01
Total-Gam	0.00E+00		

Sample ID: 410880 Sample Dates: 4/26/2016 - 4/26/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.21E+01	0.00E+00	1.21E+01
Co-58	<1.56E+01	0.00E+00	1.56E+01
Fe-59	<2.77E+01	0.00E+00	2.77E+01
Co-60	<9.22E+00	0.00E+00	9.23E+00



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1067 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
410880	4/26/2016 - 4/26/2016	Zn-65	<2.48E+01	0.00E+00	2.48E+01
		Zr-95	<2.90E+01	0.00E+00	2.90E+01
		Nb-95	<2.25E+01	0.00E+00	2.25E+01
		I-131	<1.49E+01	0.00E+00	1.49E+01
		Cs-134	<1.23E+01	0.00E+00	1.23E+01
		Cs-137	<1.91E+01	0.00E+00	1.91E+01
		La-140	<2.98E+01	0.00E+00	2.98E+01
		Ba-140	<3.78E+01	0.00E+00	3.78E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
411380	5/3/2016 - 5/3/2016	Mn-54	<1.22E+01	0.00E+00	1.22E+01
		Co-58	<1.78E+01	0.00E+00	1.78E+01
		Fe-59	<2.41E+01	0.00E+00	2.41E+01
		Co-60	<1.31E+01	0.00E+00	1.31E+01
		Zn-65	<3.97E+01	0.00E+00	3.97E+01
		Zr-95	<3.05E+01	0.00E+00	3.05E+01
		Nb-95	<2.08E+01	0.00E+00	2.08E+01
		I-131	<2.83E+01	0.00E+00	2.83E+01
		Cs-134	<1.65E+01	0.00E+00	1.65E+01
		Cs-137	<1.35E+01	0.00E+00	1.35E+01
		La-140	<3.84E+02	0.00E+00	3.84E+02
		Ba-140	<6.12E+01	0.00E+00	6.12E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
411704	5/10/2016 - 5/10/2016	Mn-54	<1.73E+01	0.00E+00	1.73E+01
		Co-58	<1.03E+01	0.00E+00	1.03E+01
		Fe-59	<3.40E+01	0.00E+00	3.40E+01
		Co-60	<2.05E+01	0.00E+00	2.05E+01
		Zn-65	<3.07E+01	0.00E+00	3.07E+01
		Zr-95	<2.15E+01	0.00E+00	2.15E+01
		Nb-95	<1.94E+01	0.00E+00	1.94E+01
		I-131	<3.07E+01	0.00E+00	3.07E+01
		Cs-134	<1.56E+01	0.00E+00	1.56E+01
		Cs-137	<1.35E+01	0.00E+00	1.35E+01
		La-140	<1.56E+02	0.00E+00	1.56E+02
		Ba-140	<6.06E+01	0.00E+00	6.06E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
412166	5/17/2016 - 5/17/2016	Mn-54	<1.00E+01	0.00E+00	1.00E+01
		Co-58	<1.64E+01	0.00E+00	1.64E+01
		Fe-59	<1.73E+01	0.00E+00	1.73E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<5.03E+01	0.00E+00	5.03E+01
		Zr-95	<2.52E+01	0.00E+00	2.52E+01
		Nb-95	<7.52E+00	0.00E+00	7.52E+00
		I-131	<2.86E+01	0.00E+00	2.86E+01
		Cs-134	<1.77E+01	0.00E+00	1.77E+01
		Cs-137	<1.35E+01	0.00E+00	1.35E+01
		La-140	<5.18E+02	0.00E+00	5.18E+02
		Ba-140	<7.66E+01	0.00E+00	7.66E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
412683	5/24/2016 - 5/24/2016	Mn-54	<1.43E+01	0.00E+00	1.43E+01
		Co-58	<1.56E+01	0.00E+00	1.56E+01
		Fe-59	<2.68E+01	0.00E+00	2.68E+01
		Co-60	<1.31E+01	0.00E+00	1.31E+01
		Zn-65	<3.13E+01	0.00E+00	3.13E+01
		Zr-95	<2.68E+01	0.00E+00	2.68E+01
		Nb-95	<2.06E+01	0.00E+00	2.06E+01
		I-131	<5.42E+01	0.00E+00	5.42E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1067 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
412683	5/24/2016 - 5/24/2016	Cs-134	<1.66E+01	0.00E+00	1.66E+01
		Cs-137	<1.66E+01	0.00E+00	1.66E+01
		La-140	<4.80E+03	0.00E+00	4.80E+03
		Ba-140	<1.63E+02	0.00E+00	1.63E+02
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
413286	6/1/2016 - 6/1/2016	Mn-54	<9.99E+00	0.00E+00	1.00E+01
		Co-58	<1.93E+01	0.00E+00	1.93E+01
		Fe-59	<3.42E+01	0.00E+00	3.42E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<1.77E+01	0.00E+00	1.77E+01
		Zr-95	<2.16E+01	0.00E+00	2.16E+01
		Nb-95	<1.81E+01	0.00E+00	1.81E+01
		I-131	<3.04E+01	0.00E+00	3.04E+01
		Cs-134	<1.58E+01	0.00E+00	1.58E+01
		Cs-137	<1.79E+01	0.00E+00	1.79E+01
		La-140	<2.46E+02	0.00E+00	2.46E+02
		Ba-140	<6.14E+01	0.00E+00	6.14E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
413833	6/7/2016 - 6/7/2016	Mn-54	<1.73E+01	0.00E+00	1.73E+01
		Co-58	<1.64E+01	0.00E+00	1.64E+01
		Fe-59	<3.45E+01	0.00E+00	3.45E+01
		Co-60	<1.60E+01	0.00E+00	1.60E+01
		Zn-65	<3.56E+01	0.00E+00	3.56E+01
		Zr-95	<1.53E+01	0.00E+00	1.53E+01
		Nb-95	<1.67E+01	0.00E+00	1.67E+01
		I-131	<3.42E+01	0.00E+00	3.42E+01
		Cs-134	<1.23E+01	0.00E+00	1.23E+01
		Cs-137	<9.58E+00	0.00E+00	9.58E+00
		La-140	<3.25E+02	0.00E+00	3.25E+02
		Ba-140	<7.54E+01	0.00E+00	7.54E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
414973	6/14/2016 - 6/14/2016	Mn-54	<7.06E+00	0.00E+00	7.06E+00
		Co-58	<1.26E+01	0.00E+00	1.26E+01
		Fe-59	<3.39E+01	0.00E+00	3.39E+01
		Co-60	<9.24E+00	0.00E+00	9.24E+00
		Zn-65	<0.00E+00	0.00E+00	0.00E+00
		Zr-95	<2.15E+01	0.00E+00	2.15E+01
		Nb-95	<2.07E+01	0.00E+00	2.07E+01
		I-131	<2.43E+01	0.00E+00	2.43E+01
		Cs-134	<1.23E+01	0.00E+00	1.23E+01
		Cs-137	<9.58E+00	0.00E+00	9.58E+00
		La-140	<2.60E+02	0.00E+00	2.60E+02
		Ba-140	<7.10E+01	0.00E+00	7.10E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415338	6/21/2016 - 6/21/2016	Mn-54	<1.87E+01	0.00E+00	1.87E+01
		Co-58	<1.92E+01	0.00E+00	1.92E+01
		Fe-59	<3.81E+01	0.00E+00	3.81E+01
		Co-60	<9.24E+00	0.00E+00	9.24E+00
		Zn-65	<2.51E+01	0.00E+00	2.51E+01
		Zr-95	<2.49E+01	0.00E+00	2.49E+01
		Nb-95	<1.64E+01	0.00E+00	1.64E+01
		I-131	<2.80E+01	0.00E+00	2.80E+01
		Cs-134	<1.35E+01	0.00E+00	1.35E+01
		Cs-137	<1.35E+01	0.00E+00	1.35E+01
		La-140	<2.79E+02	0.00E+00	2.79E+02
		Ba-140	<6.66E+01	0.00E+00	6.66E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1067 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
415338	6/21/2016 - 6/21/2016	Total-Gam	0.00E+00		
416338	6/28/2016 - 6/28/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.40E+01	0.00E+00	1.40E+01
		Co-58	<1.85E+01	0.00E+00	1.85E+01
		Fe-59	<3.19E+01	0.00E+00	3.19E+01
		Co-60	<2.06E+01	0.00E+00	2.06E+01
		Zn-65	<2.48E+01	0.00E+00	2.48E+01
		Zr-95	<2.06E+01	0.00E+00	2.06E+01
		Nb-95	<1.91E+01	0.00E+00	1.91E+01
		I-131	<1.57E+01	0.00E+00	1.57E+01
		Cs-134	<1.55E+01	0.00E+00	1.55E+01
		Cs-137	<2.25E+01	0.00E+00	2.25E+01
		La-140	<2.88E+01	0.00E+00	2.88E+01
		Ba-140	<5.74E+01	0.00E+00	5.74E+01
		Total-Gam	0.00E+00		
416962	7/5/2016 - 7/5/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.71E+01	0.00E+00	1.71E+01
		Co-58	<1.85E+01	0.00E+00	1.85E+01
		Fe-59	<3.19E+01	0.00E+00	3.19E+01
		Co-60	<1.02E+01	0.00E+00	1.02E+01
		Zn-65	<1.75E+01	0.00E+00	1.75E+01
		Zr-95	<1.19E+01	0.00E+00	1.19E+01
		Nb-95	<1.51E+01	0.00E+00	1.51E+01
		I-131	<1.89E+01	0.00E+00	1.89E+01
		Cs-134	<1.65E+01	0.00E+00	1.65E+01
		Cs-137	<1.35E+01	0.00E+00	1.35E+01
		La-140	<2.90E+01	0.00E+00	2.90E+01
		Ba-140	<5.32E+01	0.00E+00	5.32E+01
		Total-Gam	0.00E+00		
417355	7/12/2016 - 7/12/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.24E+01	0.00E+00	1.24E+01
		Co-58	<1.10E+01	0.00E+00	1.10E+01
		Fe-59	<3.27E+01	0.00E+00	3.27E+01
		Co-60	<1.45E+01	0.00E+00	1.45E+01
		Zn-65	<3.13E+01	0.00E+00	3.13E+01
		Zr-95	<2.98E+01	0.00E+00	2.98E+01
		Nb-95	<1.87E+01	0.00E+00	1.87E+01
		I-131	<2.96E+01	0.00E+00	2.96E+01
		Cs-134	<1.37E+01	0.00E+00	1.37E+01
		Cs-137	<9.58E+00	0.00E+00	9.58E+00
		La-140	<3.49E+03	0.00E+00	3.49E+03
		Ba-140	<9.53E+01	0.00E+00	9.53E+01
		Total-Gam	0.00E+00		
417716	7/19/2016 - 7/19/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.59E+01	0.00E+00	1.59E+01
		Co-58	<1.67E+01	0.00E+00	1.67E+01
		Fe-59	<4.37E+01	0.00E+00	4.37E+01
		Co-60	<9.25E+00	0.00E+00	9.25E+00
		Zn-65	<4.38E+01	0.00E+00	4.38E+01
		Zr-95	<2.87E+01	0.00E+00	2.87E+01
		Nb-95	<1.91E+01	0.00E+00	1.91E+01
		I-131	<2.88E+01	0.00E+00	2.88E+01
		Cs-134	<1.66E+01	0.00E+00	1.66E+01
		Cs-137	<1.17E+01	0.00E+00	1.17E+01
		La-140	<7.56E+02	0.00E+00	7.56E+02
		Ba-140	<9.55E+01	0.00E+00	9.55E+01
		Total-Gam	0.00E+00		
418202	7/26/2016 - 7/26/2016	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<7.51E+00	0.00E+00	7.51E+00



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1067 [INDICATOR - @ 0 miles]

Sample ID: 418202 Sample Dates: 7/26/2016 - 7/26/2016

Nuclide	Activity	2 Sigma Error	MDA
Co-58	<1.66E+01	0.00E+00	1.66E+01
Fe-59	<3.05E+01	0.00E+00	3.05E+01
Co-60	<1.36E+01	0.00E+00	1.36E+01
Zn-65	<3.78E+01	0.00E+00	3.78E+01
Zr-95	<1.76E+01	0.00E+00	1.76E+01
Nb-95	<2.93E+01	0.00E+00	2.93E+01
I-131	<3.99E+01	0.00E+00	3.99E+01
Cs-134	<1.74E+01	0.00E+00	1.74E+01
Cs-137	<1.41E+01	0.00E+00	1.41E+01
La-140	<1.55E+04	0.00E+00	1.55E+04
Ba-140	<1.35E+02	0.00E+00	1.35E+02
Total-Gam	0.00E+00		

Sample ID: 418930 Sample Dates: 8/2/2016 - 8/2/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.67E+01	0.00E+00	1.67E+01
Co-58	<1.40E+01	0.00E+00	1.40E+01
Fe-59	<2.77E+01	0.00E+00	2.77E+01
Co-60	<2.54E+01	0.00E+00	2.54E+01
Zn-65	<3.25E+01	0.00E+00	3.25E+01
Zr-95	<1.70E+01	0.00E+00	1.70E+01
Nb-95	<2.48E+01	0.00E+00	2.48E+01
I-131	<4.42E+01	0.00E+00	4.42E+01
Cs-134	<1.64E+01	0.00E+00	1.64E+01
Cs-137	<1.58E+01	0.00E+00	1.58E+01
La-140	<7.33E+03	0.00E+00	7.33E+03
Ba-140	<9.16E+01	0.00E+00	9.16E+01
Total-Gam	0.00E+00		

Sample ID: 424039 Sample Dates: 8/16/2016 - 8/16/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.19E+01	0.00E+00	2.19E+01
Co-58	<1.92E+01	0.00E+00	1.92E+01
Fe-59	<5.14E+01	0.00E+00	5.14E+01
Co-60	<1.37E+01	0.00E+00	1.37E+01
Zn-65	<5.21E+01	0.00E+00	5.21E+01
Zr-95	<4.12E+01	0.00E+00	4.12E+01
Nb-95	<2.76E+01	0.00E+00	2.76E+01
I-131	<2.16E+02	0.00E+00	2.16E+02
Cs-134	<1.45E+01	0.00E+00	1.45E+01
Cs-137	<2.45E+01	0.00E+00	2.45E+01
La-140	<6.46E+06	0.00E+00	6.46E+06
Ba-140	<2.78E+02	0.00E+00	2.78E+02
Total-Gam	0.00E+00		

Sample ID: 424335 Sample Dates: 8/23/2016 - 8/23/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.33E+01	0.00E+00	1.33E+01
Co-58	<2.08E+01	0.00E+00	2.08E+01
Fe-59	<4.88E+01	0.00E+00	4.88E+01
Co-60	<1.67E+01	0.00E+00	1.67E+01
Zn-65	<1.95E+01	0.00E+00	1.95E+01
Zr-95	<4.59E+01	0.00E+00	4.59E+01
Nb-95	<3.27E+01	0.00E+00	3.27E+01
I-131	<1.63E+02	0.00E+00	1.63E+02
Cs-134	<1.55E+01	0.00E+00	1.55E+01
Cs-137	<1.73E+01	0.00E+00	1.73E+01
La-140	<1.60E+06	0.00E+00	1.60E+06
Ba-140	<2.15E+02	0.00E+00	2.15E+02
Total-Gam	0.00E+00		

Sample ID: 424360 Sample Dates: 8/30/2016 - 8/30/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.31E+01	0.00E+00	1.31E+01
Co-58	<1.51E+01	0.00E+00	1.51E+01
Fe-59	<4.92E+01	0.00E+00	4.92E+01
Co-60	<1.06E+01	0.00E+00	1.06E+01
Zn-65	<2.71E+01	0.00E+00	2.71E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1067 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
424360	8/30/2016 - 8/30/2016	Zr-95	<3.38E+01	0.00E+00	3.38E+01
		Nb-95	<2.68E+01	0.00E+00	2.68E+01
		I-131	<9.15E+01	0.00E+00	9.15E+01
		Cs-134	<1.18E+01	0.00E+00	1.18E+01
		Cs-137	<1.87E+01	0.00E+00	1.87E+01
		La-140	<1.01E+05	0.00E+00	1.01E+05
		Ba-140	<1.37E+02	0.00E+00	1.37E+02
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
427621	9/6/2016 - 9/6/2016	Mn-54	<1.96E+01	0.00E+00	1.96E+01
		Co-58	<1.48E+01	0.00E+00	1.48E+01
		Fe-59	<4.63E+01	0.00E+00	4.63E+01
		Co-60	<9.09E+00	0.00E+00	9.09E+00
		Zn-65	<3.10E+01	0.00E+00	3.10E+01
		Zr-95	<2.67E+01	0.00E+00	2.67E+01
		Nb-95	<4.31E+01	0.00E+00	4.31E+01
		I-131	<1.89E+03	0.00E+00	1.89E+03
		Cs-134	<1.45E+01	0.00E+00	1.45E+01
		Cs-137	<1.19E+01	0.00E+00	1.19E+01
		La-140	<2.98E+11	0.00E+00	2.98E+11
		Ba-140	<1.06E+03	0.00E+00	1.06E+03
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
423254	9/13/2016 - 9/13/2016	Mn-54	<1.53E+01	0.00E+00	1.53E+01
		Co-58	<1.40E+01	0.00E+00	1.40E+01
		Fe-59	<7.32E+01	0.00E+00	7.32E+01
		Co-60	<8.20E+00	0.00E+00	8.20E+00
		Zn-65	<3.05E+01	0.00E+00	3.05E+01
		Zr-95	<4.34E+01	0.00E+00	4.34E+01
		Nb-95	<3.83E+01	0.00E+00	3.83E+01
		I-131	<1.22E+03	0.00E+00	1.22E+03
		Cs-134	<1.23E+01	0.00E+00	1.23E+01
		Cs-137	<0.00E+00	0.00E+00	0.00E+00
		La-140	<2.26E+10	0.00E+00	2.26E+10
		Ba-140	<7.68E+02	0.00E+00	7.68E+02
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
424372	9/21/2016 - 9/21/2016	Mn-54	<1.65E+01	0.00E+00	1.65E+01
		Co-58	<2.04E+01	0.00E+00	2.04E+01
		Fe-59	<2.64E+01	0.00E+00	2.64E+01
		Co-60	<8.17E+00	0.00E+00	8.17E+00
		Zn-65	<3.44E+01	0.00E+00	3.44E+01
		Zr-95	<3.25E+01	0.00E+00	3.25E+01
		Nb-95	<2.98E+01	0.00E+00	2.99E+01
		I-131	<5.67E+02	0.00E+00	5.67E+02
		Cs-134	<1.43E+01	0.00E+00	1.43E+01
		Cs-137	<1.19E+01	0.00E+00	1.19E+01
		La-140	<5.76E+08	0.00E+00	5.76E+08
		Ba-140	<4.30E+02	0.00E+00	4.30E+02
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
425371	9/27/2016 - 9/27/2016	Mn-54	<1.50E+01	0.00E+00	1.50E+01
		Co-58	<1.55E+01	0.00E+00	1.55E+01
		Fe-59	<2.56E+01	0.00E+00	2.56E+01
		Co-60	<1.63E+01	0.00E+00	1.63E+01
		Zn-65	<2.96E+01	0.00E+00	2.96E+01
		Zr-95	<4.21E+01	0.00E+00	4.21E+01
		Nb-95	<2.22E+01	0.00E+00	2.22E+01
		I-131	<3.52E+02	0.00E+00	3.52E+02
		Cs-134	<7.06E+00	0.00E+00	7.06E+00



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1067 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
425371	9/27/2016 - 9/27/2016	Cs-137	<1.58E+01	0.00E+00	1.58E+01
		La-140	<3.64E+08	0.00E+00	3.64E+08
		Ba-140	<3.87E+02	0.00E+00	3.87E+02
		Total-Gam	0.00E+00		
425933	10/4/2016 - 10/4/2016	Mn-54	<1.48E+01	0.00E+00	1.48E+01
		Co-58	<1.48E+01	0.00E+00	1.48E+01
		Fe-59	<3.53E+01	0.00E+00	3.53E+01
		Co-60	<9.02E+00	0.00E+00	9.02E+00
		Zn-65	<2.39E+01	0.00E+00	2.39E+01
		Zr-95	<3.37E+01	0.00E+00	3.37E+01
		Nb-95	<2.33E+01	0.00E+00	2.33E+01
		I-131	<3.12E+02	0.00E+00	3.12E+02
		Cs-134	<1.49E+01	0.00E+00	1.49E+01
		Cs-137	<1.68E+01	0.00E+00	1.68E+01
		La-140	<4.68E+07	0.00E+00	4.68E+07
		Ba-140	<3.63E+02	0.00E+00	3.63E+02
		Total-Gam	0.00E+00		
426306	10/12/2016 - 10/12/2016	Mn-54	<9.21E+00	0.00E+00	9.21E+00
		Co-58	<1.95E+01	0.00E+00	1.95E+01
		Fe-59	<4.46E+01	0.00E+00	4.46E+01
		Co-60	<1.27E+01	0.00E+00	1.27E+01
		Zn-65	<2.86E+01	0.00E+00	2.86E+01
		Zr-95	<2.41E+01	0.00E+00	2.41E+01
		Nb-95	<2.02E+01	0.00E+00	2.02E+01
		I-131	<1.39E+02	0.00E+00	1.39E+02
		Cs-134	<1.40E+01	0.00E+00	1.40E+01
		Cs-137	<1.68E+01	0.00E+00	1.68E+01
		La-140	<2.35E+06	0.00E+00	2.35E+06
		Ba-140	<2.71E+02	0.00E+00	2.71E+02
		Total-Gam	0.00E+00		
426995	10/18/2016 - 10/18/2016	Mn-54	<1.83E+01	0.00E+00	1.83E+01
		Co-58	<1.56E+01	0.00E+00	1.56E+01
		Fe-59	<5.29E+01	0.00E+00	5.29E+01
		Co-60	<1.15E+01	0.00E+00	1.15E+01
		Zn-65	<3.67E+01	0.00E+00	3.67E+01
		Zr-95	<1.93E+01	0.00E+00	1.93E+01
		Nb-95	<2.38E+01	0.00E+00	2.38E+01
		I-131	<1.11E+02	0.00E+00	1.11E+02
		Cs-134	<1.41E+01	0.00E+00	1.41E+01
		Cs-137	<1.79E+01	0.00E+00	1.79E+01
		La-140	<7.38E+05	0.00E+00	7.38E+05
		Ba-140	<2.20E+02	0.00E+00	2.20E+02
		Total-Gam	0.00E+00		
427652	10/26/2016 - 10/26/2016	Mn-54	<1.56E+01	0.00E+00	1.56E+01
		Co-58	<1.62E+01	0.00E+00	1.62E+01
		Fe-59	<1.82E+01	0.00E+00	1.82E+01
		Co-60	<1.40E+01	0.00E+00	1.40E+01
		Zn-65	<2.78E+01	0.00E+00	2.78E+01
		Zr-95	<2.51E+01	0.00E+00	2.51E+01
		Nb-95	<1.67E+01	0.00E+00	1.67E+01
		I-131	<6.96E+01	0.00E+00	6.96E+01
		Cs-134	<1.20E+01	0.00E+00	1.20E+01
		Cs-137	<1.78E+01	0.00E+00	1.78E+01
		La-140	<7.22E+04	0.00E+00	7.22E+04
		Ba-140	<8.35E+01	0.00E+00	8.35E+01
		Total-Gam	0.00E+00		



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1067 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
428151	11/1/2016 - 11/1/2016	Mn-54	<1.37E+01	0.00E+00	1.37E+01
		Co-58	<1.37E+01	0.00E+00	1.37E+01
		Fe-59	<2.08E+01	0.00E+00	2.08E+01
		Co-60	<1.26E+01	0.00E+00	1.26E+01
		Zn-65	<2.17E+01	0.00E+00	2.17E+01
		Zr-95	<2.08E+01	0.00E+00	2.08E+01
		Nb-95	<1.46E+01	0.00E+00	1.46E+01
		I-131	<1.78E+01	0.00E+00	1.78E+01
		Cs-134	<1.28E+01	0.00E+00	1.27E+01
		Cs-137	<1.78E+01	0.00E+00	1.78E+01
		La-140	<5.07E+01	0.00E+00	5.07E+01
		Ba-140	<5.40E+01	0.00E+00	5.40E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
428826	11/8/2016 - 11/8/2016	Mn-54	<1.50E+01	0.00E+00	1.50E+01
		Co-58	<1.37E+01	0.00E+00	1.37E+01
		Fe-59	<2.41E+01	0.00E+00	2.41E+01
		Co-60	<1.39E+01	0.00E+00	1.39E+01
		Zn-65	<2.65E+01	0.00E+00	2.65E+01
		Zr-95	<1.47E+01	0.00E+00	1.47E+01
		Nb-95	<1.45E+01	0.00E+00	1.45E+01
		I-131	<1.71E+01	0.00E+00	1.71E+01
		Cs-134	<1.36E+01	0.00E+00	1.36E+01
		Cs-137	<1.33E+01	0.00E+00	1.33E+01
		La-140	<4.20E+01	0.00E+00	4.20E+01
		Ba-140	<5.02E+01	0.00E+00	5.02E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
429344	11/15/2016 - 11/15/2016	Mn-54	<2.03E+01	0.00E+00	2.03E+01
		Co-58	<1.48E+01	0.00E+00	1.48E+01
		Fe-59	<3.36E+01	0.00E+00	3.36E+01
		Co-60	<1.14E+01	0.00E+00	1.14E+01
		Zn-65	<2.64E+01	0.00E+00	2.64E+01
		Zr-95	<2.52E+01	0.00E+00	2.52E+01
		Nb-95	<1.43E+01	0.00E+00	1.43E+01
		I-131	<1.63E+01	0.00E+00	1.63E+01
		Cs-134	<9.73E+00	0.00E+00	9.73E+00
		Cs-137	<1.19E+01	0.00E+00	1.19E+01
		La-140	<2.87E+01	0.00E+00	2.87E+01
		Ba-140	<3.61E+01	0.00E+00	3.61E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
429895	11/21/2016 - 11/21/2016	Mn-54	<6.45E+00	0.00E+00	6.45E+00
		Co-58	<7.00E+00	0.00E+00	7.00E+00
		Fe-59	<1.37E+01	0.00E+00	1.37E+01
		Co-60	<8.05E+00	0.00E+00	8.05E+00
		Zn-65	<2.16E+01	0.00E+00	2.16E+01
		Zr-95	<1.03E+01	0.00E+00	1.03E+01
		Nb-95	<7.26E+00	0.00E+00	7.26E+00
		I-131	<8.87E+00	0.00E+00	8.87E+00
		Cs-134	<8.58E+00	0.00E+00	8.58E+00
		Cs-137	<7.67E+00	0.00E+00	7.67E+00
		La-140	<9.52E+00	0.00E+00	9.52E+00
		Ba-140	<2.55E+01	0.00E+00	2.55E+01
		Total-Gam	0.00E+00		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
430515	11/29/2016 - 11/29/2016	Mn-54	<1.62E+01	0.00E+00	1.62E+01
		Co-58	<1.37E+01	0.00E+00	1.37E+01
		Fe-59	<2.41E+01	0.00E+00	2.41E+01
		Co-60	<1.14E+01	0.00E+00	1.14E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1067 [INDICATOR - @ 0 miles]

Sample ID:	430515	Sample Dates:	11/29/2016 - 11/29/2016	Nuclide	Activity	2 Sigma Error	MDA
				Zn-65	<3.06E+01	0.00E+00	3.06E+01
				Zr-95	<2.08E+01	0.00E+00	2.08E+01
				Nb-95	<1.45E+01	0.00E+00	1.45E+01
				I-131	<1.21E+01	0.00E+00	1.21E+01
				Cs-134	<9.74E+00	0.00E+00	9.74E+00
				Cs-137	<1.46E+01	0.00E+00	1.46E+01
				La-140	<2.43E+01	0.00E+00	2.43E+01
				Ba-140	<5.02E+01	0.00E+00	5.02E+01
				Total-Gam	0.00E+00		

Sample ID:	431003	Sample Dates:	12/6/2016 - 12/6/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<1.62E+01	0.00E+00	1.62E+01
				Co-58	<1.20E+01	0.00E+00	1.20E+01
				Fe-59	<3.58E+01	0.00E+00	3.58E+01
				Co-60	<1.14E+01	0.00E+00	1.14E+01
				Zn-65	<2.64E+01	0.00E+00	2.64E+01
				Zr-95	<2.04E+01	0.00E+00	2.04E+01
				Nb-95	<8.09E+00	0.00E+00	8.08E+00
				I-131	<1.35E+01	0.00E+00	1.35E+01
				Cs-134	<9.62E+00	0.00E+00	9.62E+00
				Cs-137	<1.33E+01	0.00E+00	1.33E+01
				La-140	<1.14E+01	0.00E+00	1.14E+01
				Ba-140	<5.16E+01	0.00E+00	5.16E+01
				Total-Gam	0.00E+00		

Sample ID:	431411	Sample Dates:	12/13/2016 - 12/13/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<1.50E+01	0.00E+00	1.50E+01
				Co-58	<8.51E+00	0.00E+00	8.50E+00
				Fe-59	<1.36E+01	0.00E+00	1.36E+01
				Co-60	<8.05E+00	0.00E+00	8.05E+00
				Zn-65	<2.64E+01	0.00E+00	2.64E+01
				Zr-95	<2.89E+01	0.00E+00	2.89E+01
				Nb-95	<1.52E+01	0.00E+00	1.52E+01
				I-131	<1.53E+01	0.00E+00	1.53E+01
				Cs-134	<9.62E+00	0.00E+00	9.62E+00
				Cs-137	<1.46E+01	0.00E+00	1.46E+01
				La-140	<1.70E+01	0.00E+00	1.70E+01
				Ba-140	<3.46E+01	0.00E+00	3.46E+01
				Total-Gam	0.00E+00		

Sample ID:	431742	Sample Dates:	12/19/2016 - 12/19/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<1.37E+01	0.00E+00	1.37E+01
				Co-58	<1.05E+01	0.00E+00	1.05E+01
				Fe-59	<1.94E+01	0.00E+00	1.94E+01
				Co-60	<1.54E+01	0.00E+00	1.54E+01
				Zn-65	<3.74E+01	0.00E+00	3.74E+01
				Zr-95	<1.26E+01	0.00E+00	1.26E+01
				Nb-95	<1.42E+01	0.00E+00	1.42E+01
				I-131	<1.45E+01	0.00E+00	1.45E+01
				Cs-134	<9.73E+00	0.00E+00	9.73E+00
				Cs-137	<1.46E+01	0.00E+00	1.46E+01
				La-140	<1.63E+01	0.00E+00	1.63E+01
				Ba-140	<4.41E+01	0.00E+00	4.41E+01
				Total-Gam	0.00E+00		

Sample ID:	432143	Sample Dates:	12/27/2016 - 12/27/2016	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<1.37E+01	0.00E+00	1.37E+01
				Co-58	<1.20E+01	0.00E+00	1.20E+01
				Fe-59	<1.92E+01	0.00E+00	1.92E+01
				Co-60	<1.14E+01	0.00E+00	1.14E+01
				Zn-65	<1.52E+01	0.00E+00	1.52E+01
				Zr-95	<1.44E+01	0.00E+00	1.44E+01
				Nb-95	<1.62E+01	0.00E+00	1.62E+01
				I-131	<1.30E+01	0.00E+00	1.30E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 1067 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
432143	12/27/2016 - 12/27/2016	Cs-134	<1.08E+01	0.00E+00	1.08E+01
		Cs-137	<1.46E+01	0.00E+00	1.46E+01
		La-140	<1.19E+01	0.00E+00	1.19E+01
		Ba-140	<4.89E+01	0.00E+00	4.89E+01
		Total-Gam	0.00E+00		

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 1 [INDICATOR - E @ 1.1 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
403311	1/5/2016 - 4/5/2016	mR/Std Qtr	11.51
412885	4/5/2016 - 7/6/2016	mR/Std Qtr	11.76
420884	7/6/2016 - 10/13/2016	mR/Std Qtr	8.67
430231	10/13/2016 - 1/4/2017	mR/Std Qtr	10.83

Sample Point 2 [INDICATOR - ESE @ 0.9 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
403321	1/5/2016 - 4/5/2016	mR/Std Qtr	9.43
412895	4/5/2016 - 7/6/2016	mR/Std Qtr	10.52
420894	7/6/2016 - 10/13/2016	mR/Std Qtr	8.58
430241	10/13/2016 - 1/4/2017	mR/Std Qtr	10.81

Sample Point 3 [INDICATOR - SE @ 0.9 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
403332	1/5/2016 - 4/5/2016	mR/Std Qtr	8.92
412906	4/5/2016 - 7/6/2016	mR/Std Qtr	13.45
420905	7/6/2016 - 10/10/2016	mR/Std Qtr	8.22
430252	10/10/2016 - 1/4/2017	mR/Std Qtr	12.76

Sample Point 4 [INDICATOR - SSE @ 1.1 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
403343	1/5/2016 - 4/5/2016	mR/Std Qtr	10.55
412917	4/5/2016 - 7/6/2016	mR/Std Qtr	10.49
420916	7/6/2016 - 10/10/2016	mR/Std Qtr	8.04

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 5 [INDICATOR - S @ 1.1 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
403345	1/5/2016 - 4/5/2016	mR/Std Qtr	9.91
412919	4/5/2016 - 7/6/2016	mR/Std Qtr	10.97
420918	7/6/2016 - 10/10/2016	mR/Std Qtr	8.48
430265	10/10/2016 - 1/4/2017	mR/Std Qtr	9.93

Sample Point 6 [INDICATOR - SSW @ 1.6 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
403346	1/5/2016 - 4/5/2016	mR/Std Qtr	9.13
412920	4/5/2016 - 7/6/2016	mR/Std Qtr	10.07
420919	7/6/2016 - 10/10/2016	mR/Std Qtr	7.74
430266	10/10/2016 - 1/4/2017	mR/Std Qtr	9.60

Sample Point 7 [INDICATOR - SW @ 1.1 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
403347	1/5/2016 - 4/5/2016	mR/Std Qtr	11.42
412921	4/5/2016 - 7/6/2016	mR/Std Qtr	10.63
420920	7/6/2016 - 10/10/2016	mR/Std Qtr	7.48
430267	10/10/2016 - 1/4/2017	mR/Std Qtr	10.26

Sample Point 8 [INDICATOR - W @ 1.2 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
403353	1/5/2016 - 4/6/2016	mR/Std Qtr	8.96
412927	4/6/2016 - 7/7/2016	mR/Std Qtr	9.70
420926	7/7/2016 - 10/10/2016	mR/Std Qtr	7.48
430273	10/10/2016 - 1/5/2017	mR/Std Qtr	9.48

Sample Point 9 [INDICATOR - WNW @ 1 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
403359	1/5/2016 - 4/6/2016	mR/Std Qtr	8.87
412933	4/6/2016 - 7/7/2016	mR/Std Qtr	10.00
420932	7/7/2016 - 10/10/2016	mR/Std Qtr	7.57

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 9 [INDICATOR - WNW @ 1 miles]

TLD RING TLD_INNER

Sample ID:	430279	Sample Dates:	10/10/2016 - 1/5/2017	Nuclide	Activity
				mR/Std Qtr	8.89

Sample Point 10 [INDICATOR - NW @ 0.8 miles]

TLD RING TLD_INNER

Sample ID:	403312	Sample Dates:	1/5/2016 - 4/6/2016	Nuclide	Activity
				mR/Std Qtr	9.59

Sample ID:	412886	Sample Dates:	4/6/2016 - 7/7/2016	Nuclide	Activity
				mR/Std Qtr	8.93

Sample ID:	420885	Sample Dates:	7/7/2016 - 10/10/2016	Nuclide	Activity
				mR/Std Qtr	6.17

Sample ID:	430232	Sample Dates:	10/10/2016 - 1/5/2017	Nuclide	Activity
				mR/Std Qtr	8.98

Sample Point 11 [INDICATOR - NNW @ 0.9 miles]

TLD RING TLD_INNER

Sample ID:	403313	Sample Dates:	1/5/2016 - 4/6/2016	Nuclide	Activity
				mR/Std Qtr	11.97

Sample ID:	412887	Sample Dates:	4/6/2016 - 7/7/2016	Nuclide	Activity
				mR/Std Qtr	10.87

Sample ID:	420886	Sample Dates:	7/7/2016 - 10/10/2016	Nuclide	Activity
				mR/Std Qtr	8.55

Sample ID:	430233	Sample Dates:	10/10/2016 - 1/5/2017	Nuclide	Activity
				mR/Std Qtr	9.46

Sample Point 12 [INDICATOR - N @ 1.1 miles]

TLD RING TLD_INNER

Sample ID:	403314	Sample Dates:	1/5/2016 - 4/6/2016	Nuclide	Activity
				mR/Std Qtr	10.54

Sample ID:	412888	Sample Dates:	4/6/2016 - 7/7/2016	Nuclide	Activity
				mR/Std Qtr	10.87

Sample ID:	420887	Sample Dates:	7/7/2016 - 10/10/2016	Nuclide	Activity
				mR/Std Qtr	8.26

Sample ID:	430234	Sample Dates:	10/10/2016 - 1/5/2017	Nuclide	Activity
				mR/Std Qtr	12.97

Sample Point 13 [INDICATOR - NNE @ 1.2 miles]

TLD RING TLD_INNER

Sample ID:	403315	Sample Dates:	1/5/2016 - 4/6/2016	Nuclide	Activity
				mR/Std Qtr	12.14

Sample ID:	412889	Sample Dates:	4/6/2016 - 7/7/2016	Nuclide	Activity
				mR/Std Qtr	9.47

Sample ID:	420888	Sample Dates:	7/7/2016 - 10/10/2016	Nuclide	Activity
				mR/Std Qtr	6.50

Sample ID:	430235	Sample Dates:	10/10/2016 - 1/5/2017	Nuclide	Activity
				mR/Std Qtr	7.84

Sample Point 14 [INDICATOR - NE @ 0.5 miles]

TLD RING TLD_INNER

Sample ID:	403316	Sample Dates:	1/7/2016 - 4/7/2016	Nuclide	Activity
				mR/Std Qtr	13.20

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 14 [INDICATOR - NE @ 0.5 miles]

TLD RING TLD_INNER

Sample ID:	412890	Sample Dates:	4/7/2016 - 7/8/2016	Nuclide	Activity
				mR/Std Qtr	11.72

Sample ID:	420889	Sample Dates:	7/8/2016 - 10/11/2016	Nuclide	Activity
				mR/Std Qtr	10.36

Sample ID:	430236	Sample Dates:	10/11/2016 - 1/5/2017	Nuclide	Activity
				mR/Std Qtr	9.55

Sample Point 15 [INDICATOR - ENE @ 0.9 miles]

TLD RING TLD_INNER

Sample ID:	403317	Sample Dates:	1/7/2016 - 4/7/2016	Nuclide	Activity
				mR/Std Qtr	10.84

Sample ID:	412891	Sample Dates:	4/7/2016 - 7/8/2016	Nuclide	Activity
				mR/Std Qtr	13.27

Sample ID:	420890	Sample Dates:	7/8/2016 - 10/11/2016	Nuclide	Activity
				mR/Std Qtr	9.76

Sample ID:	430237	Sample Dates:	10/11/2016 - 1/5/2017	Nuclide	Activity
				mR/Std Qtr	12.36

Sample Point 16 [INDICATOR - WSW @ 1 miles]

TLD RING TLD_INNER

Sample ID:	403318	Sample Dates:	1/5/2016 - 4/6/2016	Nuclide	Activity
				mR/Std Qtr	10.20

Sample ID:	412892	Sample Dates:	4/6/2016 - 7/7/2016	Nuclide	Activity
				mR/Std Qtr	10.28

Sample ID:	420891	Sample Dates:	7/7/2016 - 10/10/2016	Nuclide	Activity
				mR/Std Qtr	8.92

Sample ID:	430238	Sample Dates:	10/10/2016 - 1/5/2017	Nuclide	Activity
				mR/Std Qtr	9.20

Sample Point 17 [INDICATOR - ESE @ 1.4 miles]

TLD RING TLD_INNER

Sample ID:	403319	Sample Dates:	1/5/2016 - 4/5/2016	Nuclide	Activity
				mR/Std Qtr	11.54

Sample ID:	412893	Sample Dates:	4/5/2016 - 7/6/2016	Nuclide	Activity
				mR/Std Qtr	13.21

Sample ID:	420892	Sample Dates:	7/6/2016 - 10/10/2016	Nuclide	Activity
				mR/Std Qtr	8.47

Sample ID:	430239	Sample Dates:	10/10/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	12.98

Sample Point 18 [INDICATOR - SE @ 1.7 miles]

TLD RING TLD_INNER

Sample ID:	403320	Sample Dates:	1/5/2016 - 4/5/2016	Nuclide	Activity
				mR/Std Qtr	9.34

Sample ID:	412894	Sample Dates:	4/5/2016 - 7/6/2016	Nuclide	Activity
				mR/Std Qtr	10.43

Sample ID:	420893	Sample Dates:	7/6/2016 - 10/10/2016	Nuclide	Activity
				mR/Std Qtr	8.15

Sample ID:	430240	Sample Dates:	10/10/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	9.24

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 20 [INDICATOR - S @ 2.1 miles]

TLD RING TLD_INNER

Sample ID:	403322	Sample Dates:	1/5/2016 - 4/5/2016	Nuclide	Activity
				mR/Std Qtr	9.64
Sample ID:	412896	Sample Dates:	4/5/2016 - 7/6/2016	Nuclide	Activity
				mR/Std Qtr	10.10
Sample ID:	420895	Sample Dates:	7/6/2016 - 10/10/2016	Nuclide	Activity
				mR/Std Qtr	7.90
Sample ID:	430242	Sample Dates:	10/10/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	10.41

Sample Point 21 [INDICATOR - SSW @ 2.9 miles]

TLD RING TLD_INNER

Sample ID:	403323	Sample Dates:	1/5/2016 - 4/5/2016	Nuclide	Activity
				mR/Std Qtr	12.73
Sample ID:	412897	Sample Dates:	4/5/2016 - 7/6/2016	Nuclide	Activity
				mR/Std Qtr	12.83
Sample ID:	420896	Sample Dates:	7/6/2016 - 10/10/2016	Nuclide	Activity
				mR/Std Qtr	10.11
Sample ID:	430243	Sample Dates:	10/10/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	12.69

Sample Point 22 [INDICATOR - SW @ 5.3 miles]

TLD RING TLD_OUTER

Sample ID:	403324	Sample Dates:	1/6/2016 - 4/5/2016	Nuclide	Activity
				mR/Std Qtr	9.44
Sample ID:	412898	Sample Dates:	4/5/2016 - 7/6/2016	Nuclide	Activity
				mR/Std Qtr	10.68
Sample ID:	420897	Sample Dates:	7/6/2016 - 10/11/2016	Nuclide	Activity
				mR/Std Qtr	9.65
Sample ID:	430244	Sample Dates:	10/11/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	11.90

Sample Point 23 [INDICATOR - WSW @ 4.6 miles]

TLD RING TLD_OUTER

Sample ID:	403325	Sample Dates:	1/6/2016 - 4/5/2016	Nuclide	Activity
				mR/Std Qtr	6.91
Sample ID:	412899	Sample Dates:	4/5/2016 - 7/6/2016	Nuclide	Activity
				mR/Std Qtr	8.09
Sample ID:	420898	Sample Dates:	7/6/2016 - 10/11/2016	Nuclide	Activity
				mR/Std Qtr	3.14
Sample ID:	430245	Sample Dates:	10/11/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	6.77

Sample Point 24 [INDICATOR - W @ 3 miles]

TLD RING TLD_INNER

Sample ID:	403326	Sample Dates:	1/6/2016 - 4/5/2016	Nuclide	Activity
				mR/Std Qtr	14.12
Sample ID:	412900	Sample Dates:	4/5/2016 - 7/7/2016	Nuclide	Activity
				mR/Std Qtr	14.10
Sample ID:	420899	Sample Dates:	7/7/2016 - 10/12/2016	Nuclide	Activity
				mR/Std Qtr	12.19

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 24 [INDICATOR - W @ 3 miles]

TLD RING TLD_INNER

Sample ID:	430246	Sample Dates:	10/12/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	13.80

Sample Point 25 [INDICATOR - WNW @ 8.6 miles]

TLD RING TLD_OUTER

Sample ID:	403327	Sample Dates:	1/6/2016 - 4/5/2016	Nuclide	Activity
				mR/Std Qtr	9.55

Sample ID:	412901	Sample Dates:	4/5/2016 - 7/7/2016	Nuclide	Activity
				mR/Std Qtr	10.78

Sample ID:	420900	Sample Dates:	7/7/2016 - 10/12/2016	Nuclide	Activity
				mR/Std Qtr	8.22

Sample ID:	430247	Sample Dates:	10/12/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	10.75

Sample Point 26 [INDICATOR - NW @ 5.9 miles]

TLD RING TLD_OUTER

Sample ID:	403328	Sample Dates:	1/5/2016 - 4/6/2016	Nuclide	Activity
				mR/Std Qtr	12.75

Sample ID:	412902	Sample Dates:	4/6/2016 - 7/7/2016	Nuclide	Activity
				mR/Std Qtr	12.90

Sample ID:	420901	Sample Dates:	7/7/2016 - 10/12/2016	Nuclide	Activity
				mR/Std Qtr	11.70

Sample ID:	430248	Sample Dates:	10/12/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	10.76

Sample Point 27 [INDICATOR - NNW @ 5.1 miles]

TLD RING TLD_OUTER

Sample ID:	403329	Sample Dates:	1/5/2016 - 4/6/2016	Nuclide	Activity
				mR/Std Qtr	8.44

Sample ID:	412903	Sample Dates:	4/6/2016 - 7/7/2016	Nuclide	Activity
				mR/Std Qtr	9.90

Sample ID:	420902	Sample Dates:	7/7/2016 - 10/12/2016	Nuclide	Activity
				mR/Std Qtr	5.98

Sample ID:	430249	Sample Dates:	10/12/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	8.40

Sample Point 28 [INDICATOR - NW @ 4.2 miles]

TLD RING TLD_OUTER

Sample ID:	403330	Sample Dates:	1/5/2016 - 4/6/2016	Nuclide	Activity
				mR/Std Qtr	9.38

Sample ID:	420903	Sample Dates:	7/7/2016 - 10/12/2016	Nuclide	Activity
				mR/Std Qtr	8.20

Sample ID:	430250	Sample Dates:	10/12/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	8.77

Sample Point 29 [INDICATOR - SSW @ 2.6 miles]

TLD RING TLD_INNER

Sample ID:	403331	Sample Dates:	1/5/2016 - 4/5/2016	Nuclide	Activity
				mR/Std Qtr	8.60

Sample ID:	412905	Sample Dates:	4/5/2016 - 7/6/2016	Nuclide	Activity
				mR/Std Qtr	9.40

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 29 [INDICATOR - SSW @ 2.6 miles]

TLD RING TLD_INNER

Sample ID:	420904	Sample Dates:	7/6/2016 - 10/10/2016	Nuclide	Activity
				mR/Std Qtr	7.04

Sample ID:	430251	Sample Dates:	10/10/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	8.53

Sample Point 30 [INDICATOR - NE @ 2 miles]

TLD RING TLD_INNER

Sample ID:	403333	Sample Dates:	1/7/2016 - 4/6/2016	Nuclide	Activity
				mR/Std Qtr	9.28

Sample ID:	412907	Sample Dates:	4/6/2016 - 7/8/2016	Nuclide	Activity
				mR/Std Qtr	10.95

Sample ID:	420906	Sample Dates:	7/8/2016 - 10/12/2016	Nuclide	Activity
				mR/Std Qtr	8.57

Sample ID:	430253	Sample Dates:	10/12/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	12.69

Sample Point 31 [INDICATOR - ENE @ 2.5 miles]

TLD RING TLD_INNER

Sample ID:	403334	Sample Dates:	1/7/2016 - 4/6/2016	Nuclide	Activity
				mR/Std Qtr	9.84

Sample ID:	412908	Sample Dates:	4/6/2016 - 7/8/2016	Nuclide	Activity
				mR/Std Qtr	13.06

Sample ID:	420907	Sample Dates:	7/8/2016 - 10/12/2016	Nuclide	Activity
				mR/Std Qtr	8.28

Sample ID:	430254	Sample Dates:	10/12/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	6.57

Sample Point 32 [INDICATOR - ENE @ 5.8 miles]

TLD RING TLD_OUTER

Sample ID:	403335	Sample Dates:	1/9/2016 - 4/6/2016	Nuclide	Activity
				mR/Std Qtr	12.88

Sample ID:	412909	Sample Dates:	4/6/2016 - 7/6/2016	Nuclide	Activity
				mR/Std Qtr	12.23

Sample ID:	420908	Sample Dates:	7/6/2016 - 10/12/2016	Nuclide	Activity
				mR/Std Qtr	10.09

Sample ID:	430255	Sample Dates:	10/12/2016 - 1/5/2017	Nuclide	Activity
				mR/Std Qtr	11.29

Sample Point 33 [INDICATOR - E @ 4.1 miles]

TLD RING TLD_OUTER

Sample ID:	403336	Sample Dates:	1/9/2016 - 4/6/2016	Nuclide	Activity
				mR/Std Qtr	9.12

Sample ID:	412910	Sample Dates:	4/6/2016 - 7/6/2016	Nuclide	Activity
				mR/Std Qtr	11.22

Sample ID:	420909	Sample Dates:	7/6/2016 - 10/12/2016	Nuclide	Activity
				mR/Std Qtr	5.96

Sample ID:	430256	Sample Dates:	10/12/2016 - 1/5/2017	Nuclide	Activity
				mR/Std Qtr	9.11

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 34 [INDICATOR - E @ 5.4 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
403337	1/9/2016 - 4/6/2016	mR/Std Qtr	8.62
412911	4/6/2016 - 7/6/2016	mR/Std Qtr	9.62
420910	7/6/2016 - 10/12/2016	mR/Std Qtr	7.43
430257	10/12/2016 - 1/5/2017	mR/Std Qtr	9.13

Sample Point 35 [INDICATOR - SSE @ 7.3 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
403338	1/14/2016 - 4/7/2016	mR/Std Qtr	7.19
412912	4/7/2016 - 7/11/2016	mR/Std Qtr	8.67
420911	7/11/2016 - 10/17/2016	mR/Std Qtr	6.21
430258	10/17/2016 - 1/5/2017	mR/Std Qtr	6.93

Sample Point 36 [INDICATOR - NE @ 8.9 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
403339	1/9/2016 - 4/6/2016	mR/Std Qtr	9.45
412913	4/6/2016 - 7/6/2016	mR/Std Qtr	10.70
420912	7/6/2016 - 10/12/2016	mR/Std Qtr	8.38
430259	10/12/2016 - 1/5/2017	mR/Std Qtr	8.67

Sample Point 37 [INDICATOR - NW @ 5.5 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
403340	1/5/2016 - 4/6/2016	mR/Std Qtr	6.92
412914	4/6/2016 - 7/7/2016	mR/Std Qtr	10.50
420913	7/7/2016 - 10/12/2016	mR/Std Qtr	6.31
430260	10/12/2016 - 1/4/2017	mR/Std Qtr	9.37

Sample Point 38 [INDICATOR - W @ 11 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
403341	1/6/2016 - 4/5/2016	mR/Std Qtr	10.23
412915	4/5/2016 - 7/7/2016	mR/Std Qtr	10.43
420914	7/7/2016 - 10/12/2016	mR/Std Qtr	9.11

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 38 [INDICATOR - W @ 11 miles]

TLD RING TLD_OUTER

Sample ID:	430261	Sample Dates:	10/12/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	9.34

Sample Point 39 [INDICATOR - SW @ 5.3 miles]

TLD RING TLD_OUTER

Sample ID:	403342	Sample Dates:	1/6/2016 - 4/5/2016	Nuclide	Activity
				mR/Std Qtr	17.61

Sample ID:	412916	Sample Dates:	4/5/2016 - 7/6/2016	Nuclide	Activity
				mR/Std Qtr	13.79

Sample ID:	420915	Sample Dates:	7/6/2016 - 10/11/2016	Nuclide	Activity
				mR/Std Qtr	12.17

Sample ID:	430262	Sample Dates:	10/11/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	15.25

Sample Point 40 [INDICATOR - WSW @ 6.9 miles]

TLD RING TLD_OUTER

Sample ID:	403344	Sample Dates:	1/6/2016 - 4/5/2016	Nuclide	Activity
				mR/Std Qtr	16.44

Sample ID:	412918	Sample Dates:	4/5/2016 - 7/6/2016	Nuclide	Activity
				mR/Std Qtr	14.40

Sample ID:	420917	Sample Dates:	7/6/2016 - 10/11/2016	Nuclide	Activity
				mR/Std Qtr	11.43

Sample ID:	430264	Sample Dates:	10/11/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	13.29

Sample Point 75 [INDICATOR - S @ 4.7 miles]

TLD RING TLD_OUTER

Sample ID:	403348	Sample Dates:	1/6/2016 - 4/5/2016	Nuclide	Activity
				mR/Std Qtr	12.79

Sample ID:	412922	Sample Dates:	4/5/2016 - 7/6/2016	Nuclide	Activity
				mR/Std Qtr	11.25

Sample ID:	420921	Sample Dates:	7/6/2016 - 10/11/2016	Nuclide	Activity
				mR/Std Qtr	9.85

Sample ID:	430268	Sample Dates:	10/11/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	10.72

Sample Point 76 [INDICATOR - SSW @ 4.8 miles]

TLD RING TLD_OUTER

Sample ID:	403349	Sample Dates:	1/6/2016 - 4/5/2016	Nuclide	Activity
				mR/Std Qtr	11.02

Sample ID:	412923	Sample Dates:	4/5/2016 - 7/6/2016	Nuclide	Activity
				mR/Std Qtr	11.39

Sample ID:	420922	Sample Dates:	7/6/2016 - 10/11/2016	Nuclide	Activity
				mR/Std Qtr	8.97

Sample ID:	430269	Sample Dates:	10/11/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	10.52

Sample Point 77 [INDICATOR - S @ 5.4 miles]

TLD RING TLD_OUTER

Sample ID:	403350	Sample Dates:	1/14/2016 - 4/7/2016	Nuclide	Activity
				mR/Std Qtr	9.88

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 77 [INDICATOR - S @ 5.4 miles]

TLD RING TLD_OUTER

Sample ID:	412924	Sample Dates:	4/7/2016 - 7/11/2016	Nuclide	Activity
				mR/Std Qtr	8.64

Sample ID:	420923	Sample Dates:	7/11/2016 - 10/17/2016	Nuclide	Activity
				mR/Std Qtr	5.95

Sample ID:	430270	Sample Dates:	10/17/2016 - 1/5/2017	Nuclide	Activity
				mR/Std Qtr	7.12

Sample Point 78 [INDICATOR - NNE @ 9.9 miles]

TLD RING TLD_OUTER

Sample ID:	403351	Sample Dates:	1/5/2016 - 4/6/2016	Nuclide	Activity
				mR/Std Qtr	8.42

Sample ID:	412925	Sample Dates:	4/6/2016 - 7/7/2016	Nuclide	Activity
				mR/Std Qtr	9.31

Sample ID:	420924	Sample Dates:	7/7/2016 - 10/12/2016	Nuclide	Activity
				mR/Std Qtr	6.79

Sample ID:	430271	Sample Dates:	10/12/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	8.03

Sample Point 79 [INDICATOR - N @ 9.5 miles]

TLD RING TLD_OUTER

Sample ID:	403352	Sample Dates:	1/5/2016 - 4/6/2016	Nuclide	Activity
				mR/Std Qtr	9.35

Sample ID:	412926	Sample Dates:	4/6/2016 - 7/7/2016	Nuclide	Activity
				mR/Std Qtr	10.94

Sample ID:	420925	Sample Dates:	7/7/2016 - 10/12/2016	Nuclide	Activity
				mR/Std Qtr	7.66

Sample ID:	430272	Sample Dates:	10/12/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	9.77

Sample Point 81 [CONTROL - WNW @ 9.9 miles]

TLD RING TLD_CTRL

Sample ID:	403354	Sample Dates:	1/6/2016 - 4/5/2016	Nuclide	Activity
				mR/Std Qtr	10.95

Sample ID:	412928	Sample Dates:	4/5/2016 - 7/7/2016	Nuclide	Activity
				mR/Std Qtr	11.45

Sample ID:	420927	Sample Dates:	7/7/2016 - 10/12/2016	Nuclide	Activity
				mR/Std Qtr	8.49

Sample ID:	430274	Sample Dates:	10/12/2016 - 1/4/2017	Nuclide	Activity
				mR/Std Qtr	10.31

Sample Point 82 [INDICATOR - NNE @ 0.17 miles]

TLD RING NOT_APPLIC

Sample ID:	403355	Sample Dates:	1/7/2016 - 4/7/2016	Nuclide	Activity
				mR/Std Qtr	21.70

Sample ID:	412929	Sample Dates:	4/7/2016 - 7/8/2016	Nuclide	Activity
				mR/Std Qtr	28.63

Sample ID:	420928	Sample Dates:	7/8/2016 - 10/11/2016	Nuclide	Activity
				mR/Std Qtr	23.96

Sample ID:	430275	Sample Dates:	10/11/2016 - 1/5/2017	Nuclide	Activity
				mR/Std Qtr	24.03

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 83 [INDICATOR - NE @ 0.27 miles]

TLD RING NOT_APPLIC

Sample ID:	Sample Dates:	Nuclide	Activity
403356	1/7/2016 - 4/7/2016	mR/Std Qtr	20.87
412930	4/7/2016 - 7/8/2016	mR/Std Qtr	26.27
420929	7/8/2016 - 10/11/2016	mR/Std Qtr	23.49
430276	10/11/2016 - 1/5/2017	mR/Std Qtr	28.02

Sample Point 84 [INDICATOR - NE @ 0.27 miles]

TLD RING NOT_APPLIC

Sample ID:	Sample Dates:	Nuclide	Activity
403357	1/7/2016 - 4/7/2016	mR/Std Qtr	19.56
412931	4/7/2016 - 7/8/2016	mR/Std Qtr	20.61
420930	7/8/2016 - 10/11/2016	mR/Std Qtr	16.50
430277	10/11/2016 - 1/5/2017	mR/Std Qtr	18.22

Sample Point 85 [INDICATOR - ENE @ 0.09 miles]

TLD RING NOT_APPLIC

Sample ID:	Sample Dates:	Nuclide	Activity
403358	1/7/2016 - 4/7/2016	mR/Std Qtr	20.58
412932	4/7/2016 - 7/8/2016	mR/Std Qtr	28.80
420931	7/8/2016 - 10/11/2016	mR/Std Qtr	25.29
430278	10/11/2016 - 1/5/2017	mR/Std Qtr	24.12

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 800 [INDICATOR - NE @ 0.7 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
399450	1/5/2016 - 1/5/2016	WAXMYRTLE	Mn-54	<2.18E+01	0.00E+00	2.18E+01
			Co-58	<2.14E+01	0.00E+00	2.14E+01
			Fe-59	<4.25E+01	0.00E+00	4.25E+01
			Co-60	<2.72E+01	0.00E+00	2.72E+01
			Zn-65	<4.18E+01	0.00E+00	4.18E+01
			Zr-95	<4.05E+01	0.00E+00	4.05E+01
			Nb-95	<1.95E+01	0.00E+00	1.95E+01
			I-131	<3.18E+01	0.00E+00	3.18E+01
			Cs-134	<2.21E+01	0.00E+00	2.21E+01
			Cs-137	<2.18E+01	0.00E+00	2.18E+01
			BaLa-140	<3.64E+01	0.00E+00	3.64E+01
			Be-7	3.37E+03	4.68E+02	2.31E+02
			K-40	1.59E+03	4.41E+02	4.60E+02
401508	2/1/2016 - 2/1/2016	WAXMYRTLE	Mn-54	<1.71E+01	0.00E+00	1.71E+01
			Co-58	<1.52E+01	0.00E+00	1.52E+01
			Fe-59	<2.67E+01	0.00E+00	2.67E+01
			Co-60	<1.68E+01	0.00E+00	1.68E+01
			Zn-65	<3.85E+01	0.00E+00	3.85E+01
			Zr-95	<2.81E+01	0.00E+00	2.81E+01



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Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 800 [INDICATOR - NE @ 0.7 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
401508	2/1/2016 - 2/1/2016	WAXMYRTLE	Nb-95	<1.92E+01	0.00E+00	1.92E+01
			I-131	<1.62E+01	0.00E+00	1.62E+01
			Cs-134	<2.10E+01	0.00E+00	2.10E+01
			Cs-137	<1.89E+01	0.00E+00	1.89E+01
			BaLa-140	<2.03E+01	0.00E+00	2.03E+01
			Be-7	3.34E+03	4.34E+02	2.17E+02
			K-40	2.12E+03	4.52E+02	3.82E+02
405295	3/1/2016 - 3/1/2016	WAXMYRTLE	Mn-54	<2.28E+01	0.00E+00	2.28E+01
			Co-58	<2.16E+01	0.00E+00	2.16E+01
			Fe-59	<4.94E+01	0.00E+00	4.94E+01
			Co-60	<2.14E+01	0.00E+00	2.14E+01
			Zn-65	<5.21E+01	0.00E+00	5.21E+01
			Zr-95	<3.33E+01	0.00E+00	3.33E+01
			Nb-95	<2.21E+01	0.00E+00	2.21E+01
			I-131	<1.58E+01	0.00E+00	1.58E+01
			Cs-134	<2.01E+01	0.00E+00	2.01E+01
			Cs-137	<2.11E+01	0.00E+00	2.11E+01
			BaLa-140	<2.46E+01	0.00E+00	2.46E+01
			Be-7	3.33E+03	4.76E+02	2.82E+02
			K-40	2.16E+03	4.61E+02	2.19E+02
408368	4/4/2016 - 4/4/2016	WAXMYRTLE	Mn-54	<1.81E+01	0.00E+00	1.81E+01
			Co-58	<1.42E+01	0.00E+00	1.42E+01
			Fe-59	<3.73E+01	0.00E+00	3.73E+01
			Co-60	<1.71E+01	0.00E+00	1.71E+01
			Zn-65	<4.16E+01	0.00E+00	4.16E+01
			Zr-95	<2.25E+01	0.00E+00	2.25E+01
			Nb-95	<2.30E+01	0.00E+00	2.30E+01
			I-131	<1.82E+01	0.00E+00	1.82E+01
			Cs-134	<2.46E+01	0.00E+00	2.46E+01
			Cs-137	<1.58E+01	0.00E+00	1.58E+01
			BaLa-140	<1.55E+01	0.00E+00	1.55E+01
			Be-7	3.37E+03	4.46E+02	2.59E+02
			K-40	2.90E+03	5.11E+02	2.76E+02
411581	5/2/2016 - 5/2/2016	WAXMYRTLE	Mn-54	<1.54E+01	0.00E+00	1.54E+01
			Co-58	<1.74E+01	0.00E+00	1.74E+01
			Fe-59	<2.54E+01	0.00E+00	2.54E+01
			Co-60	<1.62E+01	0.00E+00	1.62E+01
			Zn-65	<3.32E+01	0.00E+00	3.32E+01
			Zr-95	<2.25E+01	0.00E+00	2.25E+01
			Nb-95	<1.85E+01	0.00E+00	1.85E+01
			I-131	<1.55E+01	0.00E+00	1.55E+01
			Cs-134	<1.36E+01	0.00E+00	1.36E+01
			Cs-137	<1.80E+01	0.00E+00	1.80E+01
			BaLa-140	<1.33E+01	0.00E+00	1.33E+01
			Be-7	3.95E+02	1.45E+02	1.85E+02
			K-40	3.20E+03	4.92E+02	3.68E+01
413646	6/1/2016 - 6/1/2016	WAXMYRTLE	Mn-54	<1.65E+01	0.00E+00	1.65E+01
			Co-58	<2.23E+01	0.00E+00	2.23E+01
			Fe-59	<3.20E+01	0.00E+00	3.20E+01
			Co-60	<2.18E+01	0.00E+00	2.18E+01
			Zn-65	<4.79E+01	0.00E+00	4.79E+01
			Zr-95	<3.14E+01	0.00E+00	3.14E+01
			Nb-95	<2.32E+01	0.00E+00	2.32E+01
			I-131	<2.93E+01	0.00E+00	2.93E+01
			Cs-134	<2.23E+01	0.00E+00	2.23E+01
			Cs-137	<2.19E+01	0.00E+00	2.19E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 800 [INDICATOR - NE @ 0.7 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
413646	6/1/2016 - 6/1/2016		BaLa-140	<3.39E+01	0.00E+00	3.39E+01
			Be-7	7.69E+02	2.04E+02	2.02E+02
			K-40	3.19E+03	5.95E+02	4.46E+02
417176	7/4/2016 - 7/4/2016		Mn-54	<1.66E+01	0.00E+00	1.66E+01
			Co-58	<2.12E+01	0.00E+00	2.12E+01
			Fe-59	<4.11E+01	0.00E+00	4.11E+01
			Co-60	<1.35E+01	0.00E+00	1.35E+01
			Zn-65	<5.34E+01	0.00E+00	5.34E+01
			Zr-95	<2.89E+01	0.00E+00	2.89E+01
			Nb-95	<2.34E+01	0.00E+00	2.34E+01
			I-131	<2.61E+01	0.00E+00	2.61E+01
			Cs-134	<2.76E+01	0.00E+00	2.76E+01
			Cs-137	<1.94E+01	0.00E+00	1.94E+01
			BaLa-140	<1.89E+01	0.00E+00	1.89E+01
			Be-7	7.79E+02	2.09E+02	2.15E+02
			K-40	2.87E+03	5.35E+02	2.93E+02
			419273	8/1/2016 - 8/1/2016		Mn-54
Co-58	<2.10E+01	0.00E+00				2.10E+01
Fe-59	<4.37E+01	0.00E+00				4.37E+01
Co-60	<2.11E+01	0.00E+00				2.11E+01
Zn-65	<5.12E+01	0.00E+00				5.12E+01
Zr-95	<3.31E+01	0.00E+00				3.31E+01
Nb-95	<2.12E+01	0.00E+00				2.12E+01
I-131	<2.11E+01	0.00E+00				2.11E+01
Cs-134	<1.63E+01	0.00E+00				1.63E+01
Cs-137	<1.96E+01	0.00E+00				1.96E+01
BaLa-140	<1.71E+01	0.00E+00				1.71E+01
Be-7	1.09E+03	2.39E+02				2.22E+02
K-40	3.02E+03	5.48E+02				3.34E+02
423134	9/1/2016 - 9/1/2016					Mn-54
			Co-58	<2.63E+01	0.00E+00	2.63E+01
			Fe-59	<4.47E+01	0.00E+00	4.47E+01
			Co-60	<2.21E+01	0.00E+00	2.21E+01
			Zn-65	<5.26E+01	0.00E+00	5.26E+01
			Zr-95	<2.68E+01	0.00E+00	2.68E+01
			Nb-95	<1.87E+01	0.00E+00	1.87E+01
			I-131	<4.49E+01	0.00E+00	4.49E+01
			Cs-134	<2.21E+01	0.00E+00	2.21E+01
			Cs-137	<1.74E+01	0.00E+00	1.74E+01
			BaLa-140	<4.46E+01	0.00E+00	4.46E+01
			Be-7	1.22E+03	2.77E+02	2.94E+02
			K-40	2.42E+03	4.57E+02	2.73E+02
			426194	10/3/2016 - 10/3/2016		Mn-54
Co-58	<1.94E+01	0.00E+00				1.94E+01
Fe-59	<4.12E+01	0.00E+00				4.12E+01
Co-60	<1.48E+01	0.00E+00				1.48E+01
Zn-65	<4.60E+01	0.00E+00				4.60E+01
Zr-95	<3.13E+01	0.00E+00				3.13E+01
Nb-95	<1.24E+01	0.00E+00				1.24E+01
I-131	<1.67E+01	0.00E+00				1.67E+01
Cs-134	<2.33E+01	0.00E+00				2.33E+01
Cs-137	<1.76E+01	0.00E+00				1.76E+01
BaLa-140	<2.48E+01	0.00E+00				2.48E+01
Be-7	1.62E+03	3.05E+02				2.33E+02
K-40	2.97E+03	5.67E+02				3.19E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 800 [INDICATOR - NE @ 0.7 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
428558	11/1/2016 - 11/1/2016		Mn-54	<2.31E+01	0.00E+00	2.31E+01
			Co-58	<2.30E+01	0.00E+00	2.30E+01
			Fe-59	<6.19E+01	0.00E+00	6.19E+01
			Co-60	<2.56E+01	0.00E+00	2.56E+01
			Zn-65	<6.90E+01	0.00E+00	6.90E+01
			Zr-95	<3.39E+01	0.00E+00	3.39E+01
			Nb-95	<2.75E+01	0.00E+00	2.75E+01
			I-131	<2.36E+01	0.00E+00	2.36E+01
			Cs-134	<3.33E+01	0.00E+00	3.33E+01
			Cs-137	<2.65E+01	0.00E+00	2.65E+01
			BaLa-140	<2.94E+01	0.00E+00	2.94E+01
			Be-7	1.14E+03	2.83E+02	2.77E+02
			K-40	2.19E+03	5.08E+02	2.86E+02

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
431206	12/1/2016 - 12/1/2016		Mn-54	<2.08E+01	0.00E+00	2.08E+01
			Co-58	<1.91E+01	0.00E+00	1.91E+01
			Fe-59	<4.49E+01	0.00E+00	4.49E+01
			Co-60	<2.03E+01	0.00E+00	2.03E+01
			Zn-65	<5.55E+01	0.00E+00	5.55E+01
			Zr-95	<3.09E+01	0.00E+00	3.09E+01
			Nb-95	<2.30E+01	0.00E+00	2.30E+01
			I-131	<2.52E+01	0.00E+00	2.52E+01
			Cs-134	<1.76E+01	0.00E+00	1.76E+01
			Cs-137	<2.37E+01	0.00E+00	2.37E+01
			BaLa-140	<8.84E+00	0.00E+00	8.84E+00
			Be-7	9.05E+02	2.50E+02	2.84E+02
			K-40	2.82E+03	5.34E+02	2.91E+02

Sample Point 801 [INDICATOR - SW @ 0.8 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
399451	1/5/2016 - 1/5/2016		Mn-54	<2.31E+01	0.00E+00	2.31E+01
			Co-58	<1.72E+01	0.00E+00	1.72E+01
			Fe-59	<2.25E+01	0.00E+00	2.25E+01
			Co-60	<1.71E+01	0.00E+00	1.71E+01
			Zn-65	<6.10E+01	0.00E+00	6.10E+01
			Zr-95	<3.22E+01	0.00E+00	3.22E+01
			Nb-95	<2.10E+01	0.00E+00	2.10E+01
			I-131	<2.40E+01	0.00E+00	2.40E+01
			Cs-134	<2.14E+01	0.00E+00	2.14E+01
			Cs-137	<1.95E+01	0.00E+00	1.95E+01
			BaLa-140	<2.83E+01	0.00E+00	2.83E+01
			Be-7	2.85E+03	4.20E+02	2.39E+02
			K-40	1.82E+03	4.32E+02	3.41E+02

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
401509	2/1/2016 - 2/1/2016		Mn-54	<1.48E+01	0.00E+00	1.48E+01
			Co-58	<1.22E+01	0.00E+00	1.22E+01
			Fe-59	<3.14E+01	0.00E+00	3.14E+01
			Co-60	<2.32E+01	0.00E+00	2.32E+01
			Zn-65	<3.77E+01	0.00E+00	3.77E+01
			Zr-95	<3.42E+01	0.00E+00	3.42E+01
			Nb-95	<2.16E+01	0.00E+00	2.16E+01
			I-131	<1.89E+01	0.00E+00	1.89E+01
			Cs-134	<2.47E+01	0.00E+00	2.47E+01
			Cs-137	<2.19E+01	0.00E+00	2.19E+01
			BaLa-140	<1.70E+01	0.00E+00	1.70E+01
			Be-7	3.92E+03	4.95E+02	2.31E+02
			K-40	1.94E+03	4.49E+02	4.06E+02

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
405296	3/1/2016 - 3/1/2016		Mn-54	<1.79E+01	0.00E+00	1.79E+01
			Co-58	<9.29E+00	0.00E+00	9.29E+00



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 801 [INDICATOR - SW @ 0.8 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
405296	3/1/2016 - 3/1/2016	WAXMYRTLE	Fe-59	<2.69E+01	0.00E+00	2.69E+01
			Co-60	<2.00E+01	0.00E+00	2.00E+01
			Zn-65	<4.85E+01	0.00E+00	4.85E+01
			Zr-95	<3.47E+01	0.00E+00	3.47E+01
			Nb-95	<2.13E+01	0.00E+00	2.13E+01
			I-131	<1.81E+01	0.00E+00	1.81E+01
			Cs-134	<1.71E+01	0.00E+00	1.71E+01
			Cs-137	<1.32E+01	0.00E+00	1.32E+01
			BaLa-140	<2.63E+01	0.00E+00	2.63E+01
			Be-7	4.00E+03	5.20E+02	2.70E+02
			K-40	2.27E+03	4.76E+02	2.95E+02
408369	4/4/2016 - 4/4/2016	WAXMYRTLE	Mn-54	<2.10E+01	0.00E+00	2.10E+01
			Co-58	<2.36E+01	0.00E+00	2.36E+01
			Fe-59	<2.66E+01	0.00E+00	2.66E+01
			Co-60	<2.20E+01	0.00E+00	2.20E+01
			Zn-65	<4.19E+01	0.00E+00	4.19E+01
			Zr-95	<3.62E+01	0.00E+00	3.62E+01
			Nb-95	<2.37E+01	0.00E+00	2.37E+01
			I-131	<1.78E+01	0.00E+00	1.78E+01
			Cs-134	<2.36E+01	0.00E+00	2.36E+01
			Cs-137	<1.84E+01	0.00E+00	1.84E+01
			BaLa-140	<2.90E+01	0.00E+00	2.90E+01
			Be-7	3.11E+03	4.42E+02	2.87E+02
			K-40	2.32E+03	4.93E+02	3.75E+02
			411582	5/2/2016 - 5/2/2016	WAXMYRTLE	Mn-54
Co-58	<1.66E+01	0.00E+00				1.66E+01
Fe-59	<3.03E+01	0.00E+00				3.03E+01
Co-60	<1.55E+01	0.00E+00				1.55E+01
Zn-65	<2.95E+01	0.00E+00				2.95E+01
Zr-95	<2.55E+01	0.00E+00				2.55E+01
Nb-95	<1.49E+01	0.00E+00				1.49E+01
I-131	<1.66E+01	0.00E+00				1.66E+01
Cs-134	<1.88E+01	0.00E+00				1.88E+01
Cs-137	<1.73E+01	0.00E+00				1.73E+01
BaLa-140	<2.06E+01	0.00E+00				2.06E+01
Be-7	5.34E+02	1.38E+02				1.32E+02
K-40	3.14E+03	5.00E+02				2.77E+02
413647	6/1/2016 - 6/1/2016	WAXMYRTLE				Mn-54
			Co-58	<1.57E+01	0.00E+00	1.57E+01
			Fe-59	<3.98E+01	0.00E+00	3.98E+01
			Co-60	<2.95E+01	0.00E+00	2.95E+01
			Zn-65	<4.28E+01	0.00E+00	4.28E+01
			Zr-95	<4.28E+01	0.00E+00	4.28E+01
			Nb-95	<1.96E+01	0.00E+00	1.96E+01
			I-131	<2.10E+01	0.00E+00	2.10E+01
			Cs-134	<1.33E+01	0.00E+00	1.33E+01
			Cs-137	<1.63E+01	0.00E+00	1.63E+01
			BaLa-140	<2.69E+01	0.00E+00	2.69E+01
			Be-7	6.28E+02	2.18E+02	2.75E+02
			K-40	2.90E+03	5.55E+02	3.71E+02
			417177	7/4/2016 - 7/4/2016	WAXMYRTLE	Mn-54
Co-58	<2.12E+01	0.00E+00				2.12E+01
Fe-59	<3.67E+01	0.00E+00				3.67E+01
Co-60	<2.12E+01	0.00E+00				2.12E+01
Zn-65	<4.62E+01	0.00E+00				4.62E+01
Zr-95	<2.54E+01	0.00E+00				2.54E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 801 [INDICATOR - SW @ 0.8 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
417177	7/4/2016 - 7/4/2016	WAXMYRTLE	Nb-95	<1.79E+01	0.00E+00	1.79E+01
			I-131	<2.50E+01	0.00E+00	2.50E+01
			Cs-134	<2.15E+01	0.00E+00	2.15E+01
			Cs-137	<2.21E+01	0.00E+00	2.21E+01
			BaLa-140	<2.68E+01	0.00E+00	2.68E+01
			Be-7	5.71E+02	2.01E+02	2.55E+02
			K-40	2.94E+03	5.27E+02	2.41E+02
419274	8/1/2016 - 8/1/2016	WAXMYRTLE	Mn-54	<2.35E+01	0.00E+00	2.35E+01
			Co-58	<2.49E+01	0.00E+00	2.49E+01
			Fe-59	<4.35E+01	0.00E+00	4.35E+01
			Co-60	<2.11E+01	0.00E+00	2.11E+01
			Zn-65	<4.59E+01	0.00E+00	4.59E+01
			Zr-95	<3.30E+01	0.00E+00	3.30E+01
			Nb-95	<1.85E+01	0.00E+00	1.85E+01
			I-131	<2.16E+01	0.00E+00	2.16E+01
			Cs-134	<2.55E+01	0.00E+00	2.55E+01
			Cs-137	<1.65E+01	0.00E+00	1.65E+01
			BaLa-140	<2.16E+01	0.00E+00	2.16E+01
			Be-7	1.57E+03	2.85E+02	2.20E+02
			K-40	2.80E+03	5.11E+02	2.37E+02
423135	9/1/2016 - 9/1/2016	WAXMYRTLE	Mn-54	<2.11E+01	0.00E+00	2.11E+01
			Co-58	<1.77E+01	0.00E+00	1.77E+01
			Fe-59	<4.27E+01	0.00E+00	4.27E+01
			Co-60	<2.18E+01	0.00E+00	2.18E+01
			Zn-65	<5.86E+01	0.00E+00	5.86E+01
			Zr-95	<3.76E+01	0.00E+00	3.76E+01
			Nb-95	<2.51E+01	0.00E+00	2.51E+01
			I-131	<4.60E+01	0.00E+00	4.60E+01
			Cs-134	<2.55E+01	0.00E+00	2.55E+01
			Cs-137	<2.35E+01	0.00E+00	2.35E+01
			BaLa-140	<2.91E+01	0.00E+00	2.91E+01
			Be-7	1.54E+03	3.18E+02	3.01E+02
			K-40	2.69E+03	5.26E+02	3.58E+02
426195	10/3/2016 - 10/3/2016	WAXMYRTLE	Mn-54	<2.01E+01	0.00E+00	2.01E+01
			Co-58	<1.28E+01	0.00E+00	1.28E+01
			Fe-59	<5.31E+01	0.00E+00	5.31E+01
			Co-60	<2.35E+01	0.00E+00	2.35E+01
			Zn-65	<4.09E+01	0.00E+00	4.09E+01
			Zr-95	<3.66E+01	0.00E+00	3.66E+01
			Nb-95	<2.05E+01	0.00E+00	2.05E+01
			I-131	<1.98E+01	0.00E+00	1.98E+01
			Cs-134	<2.72E+01	0.00E+00	2.72E+01
			Cs-137	<2.16E+01	0.00E+00	2.16E+01
			BaLa-140	<2.79E+01	0.00E+00	2.79E+01
			Be-7	1.32E+03	2.68E+02	2.22E+02
			K-40	2.54E+03	5.16E+02	3.10E+02
428559	11/1/2016 - 11/1/2016	WAXMYRTLE	Mn-54	<2.00E+01	0.00E+00	2.00E+01
			Co-58	<2.09E+01	0.00E+00	2.09E+01
			Fe-59	<4.30E+01	0.00E+00	4.30E+01
			Co-60	<1.70E+01	0.00E+00	1.70E+01
			Zn-65	<4.49E+01	0.00E+00	4.49E+01
			Zr-95	<2.34E+01	0.00E+00	2.34E+01
			Nb-95	<1.93E+01	0.00E+00	1.93E+01
			I-131	<2.00E+01	0.00E+00	2.00E+01
			Cs-134	<2.84E+01	0.00E+00	2.84E+01
Cs-137	<1.72E+01	0.00E+00	1.72E+01			



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 801 [INDICATOR - SW @ 0.8 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
428559	11/1/2016 - 11/1/2016		BaLa-140	<2.26E+01	0.00E+00	2.26E+01
			Be-7	1.24E+03	2.61E+02	2.34E+02
			K-40	1.66E+03	3.88E+02	2.20E+02
431207	12/1/2016 - 12/1/2016		Mn-54	<3.00E+01	0.00E+00	3.00E+01
			Co-58	<2.00E+01	0.00E+00	2.00E+01
			Fe-59	<6.92E+01	0.00E+00	6.92E+01
			Co-60	<3.12E+01	0.00E+00	3.12E+01
			Zn-65	<4.92E+01	0.00E+00	4.92E+01
			Zr-95	<5.64E+01	0.00E+00	5.64E+01
			Nb-95	<3.16E+01	0.00E+00	3.16E+01
			I-131	<3.91E+01	0.00E+00	3.91E+01
			Cs-134	<2.41E+01	0.00E+00	2.41E+01
			Cs-137	<3.01E+01	0.00E+00	3.01E+01
			BaLa-140	<3.31E+01	0.00E+00	3.31E+01
			Be-7	1.38E+03	3.49E+02	3.63E+02
			K-40	1.94E+03	5.42E+02	5.00E+02

Sample Point 802 [CONTROL - -- @ 10.1 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
399452	1/5/2016 - 1/5/2016		Mn-54	<2.50E+01	0.00E+00	2.50E+01
			Co-58	<1.22E+01	0.00E+00	1.22E+01
			Fe-59	<4.04E+01	0.00E+00	4.04E+01
			Co-60	<2.22E+01	0.00E+00	2.22E+01
			Zn-65	<4.90E+01	0.00E+00	4.90E+01
			Zr-95	<3.99E+01	0.00E+00	3.99E+01
			Nb-95	<2.50E+01	0.00E+00	2.50E+01
			I-131	<3.50E+01	0.00E+00	3.50E+01
			Cs-134	<2.60E+01	0.00E+00	2.60E+01
			Cs-137	<2.90E+01	0.00E+00	2.90E+01
			BaLa-140	<3.66E+01	0.00E+00	3.66E+01
			Be-7	4.88E+03	6.01E+02	2.67E+02
			K-40	1.53E+03	3.73E+02	2.21E+02
401510	2/1/2016 - 2/1/2016		Mn-54	<1.87E+01	0.00E+00	1.87E+01
			Co-58	<1.88E+01	0.00E+00	1.88E+01
			Fe-59	<3.09E+01	0.00E+00	3.09E+01
			Co-60	<3.15E+01	0.00E+00	3.15E+01
			Zn-65	<3.80E+01	0.00E+00	3.80E+01
			Zr-95	<3.93E+01	0.00E+00	3.93E+01
			Nb-95	<2.22E+01	0.00E+00	2.22E+01
			I-131	<2.36E+01	0.00E+00	2.36E+01
			Cs-134	<2.33E+01	0.00E+00	2.33E+01
			Cs-137	<2.90E+01	0.00E+00	2.90E+01
			BaLa-140	<6.83E+00	0.00E+00	6.83E+00
			Be-7	5.63E+03	6.57E+02	2.58E+02
			K-40	1.99E+03	4.84E+02	4.69E+02
405297	3/1/2016 - 3/1/2016		Mn-54	<1.99E+01	0.00E+00	1.99E+01
			Co-58	<2.08E+01	0.00E+00	2.08E+01
			Fe-59	<3.73E+01	0.00E+00	3.73E+01
			Co-60	<2.57E+01	0.00E+00	2.57E+01
			Zn-65	<3.81E+01	0.00E+00	3.81E+01
			Zr-95	<3.92E+01	0.00E+00	3.92E+01
			Nb-95	<1.92E+01	0.00E+00	1.92E+01
			I-131	<2.17E+01	0.00E+00	2.17E+01
			Cs-134	<2.65E+01	0.00E+00	2.65E+01
			Cs-137	<2.02E+01	0.00E+00	2.02E+01
			BaLa-140	<2.58E+01	0.00E+00	2.58E+01
			Be-7	1.58E+03	2.97E+02	2.49E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 802 [CONTROL - -- @ 10.1 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
405297	3/1/2016 - 3/1/2016		K-40	1.84E+03	4.27E+02	3.15E+02
408370	4/4/2016 - 4/4/2016		Mn-54	<1.71E+01	0.00E+00	1.71E+01
			Co-58	<2.23E+01	0.00E+00	2.23E+01
			Fe-59	<3.89E+01	0.00E+00	3.89E+01
			Co-60	<2.49E+01	0.00E+00	2.49E+01
			Zn-65	<3.58E+01	0.00E+00	3.58E+01
			Zr-95	<3.38E+01	0.00E+00	3.38E+01
			Nb-95	<1.81E+01	0.00E+00	1.81E+01
			I-131	<1.80E+01	0.00E+00	1.80E+01
			Cs-134	<1.30E+01	0.00E+00	1.30E+01
			Cs-137	<1.90E+01	0.00E+00	1.90E+01
			BaLa-140	<5.64E+00	0.00E+00	5.64E+00
			Be-7	3.37E+03	4.37E+02	1.85E+02
			K-40	2.27E+03	4.20E+02	4.27E+01
411583	5/2/2016 - 5/2/2016		Mn-54	<1.81E+01	0.00E+00	1.81E+01
			Co-58	<1.27E+01	0.00E+00	1.27E+01
			Fe-59	<2.89E+01	0.00E+00	2.89E+01
			Co-60	<1.96E+01	0.00E+00	1.96E+01
			Zn-65	<3.43E+01	0.00E+00	3.43E+01
			Zr-95	<2.71E+01	0.00E+00	2.71E+01
			Nb-95	<1.58E+01	0.00E+00	1.58E+01
			I-131	<1.80E+01	0.00E+00	1.80E+01
			Cs-134	<1.43E+01	0.00E+00	1.43E+01
			Cs-137	<1.86E+01	0.00E+00	1.86E+01
			BaLa-140	<2.08E+01	0.00E+00	2.08E+01
			Be-7	8.99E+02	1.98E+02	2.01E+02
			K-40	2.80E+03	4.51E+02	1.64E+02
413648	6/1/2016 - 6/1/2016		Mn-54	<1.83E+01	0.00E+00	1.83E+01
			Co-58	<1.87E+01	0.00E+00	1.87E+01
			Fe-59	<3.37E+01	0.00E+00	3.37E+01
			Co-60	<2.06E+01	0.00E+00	2.06E+01
			Zn-65	<4.28E+01	0.00E+00	4.28E+01
			Zr-95	<2.98E+01	0.00E+00	2.98E+01
			Nb-95	<2.07E+01	0.00E+00	2.07E+01
			I-131	<2.06E+01	0.00E+00	2.06E+01
			Cs-134	<1.48E+01	0.00E+00	1.48E+01
			Cs-137	<2.13E+01	0.00E+00	2.13E+01
			BaLa-140	<6.18E+00	0.00E+00	6.18E+00
			Be-7	5.03E+02	1.58E+02	1.82E+02
			K-40	2.37E+03	4.40E+02	2.72E+02
417178	7/4/2016 - 7/4/2016		Mn-54	<2.30E+01	0.00E+00	2.30E+01
			Co-58	<2.42E+01	0.00E+00	2.42E+01
			Fe-59	<5.06E+01	0.00E+00	5.06E+01
			Co-60	<2.15E+01	0.00E+00	2.15E+01
			Zn-65	<4.94E+01	0.00E+00	4.94E+01
			Zr-95	<3.82E+01	0.00E+00	3.82E+01
			Nb-95	<2.27E+01	0.00E+00	2.27E+01
			I-131	<2.54E+01	0.00E+00	2.54E+01
			Cs-134	<2.80E+01	0.00E+00	2.80E+01
			Cs-137	<2.92E+01	0.00E+00	2.92E+01
			BaLa-140	<7.66E+00	0.00E+00	7.66E+00
			Be-7	1.05E+03	2.63E+02	2.80E+02
			K-40	1.97E+03	5.15E+02	5.28E+02
419275	8/1/2016 - 8/1/2016		Mn-54	<1.97E+01	0.00E+00	1.97E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 802 [CONTROL - -- @ 10.1 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
419275	8/1/2016 - 8/1/2016	WAXMYRTLE	Co-58	<1.36E+01	0.00E+00	1.36E+01
			Fe-59	<3.57E+01	0.00E+00	3.57E+01
			Co-60	<1.83E+01	0.00E+00	1.83E+01
			Zn-65	<4.62E+01	0.00E+00	4.62E+01
			Zr-95	<2.54E+01	0.00E+00	2.54E+01
			Nb-95	<1.76E+01	0.00E+00	1.76E+01
			I-131	<1.72E+01	0.00E+00	1.72E+01
			Cs-134	<2.12E+01	0.00E+00	2.12E+01
			Cs-137	<2.22E+01	0.00E+00	2.22E+01
			BaLa-140	<1.89E+01	0.00E+00	1.89E+01
			Be-7	1.44E+03	2.60E+02	2.12E+02
			K-40	2.28E+03	4.26E+02	1.82E+02
423136	9/1/2016 - 9/1/2016	WAXMYRTLE	Mn-54	<2.02E+01	0.00E+00	2.02E+01
			Co-58	<2.16E+01	0.00E+00	2.16E+01
			Fe-59	<4.92E+01	0.00E+00	4.92E+01
			Co-60	<2.18E+01	0.00E+00	2.18E+01
			Zn-65	<5.15E+01	0.00E+00	5.15E+01
			Zr-95	<3.97E+01	0.00E+00	3.97E+01
			Nb-95	<1.90E+01	0.00E+00	1.90E+01
			I-131	<4.65E+01	0.00E+00	4.65E+01
			Cs-134	<1.85E+01	0.00E+00	1.85E+01
			Cs-137	<2.44E+01	0.00E+00	2.44E+01
			BaLa-140	<4.80E+01	0.00E+00	4.80E+01
			Be-7	1.06E+03	2.57E+02	2.54E+02
K-40	2.26E+03	4.85E+02	3.73E+02			
426196	10/3/2016 - 10/3/2016	WAXMYRTLE	Mn-54	<2.06E+01	0.00E+00	2.06E+01
			Co-58	<2.16E+01	0.00E+00	2.16E+01
			Fe-59	<3.57E+01	0.00E+00	3.57E+01
			Co-60	<2.28E+01	0.00E+00	2.28E+01
			Zn-65	<4.67E+01	0.00E+00	4.67E+01
			Zr-95	<3.74E+01	0.00E+00	3.74E+01
			Nb-95	<1.77E+01	0.00E+00	1.77E+01
			I-131	<1.96E+01	0.00E+00	1.96E+01
			Cs-134	<2.75E+01	0.00E+00	2.75E+01
			Cs-137	<2.83E+01	0.00E+00	2.83E+01
			BaLa-140	<1.87E+01	0.00E+00	1.87E+01
			Be-7	1.59E+03	3.06E+02	2.68E+02
K-40	1.74E+03	4.22E+02	3.15E+02			
428560	11/1/2016 - 11/1/2016	WAXMYRTLE	Mn-54	<2.65E+01	0.00E+00	2.65E+01
			Co-58	<2.16E+01	0.00E+00	2.16E+01
			Fe-59	<4.66E+01	0.00E+00	4.66E+01
			Co-60	<2.37E+01	0.00E+00	2.37E+01
			Zn-65	<4.52E+01	0.00E+00	4.52E+01
			Zr-95	<3.92E+01	0.00E+00	3.92E+01
			Nb-95	<2.57E+01	0.00E+00	2.57E+01
			I-131	<2.34E+01	0.00E+00	2.34E+01
			Cs-134	<2.43E+01	0.00E+00	2.43E+01
			Cs-137	<2.37E+01	0.00E+00	2.37E+01
			BaLa-140	<7.15E+00	0.00E+00	7.15E+00
			Be-7	3.18E+03	4.46E+02	2.19E+02
K-40	2.17E+03	4.85E+02	3.57E+02			
431209	12/1/2016 - 12/1/2016	WAXMYRTLE	Mn-54	<1.49E+01	0.00E+00	1.49E+01
			Co-58	<2.34E+01	0.00E+00	2.34E+01
			Fe-59	<6.18E+01	0.00E+00	6.18E+01
			Co-60	<3.02E+01	0.00E+00	3.02E+01
			Zn-65	<4.90E+01	0.00E+00	4.90E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 802 [CONTROL - -- @ 10.1 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
431209	12/1/2016 - 12/1/2016		Zr-95	<3.79E+01	0.00E+00	3.79E+01
			Nb-95	<3.51E+01	0.00E+00	3.51E+01
			I-131	<4.24E+01	0.00E+00	4.24E+01
			Cs-134	<2.98E+01	0.00E+00	2.98E+01
			Cs-137	<2.99E+01	0.00E+00	2.99E+01
			BaLa-140	<1.08E+01	0.00E+00	1.08E+01
			Be-7	1.95E+03	4.05E+02	4.05E+02
			K-40	1.62E+03	4.22E+02	2.39E+02

Sample Point 803 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
399453	1/5/2016 - 1/5/2016		Mn-54	<1.48E+01	0.00E+00	1.48E+01
			Co-58	<2.35E+01	0.00E+00	2.35E+01
			Fe-59	<3.96E+01	0.00E+00	3.96E+01
			Co-60	<2.38E+01	0.00E+00	2.38E+01
			Zn-65	<4.19E+01	0.00E+00	4.19E+01
			Zr-95	<4.45E+01	0.00E+00	4.45E+01
			Nb-95	<2.26E+01	0.00E+00	2.26E+01
			I-131	<2.76E+01	0.00E+00	2.76E+01
			Cs-134	<2.01E+01	0.00E+00	2.01E+01
			Cs-137	<2.39E+01	0.00E+00	2.39E+01
			BaLa-140	<3.04E+01	0.00E+00	3.04E+01
			Be-7	3.79E+03	5.23E+02	2.99E+02
			K-40	1.94E+03	4.22E+02	5.37E+01

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
401511	2/1/2016 - 2/1/2016		Mn-54	<2.54E+01	0.00E+00	2.54E+01
			Co-58	<1.57E+01	0.00E+00	1.57E+01
			Fe-59	<4.24E+01	0.00E+00	4.24E+01
			Co-60	<2.04E+01	0.00E+00	2.04E+01
			Zn-65	<4.67E+01	0.00E+00	4.67E+01
			Zr-95	<3.20E+01	0.00E+00	3.20E+01
			Nb-95	<2.50E+01	0.00E+00	2.50E+01
			I-131	<2.24E+01	0.00E+00	2.24E+01
			Cs-134	<2.32E+01	0.00E+00	2.32E+01
			Cs-137	<1.90E+01	0.00E+00	1.90E+01
			BaLa-140	<7.17E+00	0.00E+00	7.17E+00
			Be-7	2.93E+03	4.29E+02	2.53E+02
			K-40	2.39E+03	4.77E+02	2.09E+02

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
405298	3/1/2016 - 3/1/2016		Mn-54	<1.73E+01	0.00E+00	1.73E+01
			Co-58	<1.72E+01	0.00E+00	1.72E+01
			Fe-59	<4.77E+01	0.00E+00	4.77E+01
			Co-60	<2.32E+01	0.00E+00	2.32E+01
			Zn-65	<4.73E+01	0.00E+00	4.73E+01
			Zr-95	<3.20E+01	0.00E+00	3.20E+01
			Nb-95	<2.39E+01	0.00E+00	2.39E+01
			I-131	<1.74E+01	0.00E+00	1.74E+01
			Cs-134	<2.98E+01	0.00E+00	2.98E+01
			Cs-137	<2.03E+01	0.00E+00	2.03E+01
			BaLa-140	<3.07E+01	0.00E+00	3.07E+01
			Be-7	4.86E+03	6.13E+02	2.71E+02
			K-40	2.49E+03	5.18E+02	3.50E+02

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
408371	4/4/2016 - 4/4/2016		Mn-54	<1.24E+01	0.00E+00	1.24E+01
			Co-58	<1.65E+01	0.00E+00	1.65E+01
			Fe-59	<2.83E+01	0.00E+00	2.83E+01
			Co-60	<1.82E+01	0.00E+00	1.82E+01
			Zn-65	<2.94E+01	0.00E+00	2.94E+01
			Zr-95	<2.65E+01	0.00E+00	2.65E+01
			Nb-95	<1.71E+01	0.00E+00	1.71E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 803 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
408371	4/4/2016 - 4/4/2016	WAXMYRTLE	I-131	<1.70E+01	0.00E+00	1.70E+01
			Cs-134	<1.65E+01	0.00E+00	1.65E+01
			Cs-137	<1.49E+01	0.00E+00	1.49E+01
			BaLa-140	<1.58E+01	0.00E+00	1.58E+01
			Be-7	2.51E+03	3.40E+02	2.00E+02
			K-40	2.65E+03	4.36E+02	1.69E+02
411584	5/2/2016 - 5/2/2016	WAXMYRTLE	Mn-54	<1.73E+01	0.00E+00	1.73E+01
			Co-58	<1.45E+01	0.00E+00	1.45E+01
			Fe-59	<3.48E+01	0.00E+00	3.48E+01
			Co-60	<1.44E+01	0.00E+00	1.44E+01
			Zn-65	<4.05E+01	0.00E+00	4.05E+01
			Zr-95	<2.64E+01	0.00E+00	2.64E+01
			Nb-95	<1.73E+01	0.00E+00	1.73E+01
			I-131	<1.53E+01	0.00E+00	1.53E+01
			Cs-134	<2.07E+01	0.00E+00	2.07E+01
			Cs-137	<1.48E+01	0.00E+00	1.48E+01
			BaLa-140	<2.32E+01	0.00E+00	2.32E+01
			Be-7	6.20E+02	1.52E+02	1.45E+02
			K-40	2.89E+03	4.69E+02	2.21E+02
413649	6/1/2016 - 6/1/2016	WAXMYRTLE	Mn-54	<1.86E+01	0.00E+00	1.86E+01
			Co-58	<1.42E+01	0.00E+00	1.42E+01
			Fe-59	<4.08E+01	0.00E+00	4.08E+01
			Co-60	<1.72E+01	0.00E+00	1.72E+01
			Zn-65	<3.77E+01	0.00E+00	3.77E+01
			Zr-95	<2.78E+01	0.00E+00	2.78E+01
			Nb-95	<1.32E+01	0.00E+00	1.32E+01
			I-131	<1.90E+01	0.00E+00	1.90E+01
			Cs-134	<1.93E+01	0.00E+00	1.93E+01
			Cs-137	<1.79E+01	0.00E+00	1.79E+01
			BaLa-140	<1.64E+01	0.00E+00	1.64E+01
			Be-7	8.09E+02	1.90E+02	1.87E+02
			K-40	2.95E+03	5.26E+02	4.18E+02
417179	7/4/2016 - 7/4/2016	WAXMYRTLE	Mn-54	<2.31E+01	0.00E+00	2.31E+01
			Co-58	<2.41E+01	0.00E+00	2.41E+01
			Fe-59	<4.15E+01	0.00E+00	4.15E+01
			Co-60	<2.77E+01	0.00E+00	2.77E+01
			Zn-65	<4.85E+01	0.00E+00	4.85E+01
			Zr-95	<3.52E+01	0.00E+00	3.52E+01
			Nb-95	<2.19E+01	0.00E+00	2.19E+01
			I-131	<2.60E+01	0.00E+00	2.60E+01
			Cs-134	<3.04E+01	0.00E+00	3.04E+01
			Cs-137	<2.48E+01	0.00E+00	2.48E+01
			BaLa-140	<1.92E+01	0.00E+00	1.92E+01
			Be-7	5.93E+02	2.18E+02	2.86E+02
			K-40	2.73E+03	5.09E+02	2.06E+02
419276	8/1/2016 - 8/1/2016	WAXMYRTLE	Mn-54	<1.64E+01	0.00E+00	1.64E+01
			Co-58	<1.97E+01	0.00E+00	1.97E+01
			Fe-59	<5.14E+01	0.00E+00	5.14E+01
			Co-60	<2.17E+01	0.00E+00	2.17E+01
			Zn-65	<4.46E+01	0.00E+00	4.46E+01
			Zr-95	<3.19E+01	0.00E+00	3.19E+01
			Nb-95	<2.10E+01	0.00E+00	2.10E+01
			I-131	<2.36E+01	0.00E+00	2.36E+01
			Cs-134	<3.14E+01	0.00E+00	3.14E+01
			Cs-137	<2.28E+01	0.00E+00	2.28E+01
			BaLa-140	<3.15E+01	0.00E+00	3.15E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 803 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
419276	8/1/2016 - 8/1/2016	WAXMYRTLE	Be-7	1.75E+03	3.09E+02	2.42E+02
			K-40	3.21E+03	5.57E+02	2.22E+02
423137	9/1/2016 - 9/1/2016	WAXMYRTLE	Mn-54	<1.49E+01	0.00E+00	1.49E+01
			Co-58	<2.21E+01	0.00E+00	2.21E+01
			Fe-59	<4.50E+01	0.00E+00	4.50E+01
			Co-60	<2.33E+01	0.00E+00	2.33E+01
			Zn-65	<5.02E+01	0.00E+00	5.02E+01
			Zr-95	<3.68E+01	0.00E+00	3.68E+01
			Nb-95	<2.75E+01	0.00E+00	2.75E+01
			I-131	<4.76E+01	0.00E+00	4.76E+01
			Cs-134	<2.40E+01	0.00E+00	2.40E+01
			Cs-137	<1.77E+01	0.00E+00	1.77E+01
			BaLa-140	<4.68E+01	0.00E+00	4.68E+01
			Be-7	1.56E+03	3.04E+02	2.52E+02
			K-40	2.86E+03	5.27E+02	2.93E+02
426197	10/3/2016 - 10/3/2016	WAXMYRTLE	Mn-54	<1.65E+01	0.00E+00	1.65E+01
			Co-58	<1.65E+01	0.00E+00	1.65E+01
			Fe-59	<4.97E+01	0.00E+00	4.97E+01
			Co-60	<2.40E+01	0.00E+00	2.40E+01
			Zn-65	<4.19E+01	0.00E+00	4.19E+01
			Zr-95	<3.12E+01	0.00E+00	3.12E+01
			Nb-95	<2.32E+01	0.00E+00	2.32E+01
			I-131	<2.37E+01	0.00E+00	2.37E+01
			Cs-134	<1.86E+01	0.00E+00	1.86E+01
			Cs-137	<2.00E+01	0.00E+00	2.00E+01
			BaLa-140	<1.96E+01	0.00E+00	1.96E+01
			Be-7	2.24E+03	3.58E+02	2.18E+02
			K-40	2.73E+03	5.75E+02	4.70E+02
428561	11/1/2016 - 11/1/2016	WAXMYRTLE	Mn-54	<1.61E+01	0.00E+00	1.61E+01
			Co-58	<2.12E+01	0.00E+00	2.12E+01
			Fe-59	<4.31E+01	0.00E+00	4.31E+01
			Co-60	<2.10E+01	0.00E+00	2.10E+01
			Zn-65	<4.47E+01	0.00E+00	4.47E+01
			Zr-95	<3.27E+01	0.00E+00	3.27E+01
			Nb-95	<1.83E+01	0.00E+00	1.83E+01
			I-131	<1.94E+01	0.00E+00	1.94E+01
			Cs-134	<1.98E+01	0.00E+00	1.98E+01
			Cs-137	<2.17E+01	0.00E+00	2.17E+01
			BaLa-140	<1.92E+01	0.00E+00	1.92E+01
			Be-7	2.07E+03	3.52E+02	2.70E+02
			K-40	2.97E+03	5.46E+02	2.13E+02
431210	12/1/2016 - 12/1/2016	WAXMYRTLE	Mn-54	<1.69E+01	0.00E+00	1.69E+01
			Co-58	<2.56E+01	0.00E+00	2.56E+01
			Fe-59	<4.61E+01	0.00E+00	4.61E+01
			Co-60	<2.26E+01	0.00E+00	2.26E+01
			Zn-65	<3.27E+01	0.00E+00	3.27E+01
			Zr-95	<3.23E+01	0.00E+00	3.23E+01
			Nb-95	<2.00E+01	0.00E+00	2.00E+01
			I-131	<2.70E+01	0.00E+00	2.70E+01
			Cs-134	<2.11E+01	0.00E+00	2.11E+01
			Cs-137	<2.38E+01	0.00E+00	2.38E+01
			BaLa-140	<2.21E+01	0.00E+00	2.21E+01
			Be-7	1.56E+03	2.95E+02	2.50E+02
			K-40	2.22E+03	4.53E+02	2.79E+02



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 804 [INDICATOR - S @ 0.7 miles]

Sample ID:	Sample Dates:	WAXMYRTLLE	Nuclide	Activity	2 Sigma Error	MDA
399454	1/5/2016 - 1/5/2016	WAXMYRTLLE	Mn-54	<1.81E+01	0.00E+00	1.81E+01
			Co-58	<1.26E+01	0.00E+00	1.26E+01
			Fe-59	<3.62E+01	0.00E+00	3.62E+01
			Co-60	<2.49E+01	0.00E+00	2.49E+01
			Zn-65	<3.14E+01	0.00E+00	3.14E+01
			Zr-95	<2.88E+01	0.00E+00	2.88E+01
			Nb-95	<1.43E+01	0.00E+00	1.43E+01
			I-131	<2.48E+01	0.00E+00	2.48E+01
			Cs-134	<2.02E+01	0.00E+00	2.02E+01
			Cs-137	<1.99E+01	0.00E+00	1.99E+01
			BaLa-140	<2.02E+01	0.00E+00	2.02E+01
			Be-7	1.87E+03	3.27E+02	2.79E+02
			K-40	1.72E+03	3.89E+02	2.61E+02
401512	2/1/2016 - 2/1/2016	WAXMYRTLLE	Mn-54	<1.98E+01	0.00E+00	1.98E+01
			Co-58	<2.11E+01	0.00E+00	2.11E+01
			Fe-59	<4.57E+01	0.00E+00	4.57E+01
			Co-60	<3.07E+01	0.00E+00	3.07E+01
			Zn-65	<3.84E+01	0.00E+00	3.84E+01
			Zr-95	<2.26E+01	0.00E+00	2.26E+01
			Nb-95	<1.94E+01	0.00E+00	1.94E+01
			I-131	<2.03E+01	0.00E+00	2.03E+01
			Cs-134	<2.49E+01	0.00E+00	2.49E+01
			Cs-137	<3.04E+01	0.00E+00	3.04E+01
			BaLa-140	<3.75E+01	0.00E+00	3.75E+01
			Be-7	3.40E+03	4.79E+02	2.66E+02
			K-40	1.70E+03	4.57E+02	4.23E+02
405299	3/1/2016 - 3/1/2016	WAXMYRTLLE	Mn-54	<1.94E+01	0.00E+00	1.94E+01
			Co-58	<2.12E+01	0.00E+00	2.12E+01
			Fe-59	<3.93E+01	0.00E+00	3.93E+01
			Co-60	<2.97E+01	0.00E+00	2.97E+01
			Zn-65	<4.38E+01	0.00E+00	4.38E+01
			Zr-95	<4.10E+01	0.00E+00	4.10E+01
			Nb-95	<1.27E+01	0.00E+00	1.27E+01
			I-131	<1.99E+01	0.00E+00	1.99E+01
			Cs-134	<1.80E+01	0.00E+00	1.80E+01
			Cs-137	<2.52E+01	0.00E+00	2.52E+01
			BaLa-140	<2.55E+01	0.00E+00	2.55E+01
			Be-7	5.22E+03	6.23E+02	2.65E+02
			K-40	2.13E+03	4.46E+02	2.53E+02
408372	4/4/2016 - 4/4/2016	WAXMYRTLLE	Mn-54	<1.50E+01	0.00E+00	1.50E+01
			Co-58	<1.31E+01	0.00E+00	1.31E+01
			Fe-59	<3.20E+01	0.00E+00	3.20E+01
			Co-60	<2.05E+01	0.00E+00	2.05E+01
			Zn-65	<4.23E+01	0.00E+00	4.23E+01
			Zr-95	<2.74E+01	0.00E+00	2.74E+01
			Nb-95	<1.36E+01	0.00E+00	1.36E+01
			I-131	<1.93E+01	0.00E+00	1.93E+01
			Cs-134	<2.11E+01	0.00E+00	2.11E+01
			Cs-137	<2.01E+01	0.00E+00	2.01E+01
			BaLa-140	<2.31E+01	0.00E+00	2.31E+01
			Be-7	2.12E+03	3.15E+02	2.04E+02
			K-40	3.20E+03	5.14E+02	2.30E+02
411585	5/2/2016 - 5/2/2016	WAXMYRTLLE	Mn-54	<1.79E+01	0.00E+00	1.79E+01
			Co-58	<1.54E+01	0.00E+00	1.54E+01
			Fe-59	<4.23E+01	0.00E+00	4.23E+01
			Co-60	<1.61E+01	0.00E+00	1.61E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 804 [INDICATOR - S @ 0.7 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
411585	5/2/2016 - 5/2/2016	WAXMYRTLE	Zn-65	<3.67E+01	0.00E+00	3.67E+01
			Zr-95	<2.13E+01	0.00E+00	2.13E+01
			Nb-95	<1.30E+01	0.00E+00	1.30E+01
			I-131	<1.67E+01	0.00E+00	1.67E+01
			Cs-134	<2.09E+01	0.00E+00	2.09E+01
			Cs-137	<1.50E+01	0.00E+00	1.50E+01
			BaLa-140	<1.84E+01	0.00E+00	1.84E+01
			Be-7	4.08E+02	1.68E+02	2.28E+02
			K-40	2.33E+03	4.61E+02	3.62E+02
			413650	6/1/2016 - 6/1/2016	WAXMYRTLE	Mn-54
Co-58	<1.79E+01	0.00E+00				1.79E+01
Fe-59	<3.37E+01	0.00E+00				3.37E+01
Co-60	<2.06E+01	0.00E+00				2.06E+01
Zn-65	<3.36E+01	0.00E+00				3.36E+01
Zr-95	<2.53E+01	0.00E+00				2.53E+01
Nb-95	<1.87E+01	0.00E+00				1.87E+01
I-131	<2.46E+01	0.00E+00				2.46E+01
Cs-134	<1.88E+01	0.00E+00				1.88E+01
Cs-137	<2.08E+01	0.00E+00				2.08E+01
BaLa-140	<2.47E+01	0.00E+00				2.47E+01
Be-7	6.04E+02	1.79E+02				2.07E+02
K-40	2.30E+03	4.34E+02				2.68E+02
417180	7/4/2016 - 7/4/2016	WAXMYRTLE	Mn-54	<1.40E+01	0.00E+00	1.40E+01
			Co-58	<1.51E+01	0.00E+00	1.51E+01
			Fe-59	<3.92E+01	0.00E+00	3.92E+01
			Co-60	<1.14E+01	0.00E+00	1.14E+01
			Zn-65	<4.73E+01	0.00E+00	4.73E+01
			Zr-95	<3.37E+01	0.00E+00	3.37E+01
			Nb-95	<2.18E+01	0.00E+00	2.18E+01
			I-131	<1.91E+01	0.00E+00	1.91E+01
			Cs-134	<1.68E+01	0.00E+00	1.68E+01
			Cs-137	<2.07E+01	0.00E+00	2.07E+01
			BaLa-140	<2.37E+01	0.00E+00	2.37E+01
			Be-7	1.14E+03	2.30E+02	2.00E+02
			K-40	2.52E+03	4.56E+02	1.95E+02
			419277	8/1/2016 - 8/1/2016	WAXMYRTLE	Mn-54
Co-58	<1.49E+01	0.00E+00				1.49E+01
Fe-59	<3.68E+01	0.00E+00				3.68E+01
Co-60	<2.01E+01	0.00E+00				2.01E+01
Zn-65	<4.61E+01	0.00E+00				4.61E+01
Zr-95	<3.71E+01	0.00E+00				3.71E+01
Nb-95	<2.08E+01	0.00E+00				2.08E+01
I-131	<1.76E+01	0.00E+00				1.76E+01
Cs-134	<2.14E+01	0.00E+00				2.14E+01
Cs-137	<2.29E+01	0.00E+00				2.29E+01
BaLa-140	<2.67E+01	0.00E+00				2.67E+01
Be-7	1.42E+03	2.58E+02				1.88E+02
K-40	2.52E+03	4.72E+02				2.20E+02
423138	9/1/2016 - 9/1/2016	WAXMYRTLE				Mn-54
			Co-58	<2.32E+01	0.00E+00	2.32E+01
			Fe-59	<4.50E+01	0.00E+00	4.50E+01
			Co-60	<1.96E+01	0.00E+00	1.96E+01
			Zn-65	<4.53E+01	0.00E+00	4.53E+01
			Zr-95	<3.56E+01	0.00E+00	3.56E+01
			Nb-95	<2.40E+01	0.00E+00	2.40E+01
			I-131	<4.60E+01	0.00E+00	4.60E+01



BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2016 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 804 [INDICATOR - S @ 0.7 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
423138	9/1/2016 - 9/1/2016		Cs-134	<2.41E+01	0.00E+00	2.41E+01
			Cs-137	<1.88E+01	0.00E+00	1.88E+01
			BaLa-140	<3.94E+01	0.00E+00	3.94E+01
			Be-7	9.71E+02	2.48E+02	2.85E+02
			K-40	2.38E+03	4.33E+02	1.92E+02
426198	10/3/2016 - 10/3/2016		Mn-54	<2.02E+01	0.00E+00	2.02E+01
			Co-58	<1.92E+01	0.00E+00	1.92E+01
			Fe-59	<4.15E+01	0.00E+00	4.15E+01
			Co-60	<2.80E+01	0.00E+00	2.80E+01
			Zn-65	<4.62E+01	0.00E+00	4.62E+01
			Zr-95	<3.94E+01	0.00E+00	3.94E+01
			Nb-95	<1.96E+01	0.00E+00	1.96E+01
			I-131	<1.70E+01	0.00E+00	1.70E+01
			Cs-134	<2.90E+01	0.00E+00	2.90E+01
			Cs-137	<2.51E+01	0.00E+00	2.51E+01
			BaLa-140	<2.54E+01	0.00E+00	2.54E+01
			Be-7	1.64E+03	4.70E+02	1.79E+02
			K-40	2.26E+03	4.60E+02	2.65E+02
428562	11/1/2016 - 11/1/2016		Mn-54	<1.79E+01	0.00E+00	1.79E+01
			Co-58	<2.00E+01	0.00E+00	2.00E+01
			Fe-59	<3.47E+01	0.00E+00	3.47E+01
			Co-60	<1.99E+01	0.00E+00	1.99E+01
			Zn-65	<4.53E+01	0.00E+00	4.53E+01
			Zr-95	<3.81E+01	0.00E+00	3.81E+01
			Nb-95	<2.82E+01	0.00E+00	2.82E+01
			I-131	<2.03E+01	0.00E+00	2.03E+01
			Cs-134	<2.86E+01	0.00E+00	2.86E+01
			Cs-137	<2.69E+01	0.00E+00	2.69E+01
			BaLa-140	<1.82E+01	0.00E+00	1.82E+01
			Be-7	7.44E+02	2.17E+02	2.49E+02
			K-40	2.27E+03	4.61E+02	2.18E+02
431211	12/1/2016 - 12/1/2016		Mn-54	<1.55E+01	0.00E+00	1.55E+01
			Co-58	<2.59E+01	0.00E+00	2.59E+01
			Fe-59	<4.94E+01	0.00E+00	4.94E+01
			Co-60	<2.50E+01	0.00E+00	2.50E+01
			Zn-65	<4.40E+01	0.00E+00	4.40E+01
			Zr-95	<3.65E+01	0.00E+00	3.65E+01
			Nb-95	<2.52E+01	0.00E+00	2.52E+01
			I-131	<3.01E+01	0.00E+00	3.01E+01
			Cs-134	<2.10E+01	0.00E+00	2.10E+01
			Cs-137	<2.50E+01	0.00E+00	2.50E+01
			BaLa-140	<3.35E+01	0.00E+00	3.35E+01
			Be-7	1.41E+03	3.02E+02	2.73E+02
			K-40	1.71E+03	4.65E+02	4.41E+02



APPENDIX F

**ERRATA TO
PREVIOUS REPORTS**

APPENDIX F

ERRATA TO THE 2014 and 2015 BNP AREOR

During a 2016 Dosimetry Laboratory peer assessment, it was discovered the 2014 and 2015 (all quarters) internal environmental TLD crosschecks were not completed in accordance with procedure RD/0/B/4000/13, Environmental Monitoring (NCR # 02073609). Environmental monitoring is not National Voluntary Laboratory Accreditation Program (NVLAP) accredited, but the internal crosscheck data was reported to the NRC in the 2014 and 2015 AREORs. External environmental TLD crosschecks were performed during 2014 and 2015 in accordance with procedure RD/0/B/4000/13, Environmental Monitoring; therefore, environmental TLD QA/QC was performed.

Laboratory TLD data supporting the 2014 and 2015 internal environmental TLD crosscheck result tables could not be located during the 2016 assessment. The internal environmental crosscheck (Duke Energy) table indicated in the quality assurance sections of the 2014 and 2015 reports is therefore not considered acceptable and is removed from the 2014 and 2015 reports. The internal environmental TLD crosscheck data were not presented in the 2016 AREOR and were removed from the quality assurance section in entirety.