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May 14, 2013

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555-0001

Subject: Duke Energy Carolinas, LLC
Catawba Nuclear Station, Units 1 and 2
Docket Nos. 50-413 and 50-414
2012 Annual Radiological Environmental Operating Report

Pursuant to Catawba Nuclear Station Technical Specification 5.6.2 and Selected Licensee Commitment 16.11-16, please find attached the 2012 Annual Radiological Environmental Operating Report. This report covers operation of Catawba Units 1 and 2 during the 2012 calendar year.

Any questions concerning this report should be directed to Randy Hart at (803) 701-3622.

Sincerely,

Kelvin Henderson

Attachment

IE25
NRR

xc (with attachment):

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DUKE ENERGY.

Catawba Nuclear Station
Units 1 and 2

AREOR

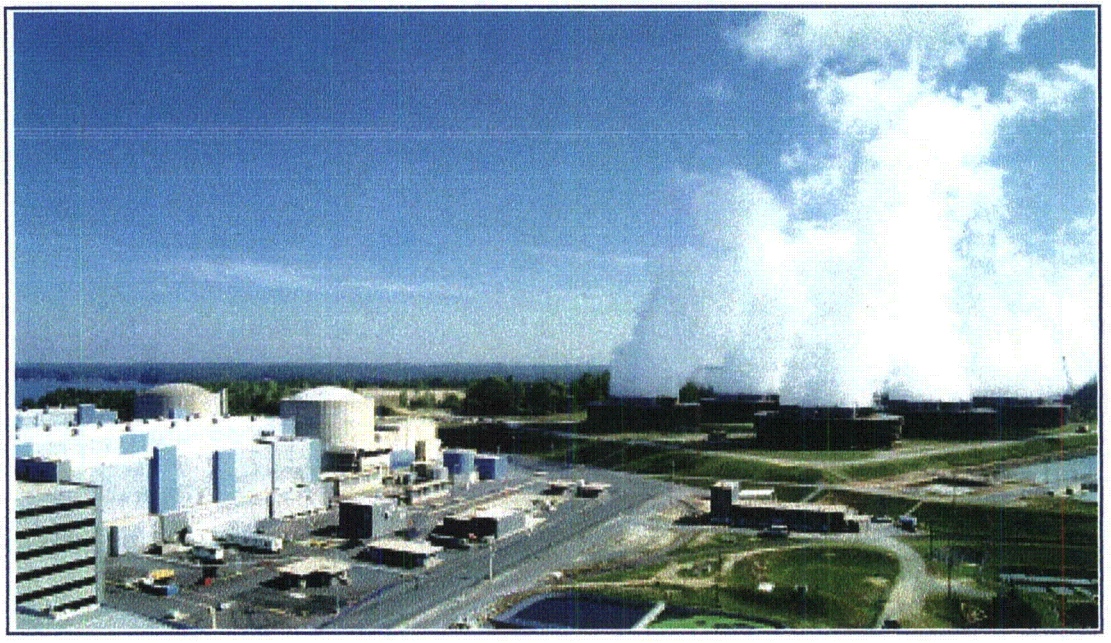
Annual Radiological Environmental Operating Report 2012

DUKE ENERGY

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

DUKE ENERGY CORPORATION
CATAWBA NUCLEAR STATION
Units 1 and 2

2012



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

BW	BiWeekly
C	Control
CNS	Catawba Nuclear Station
DHEC	Department of Health and Environmental Control
ERA	Environmental Resource Associates
GI-LLI	Gastrointestinal – Lower Large Intestine
GPS	Global Positioning System
ISFSI	Independent Spent Fuel Storage Installation
LLD	Lower Limit of Detection
M	Monthly
MDA	Minimum Detectable Activity
MOA	Memorandum of Agreement
mrem	Millirem
NIST	National Institute of Standards and Technology
NRC	Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
pCi/kg	picocurie per kilogram
pCi/l	picocurie per liter
pCi/m3	picocurie per cubic meter
PIP	Problem Investigation Program
Q	Quarterly
REMP	Radiological Environmental Monitoring Program
SA	Semiannually
SLCs	Selected Licensee Commitments
SM	Semimonthly
TECH SPECs	Technical Specifications
TLD	Thermoluminescent Dosimeter
µCi/ml	microcurie per milliliter
UFSAR	Updated Final Safety Analysis Report
W	Weekly

1.0 EXECUTIVE SUMMARY

This Annual Radiological Environmental Operating Report describes the Catawba Nuclear Station Radiological Environmental Monitoring Program (REMP), and the program results for the calendar year 2012.

Included are the identification of sampling locations, descriptions of environmental sampling and analysis procedures, comparisons of present environmental radioactivity levels and pre-operational environmental data, comparisons of doses calculated from environmental measurements and effluent data, analysis of trends in environmental radiological data as potentially affected by station 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 Selected Licensee Commitments (SLCs). Required analyses were performed and detection capabilities were met for all collected samples as required by SLCs. Eight-hundred ninety samples were analyzed comprising 1,202 test results in order to compile data for the 2012 report. Based on the annual land use census, the current number of sampling sites for Catawba Nuclear Station is sufficient.

Concentrations observed in the environment in 2012 for station related radionuclides were generally within the ranges of concentrations observed in the past. Inspection of data showed that radioactivity concentrations in surface water, drinking water, shoreline sediment, and fish are higher than the activities reported for samples collected prior to the operation of the station. Measured concentrations were not higher than expected and all positively identified measurements attributable to station operation were within limits as specified in SLCs.

Additionally, environmental radiological monitoring data is consistent with effluents introduced into the environment by plant operations. The total body dose estimated to the maximum exposed member of the public as calculated by environmental sampling data, excluding TLD results, was 8.55E-02 mrem for 2012. Background radiation dose in the United States is approximately 620 mrem per year (approximately half from naturally occurring sources such as radon and half from man-made sources such as medical processes) (reference 6.13). It is therefore concluded that station operations has had no significant radiological impact on the health and safety of the public or the environment.

2.0 INTRODUCTION

2.1 SITE DESCRIPTION AND SAMPLE LOCATIONS

Duke Energy Corporation's Catawba Nuclear Station is a two-unit facility located on the shore of Lake Wylie in York County, South Carolina. Each of the two essentially identical units employs a pressurized water reactor nuclear steam supply system furnished by Westinghouse Electric Corporation. Each generating unit is designed to produce a net electrical output of approximately 1145 MWe. Units 1 and 2 achieved initial criticality on January 7, 1985, and May 8, 1986, respectively.

Condenser cooling is accomplished utilizing a closed system incorporating cooling towers, instead of using lake water directly. Liquid effluents are released into Lake Wylie via the station discharge canal and are not accompanied by the large additional dilution water flow associated with "once-through" condenser cooling. This design results in greater radionuclide concentrations in the discharge canal given comparable liquid effluent source terms.

Figures 2.1-1 and 2.1-2 are maps depicting the Thermoluminescent Dosimeter (TLD) monitoring locations and the sampling locations. The location numbers shown on these maps correspond to those listed in Tables 2.1-A and 2.1-B. Figure 2.1-1 comprises all sample locations within a one mile radius of CNS. Figure 2.1-2 comprises all sample locations within a 10 mile radius of CNS.

2.2 SCOPE AND REQUIREMENTS OF THE REMP

An environmental monitoring program has been in effect at Catawba Nuclear Station since 1981, four years prior to operation of Unit 1 in 1985. The preoperational program provides data on the existing environmental radioactivity levels for the site and vicinity which may be used to determine whether increases in environmental levels are attributable to the station. The operational program provides surveillance and backup support of detailed effluent monitoring which is necessary to evaluate the significance, if any, of the contributions to the existing environmental radioactivity levels that result from station operation.

This monitoring program is based on NRC guidance as reflected in the Selected Licensee Commitments Manual, with regard to sample media, sampling locations, sampling frequency and analytical sensitivity requirements. Indicator and control locations were established for comparison purposes to distinguish radioactivity of station 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 Catawba Nuclear Station. This program satisfies the requirements of Section IV.B.2 of Appendix I to 10CFR50 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 Selected Licensee Commitments, 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 land use. This census satisfies the requirements of Section IV.B.3 of Appendix I to 10CFR50. Results are shown in Table 3.11.

Participation in an interlaboratory comparison program as required by Selected Licensee Commitments 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 10CFR50. A summary of the results obtained as part of this comparison program are in Section 5 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):

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

Where:

$\overline{x}$ = estimate of the mean,
i = individual sample,
N = total number of samples with a net activity (or concentration),
χ_i = net activity (or concentration) for sample i.

2.3.2 LOWER LEVEL OF DETECTION AND MINIMUM DETECTABLE ACTIVITY

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

LLD - The LLD, as defined in the Selected Licensee Commitments Manual is the smallest concentration of radioactive material in a sample that will yield a net count, above the system background, that will be detected with 95% probability with only 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 Selected Licensee Commitments and are listed in Table 2.2-C.

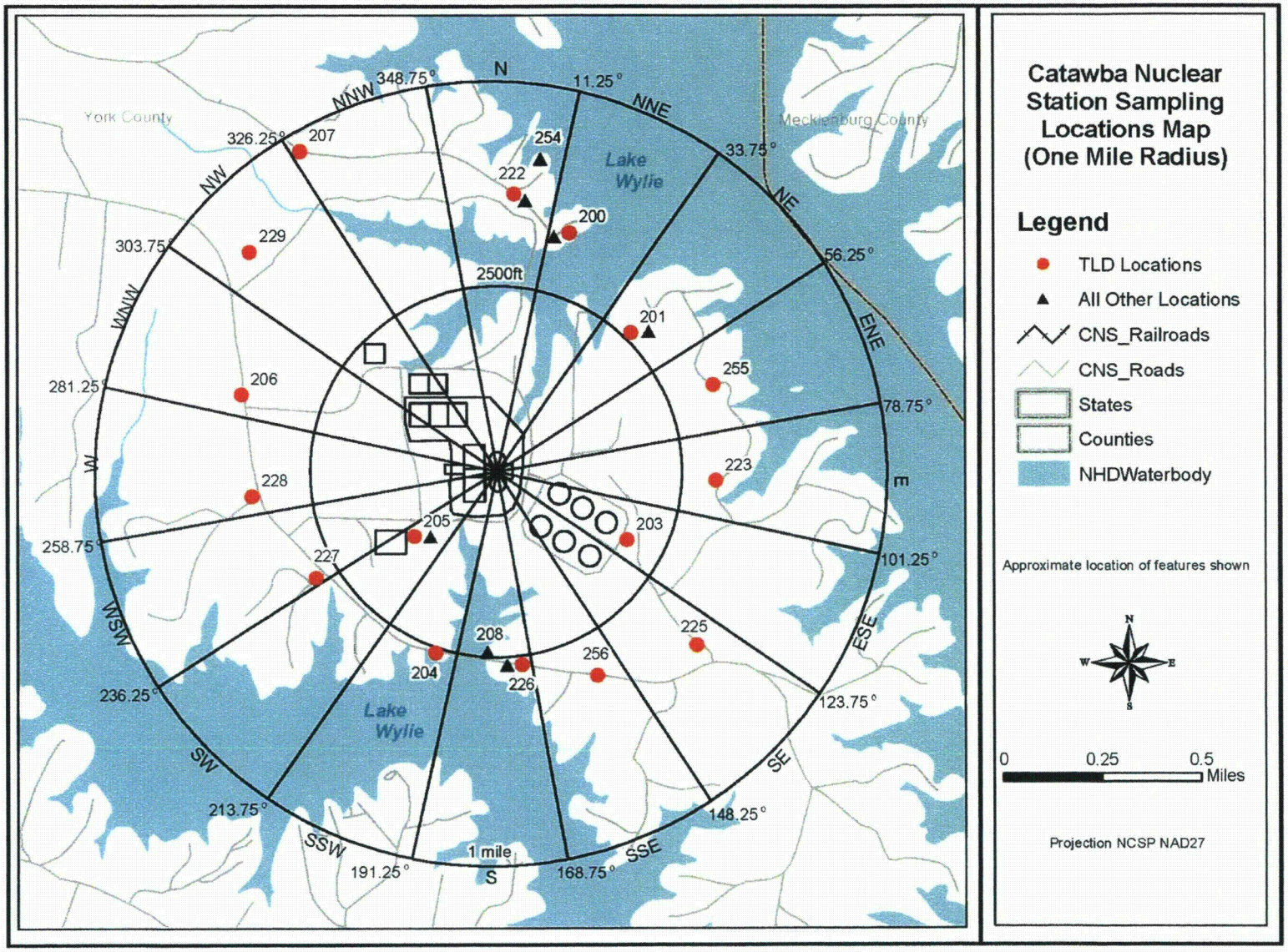
MDA - The MDA is the net counting rate (sample after subtraction of background) that must be surpassed before a sample is considered to contain a scientifically measurable amount of a radioactive material exceeding background amounts. The MDA is calculated using a sample background and may be thought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

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 Chernobyl accident). 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


Catawba Nuclear Station Sampling Locations Map (One Mile Radius)
Legend
TLD Locations
All Other Locations
CNS_Railroads
CNS_Roads
States
Counties
NHDWaterbody
Approximate location of features shown
0
0.25
0.5
Miles
Projection NCSP NAD27
York County
Mecklenburg County
Lake Wylie
Lake Wylie
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
348.75°
11.25°
33.75°
56.25°
78.75°
101.25°
123.75°
148.25°
168.75°
191.25°
213.75°
236.25°
258.75°
281.25°
303.75°
326.25°
2500ft
1 mile
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208
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223
225
226
227
228
229
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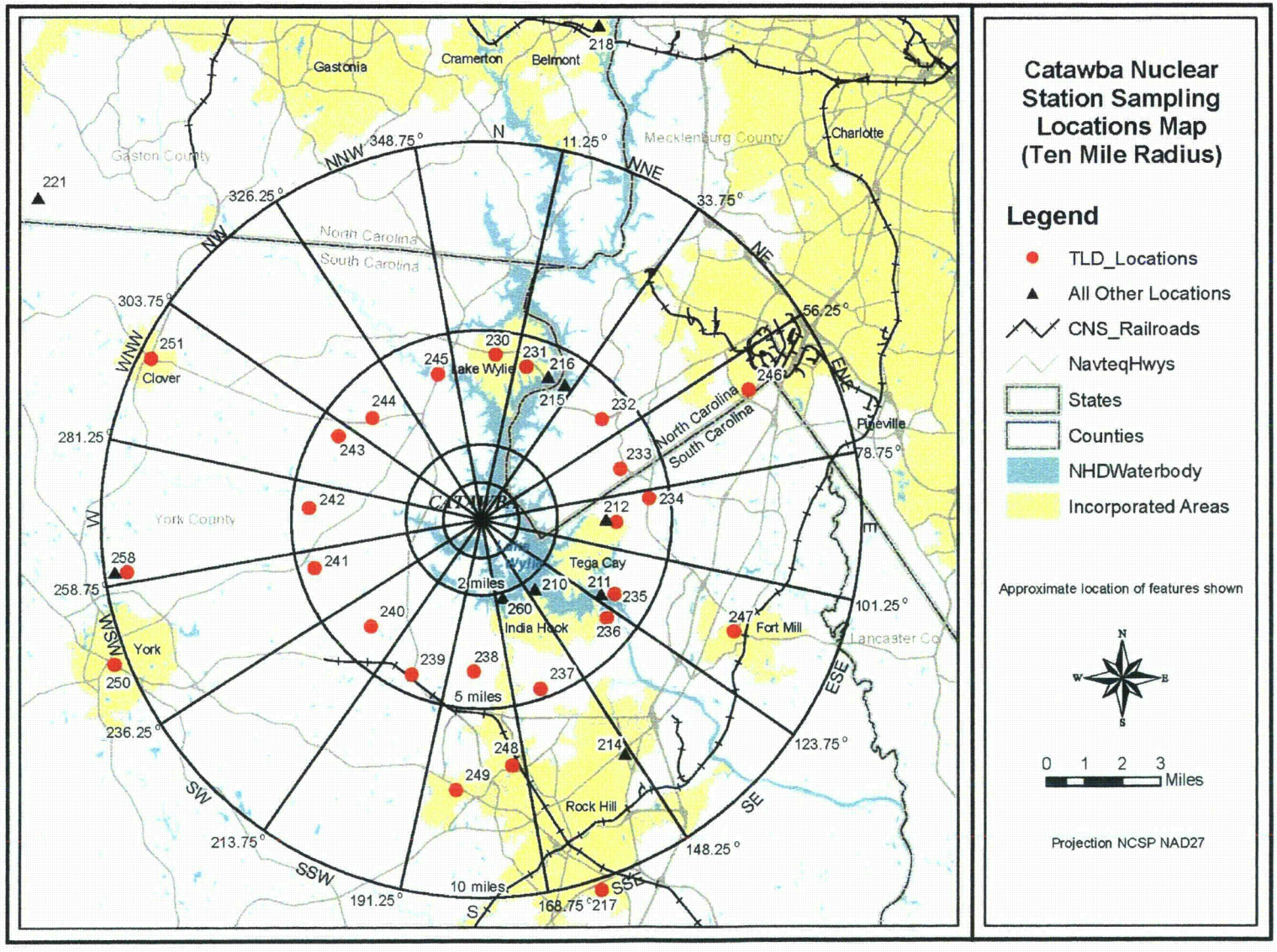
255
256

Figure 2.1-2


Catawba Nuclear Station Sampling Locations Map (Ten Mile Radius)
Legend
TLD_Locations
All Other Locations
CNS_Railroads
NavteqHwys
States
Counties
NHDWaterbody
Incorporated Areas
Approximate location of features shown
0 1 2 3 Miles
Projection NCSP NAD27
Gastonia
Cramerton
Belmont
Charlotte
Mecklenburg County
Gaston County
York County
Lancaster Co
Pineville
Clover
Lake Wylie
Tega Cay
India Hook
Fort Mill
York
Rock Hill
North Carolina
South Carolina
CATAWBA
2 miles
5 miles
10 miles
N
NNE
NE
ENE
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ESE
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SSE
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SSW
SW
WSW
W
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NW
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11.25°
33.75°
56.25°
78.75°
101.25°
123.75°
148.25°
168.75°
191.25°
213.75°
236.25°
258.75°
281.25°
303.75°
326.25°
348.75°
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221
251
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217

TABLE 2.1-A

CATAWBA RADIOLOGICAL MONITORING PROGRAM
SAMPLING LOCATIONS

Table 2.1-A Codes			
W	Weekly	SM	Semimonthly
BW	BiWeekly	Q	Quarterly
M	Monthly	SA	Semiannually
C	Control	I	Indicator

Site #	Measure Type	Location Description*	Air Rad. & Part.	Surface Water	Drinking Water	Shoreline Sediment	Food Products (a)	Fish	Milk	Broad Leaf Veg. (b)	Ground Water
200	I	Site Boundary (0.63 mi NNE)	W							M	
201	I	Site Boundary (0.53 mi NE)	W							M	
205	I	Site Boundary (0.25 mi SW)	W								
208	I	Discharge Canal (0.45 mi S)		M		SA		SA			
210	I	Ebenezer Access (2.31 mi SE)				SA					
211	I	Wylie Dam (4.06 mi ESE)		M							
212	I	Tega Cay (3.32 mi E)	W								
214	I	Rock Hill Water Supply (7.30 mi SSE)			M						
215	C	River Pointe - Hwy 49 (4.21 mi NNE)		M		SA					
216	C	Hwy 49 Bridge (4.19 mi NNE)						SA			
218	C	Belmont Water Supply (13.5 mi NNE)			M						
221	C	Dairy (14.5 mi NW)							SM		
222	I	Site Boundary (0.70 mi N)								M	
226	I	Site Boundary (0.48 mi S)								M	
254	I	Residence (0.82 mi N)									Q
258	C	Fairhope Road (9.84 mi W)	W							M	
260	I	Irrigated Gardens (2.00 mi SSE)					M(a)				

(a) During Harvest Season
(b) When Available

* 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 2.1-B

CATAWBA RADIOLOGICAL MONITORING PROGRAM
SAMPLING LOCATIONS (TLD SITES)

Table 2.1-B Codes			
IR	Inner Ring	OR	Outer Ring
C	Control	SI	Special Interest

Site #	Measure Type	Location*	Distance (miles)	Sector	Site #	Measure Type	Location*	Distance (miles)	Sector
200	IR	SITE BOUNDARY	0.63	NNE	234	OR	WELLS FARGO BANK	4.50	E
201	IR	SITE BOUNDARY	0.53	NE	235	OR	LAKE WYLIE DAM	4.07	ESE
203	IR	SITE BOUNDARY	0.38	ESE	236	OR	SC WILDLIFE FEDERATION OFFICE	4.25	SE
204	IR	SITE BOUNDARY	0.48	SSW	237	OR	TWIN LAKES ROAD AND HOMESTEAD ROAD	4.75	SSE
205	IR	SITE BOUNDARY	0.25	SW	238	OR	PENNINGTON ROAD AND WEST OAK ROAD	4.02	S
206	IR	SITE BOUNDARY	0.67	WNW	239	OR	CARTER LUMBER COMPANY	4.49	SSW
207	IR	SITE BOUNDARY	0.95	NNW	240	OR	PARAHAM ROAD	4.07	SW
212	SI	TEGA CAY AIR SITE	3.32	E	241	OR	CAMPBELL ROAD	4.58	WSW
217	C	OLD ROCK HILL AIR SITE	10.3	SSE	242	OR	TRANSMISSION TOWER ON PARAHAM ROAD	4.56	W
222	IR	SITE BOUNDARY	0.71	N	243	OR	KINGSBERRY ROAD	4.39	WNW
223	IR	SITE BOUNDARY	0.57	E	244	OR	BETHEL ELEMENTARY SCHOOL	4.02	NW
225	IR	SITE BOUNDARY	0.68	SE	245	OR	CROWDERS CREEK BOAT LANDING	4.01	NNW
226	IR	SITE BOUNDARY	0.48	S	246	SI	CAROWINDS GUARD HOUSE	7.87	ENE
227	IR	SITE BOUNDARY	0.52	WSW	247	C	FORT MILL	7.33	ESE
228	IR	SITE BOUNDARY	0.61	W	248	SI	PIEDMONT MEDICAL CENTER	6.54	S
229	IR	SITE BOUNDARY	0.84	NW	249	SI	YORK COUNTY OPERATIONS CENTER	7.17	S
230	OR	RIVER HILLS CHURCH	4.37	N	250	SI	YORK DUKE POWER OFFICE	10.4	WSW
231	OR	RIVER HILLS FRONT ENTRANCE	4.21	NNE	251	C	CLOVER	9.72	WNW
232	OR	PLEASANT HILL ROAD	4.18	NE	255	IR	SITE BOUNDARY	0.61	ENE
233	OR	ZOAR ROAD AND THOMAS DRIVE	3.95	ENE	256	IR	SITE BOUNDARY	0.58	SSE
					258	SI	FAIRHOPE ROAD	9.84	W

* 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)	Air Particulates or Gases (pCi/m^3)	Fish (pCi/kg-wet)	Milk (pCi/liter)	Food Products (pCi/kg-wet)
H-3	20,000[a],[b]				
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	

(a) If no drinking water pathway exists, a value of 30,000 pCi/liter may be used.
(b) H-3 Reporting level not applicable to surface water

TABLE 2.2-B

REMP ANALYSIS FREQUENCY

Sample Medium	Analysis Schedule	Gamma Isotopic	Tritium	Low Level I-131	Gross Beta	TLD
Air Radioiodine	Weekly	X				
Air Particulate	Weekly	X			X	
Direct Radiation	Quarterly					X
Surface Water	Monthly Composite	X				
	Quarterly Composite		X			
Drinking Water	Monthly Composite	X		(a)	X	
	Quarterly Composite		X			
Ground Water	Quarterly	X	X			
Shoreline Sediment	Semiannually	X				
Milk	Semimonthly	X		X		
Fish	Semiannually	X				
Broadleaf Vegetation	Monthly[b]	X				
Food Products	Monthly[b]	X				

(a) Low-level I-131 analysis will be performed if the dose calculated for the consumption of drinking water is > 1 mrem per year. An LLD of 1 pCi/liter will be required for this analysis.
(b) When Available

TABLE 2.2-C

MAXIMUM VALUES FOR THE LOWER LIMIT OF DETECTION

Analysis	Water (pCi/liter)	Air Particulates or Gases (pCi/m^3)	Fish (pCi/kg-wet)	Milk (pCi/liter)	Food Products (pCi/kg-wet)	Sediment (pCi/kg-dry)
Gross Beta	4	0.01				
H-3	2000 [(a)]					
Mn-54	15		130			
Fe-59	30		260			
Co-58, 60	15		130			
Zn-65	30		260			
Zr-Nb-95	15					
I-131	1 [(b)]	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) If no drinking water pathway exists, a value of 3000 pCi/liter may be used.
(b) If no drinking water pathway exists, the LLD of gamma isotopic analysis may be used.

3.0 INTERPRETATION OF RESULTS

Review of all 2012 REMP analysis results was performed to identify changes in environmental levels as a result of station operations. The following section depicts and explains the review of these results. Sample data for 2012 was compared to preoperational and historical data. Over the years of operation, analysis and collection changes have taken place that do not allow direct comparisons for some data collected from 1984 (preoperational) through 2012. Summary tables containing 2012 information required by Technical Specification Administrative Control 5.6.2 are located in Appendix B.

Evaluation for significant trends was performed for radionuclides that are listed as required within Selected Licensee Commitments 16.11-13. 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 drinking water and gross beta trending for air particulates was initiated in 1996. Other radionuclides detected that are the result of plant operation, but not required for reporting, are trended.

A comparison of annual mean concentrations of effluent-based detected radionuclides to historical results provided trending bases. Frequency of detection and concentrations related to SLC reporting levels (Table 2.2-A) were used as criteria for trending conclusions. All 2012 maximum percentages of reporting levels attributed to CNS operation were well below the 100% action level. The highest value reached during 2012 due to CNS operation was 8.00% for H-3 in drinking water sample collected from location 214.

Selected Licensee Commitment section 16.11-13 addresses actions to be taken if radionuclides other than those required are detected in samples collected. The occurrences of these radionuclides are the result of CNS liquid effluents which contained the radionuclides.

During 1984-1986, all net activity results (sample minus background), both positive and negative were included in calculation of sample mean. A change in the EnRad gamma spectroscopy system on September 1, 1987, decreased the number of measurements yielding detectable low-level activity for indicator and control location samples. It was thought that the method used by the previous system was vulnerable to false-positive results.

All 2012 sample analysis results were reviewed to detect and identify any significant trends. Tables and graphs are used throughout this section to display data from effluent-based radionuclides identified since the system change in late 1987. All negative concentration values were replaced with zero for calculation purposes. Any zero concentrations used in tables or graphs represent activity measurements less than detectable levels.

Review of all 2012 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 CNS site and surrounding areas that were attributable to plant operations.

3.1 AIRBORNE RADIOIODINE AND PARTICULATES

In 2012, 260 radioiodine and particulate samples were analyzed, 208 from four indicator locations and 52 at the control location. Particulate samples were analyzed weekly for gamma and gross beta. Radioiodine samples received a weekly gamma analysis.

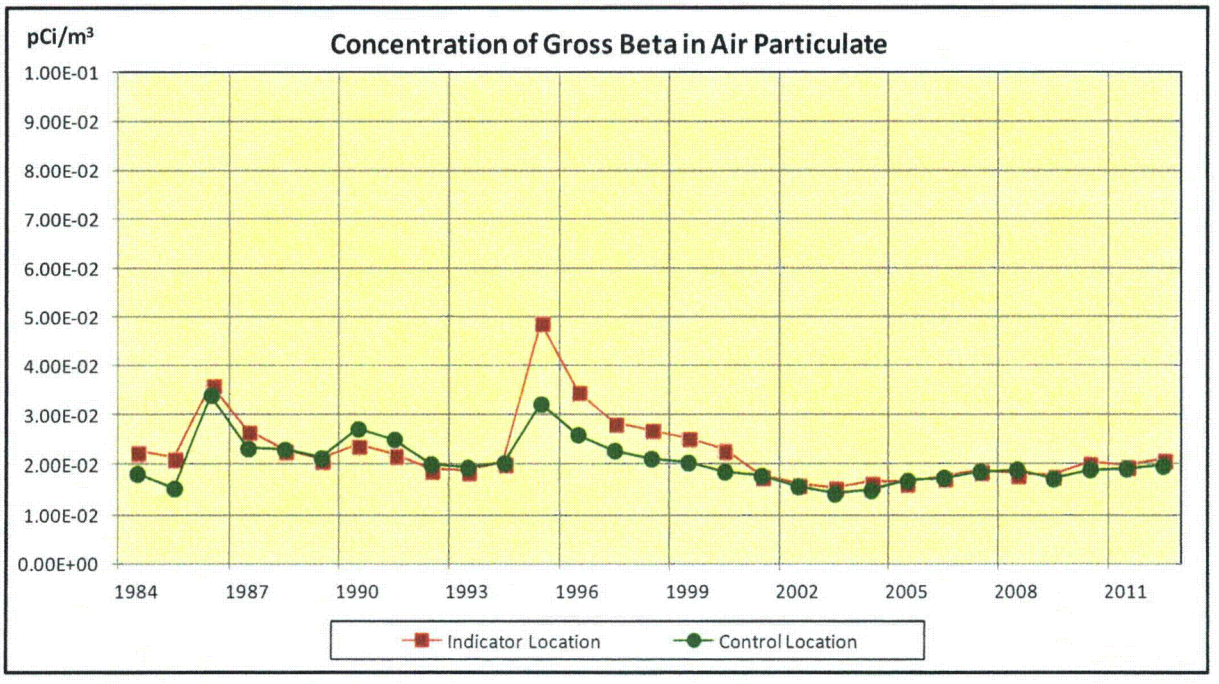
Figure 3.1 shows individual sample gross beta results for the indicator location with highest annual mean and the control location samples during 2012. The two sample locations' results are similar in concentration and have varied negligibly since preoperational periods.

There were no detectable gamma emitters identified for particulate filters analyzed during 2012. Table 3.1-A shows the highest indicator annual mean and control location annual mean for gross beta in air particulate.

There was no detectable I-131 in air radioiodine samples analyzed in 2012. Table 3.1-B shows the highest indicator annual mean and control location annual mean for I-131 since 1984 (preoperational period). The table shows similar concentrations for both the indicator and control locations and the activities decreasing from early in the operational history of the plant. No I-131 activity due to CNS plant operations has been detected since 1987.

K-40 and Be-7 that occur naturally were routinely detected in charcoal cartridges collected during the year.

Figure 3.1



There is no reporting level for gross beta in air particulate

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

Year	Indicator Location (pCi/m^3)	Control Location (pCi/m^3)
1984	2.25E-2	1.82E-2
1985	2.12E-2	1.53E-2
1986	3.62E-2	3.41E-2
1987	2.67E-2	2.32E-2
1988	2.29E-2	2.30E-2
1989	2.11E-2	2.13E-2
1990	2.39E-2	2.72E-2
1991	2.19E-2	2.51E-2
1992	1.90E-2	2.01E-2
1993	1.87E-2	1.94E-2
1994	2.03E-2	2.03E-2
1995	4.88E-2	3.23E-2
1996	3.49E-2	2.60E-2
1997	2.83E-2	2.28E-2
1998	2.69E-2	2.12E-2
1999	2.53E-2	2.04E-2
2000	2.28E-2	1.86E-2
2001	1.76E-2	1.78E-2
2002	1.60E-2	1.57E-2
2003	1.54E-2	1.42E-2
2004	1.65E-2	1.49E-2
2005	1.66E-2	1.68E-2
2006	1.74E-2	1.74E-2
2007	1.88E-2	1.86E-2
2008	1.80E-2	1.90E-2
2009	1.78E-2	1.72E-2
2010	2.03E-2	1.90E-2
2011	1.98E-2	1.92E-2
Average (2002 - 2011)	1.77E-2	1.72E-2
2012	2.09E-2	1.97E-2

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

Year	Indicator Location (pCi/m^3)	Control Location (pCi/m^3)
1984	1.30E-3	1.46E-2
1985	4.75E-3	2.38E-2
1986	1.43E-2	1.02E-2
1987	1.38E-2	0.00E0
1988	0.00E0	0.00E0
1989	0.00E0	0.00E0
1990	0.00E0	0.00E0
1991	0.00E0	0.00E0
1992	0.00E0	0.00E0
1993	0.00E0	0.00E0
1994	0.00E0	0.00E0
1995	0.00E0	0.00E0
1996	0.00E0	0.00E0
1997	0.00E0	0.00E0
1998	0.00E0	0.00E0
1999	0.00E0	0.00E0
2000	0.00E0	0.00E0
2001	0.00E0	0.00E0
2002	0.00E0	0.00E0
2003	0.00E0	0.00E0
2004	0.00E0	0.00E0
2005	0.00E0	0.00E0
2006	0.00E0	0.00E0
2007	0.00E0	0.00E0
2008	0.00E0	0.00E0
2009	0.00E0	0.00E0
2010	0.00E0	0.00E0
2011	5.53E-2	5.65E-2
2012	0.00E0	0.00E0

0.00E0 = no detectable measurements
2011 concentration affected by Fukushima Daiichi

3.2 DRINKING WATER

Gross beta and gamma spectroscopy were performed on 26 drinking water samples. The samples were composited to create 8 quarterly samples that were analyzed for tritium. One indicator location was sampled, along with one control location.

No gamma emitting radionuclides were identified in 2012 drinking water samples. There have been no gamma emitting radionuclides identified in drinking water samples since 1988.

Table 3.2 shows highest annual mean gross beta concentrations for the indicator location and control location since preoperation. The indicator location (downstream of the plant effluent release point) average concentration was 1.89 pCi/l in 2012 and the control location concentration was 1.84 pCi/l. The 2011 indicator mean was 2.01 pCi/l. The table shows that current gross beta levels are not statistically different from preoperational concentrations.

Tritium was detected in the four indicator samples and the four control samples during 2012. The mean indicator tritium concentration for 2012 was 954 pCi/l, 4.77% of reporting level. The mean control tritium concentration for 2012 was 502 pCi/l, 2.51% of reporting level. Figure 3.2 and Table 3.2 display the highest indicator and control location annual mean concentrations for tritium since 1984.

The concentration of tritium in drinking water is affected by releases from the Catawba plant and the McGuire Nuclear Station, located approximately 40 miles upstream of the Catawba plant on the Catawba River.

The dose for consumption of water was less than one mrem per year, historically and for 2012; therefore low-level iodine analysis is not required.

Figure 3.2

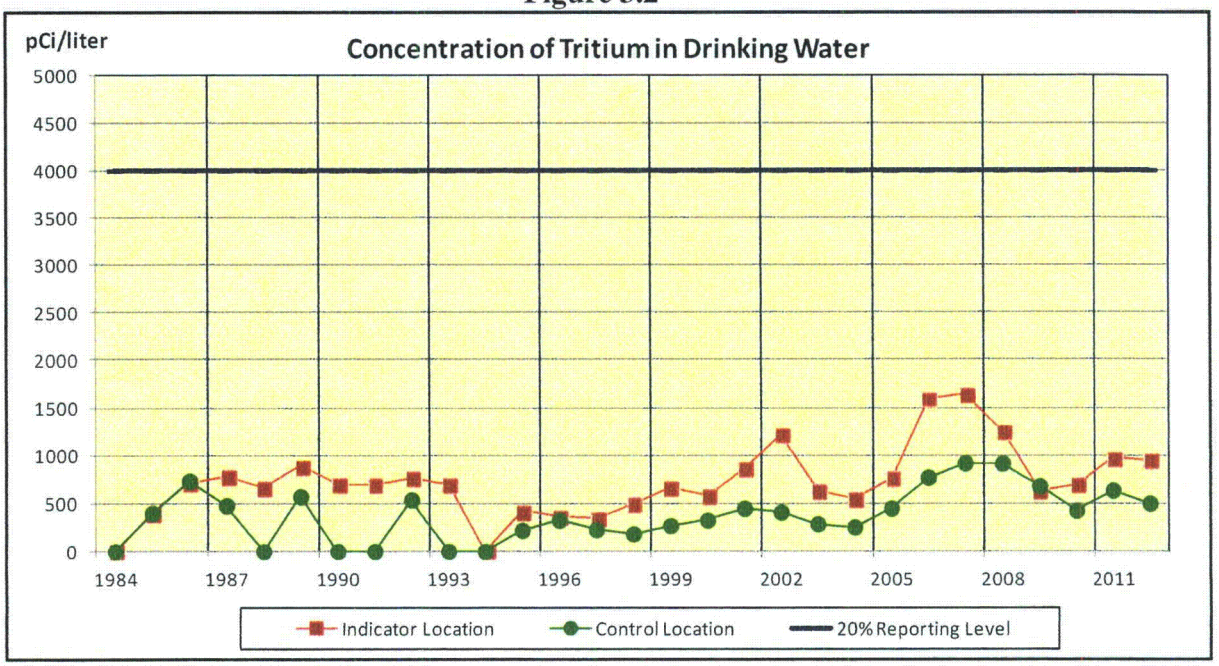


Table 3.2 Mean Concentration of Radionuclides in Drinking Water

YEAR	Gross Beta (pCi/l)		Tritium (pCi/l)	
	Indicator Location	Control Location	Indicator Location	Control Location
1984	4.72	1.83	3.10E-2	3.10E-2
1985	2.70	2.24	4.13E2	4.00E2
1986	3.11	2.26	7.23E2	7.33E2
1987	3.10	2.40	7.80E2	4.80E2
1988	3.60	2.60	6.64E2	0.00E0
1989	3.60	2.90	8.91E2	5.72E2
1990	4.50	3.20	7.03E2	0.00E0
1991	3.70	2.20	7.04E2	0.00E0
1992	3.20	2.40	7.65E2	5.38E2
1993	3.50	2.50	7.06E2	0.00E0
1994	3.30	2.70	0.00E0	0.00E0
1995	4.80	4.50	4.28E2	2.21E2
1996	3.08	3.14	3.71E2	3.27E2
1997	3.74	3.15	3.54E2	2.28E2
1998	2.51	2.44	5.07E2	1.83E2
1999	3.55	2.48	6.71E2	2.70E2
2000	3.04	2.27	5.87E2	3.26E2
2001	3.49	2.30	8.66E2	4.50E2
2002	3.44	2.36	1.22E3	4.11E2
2003	2.27	2.02	6.36E2	2.88E2
2004	1.88	1.69	5.47E2	2.54E2
2005	2.05	1.84	7.69E2	4.50E2
2006	2.30	2.17	1.59E3	7.70E2
2007	2.34	2.21	1.65E3	9.18E2
2008	2.81	2.16	1.25E3	9.16E2
2009	2.07	1.99	6.34E2	6.81E2
2010	1.84	1.80	7.05E2	4.27E2
2011	2.01	1.71	9.73E2	6.36E2
2012	1.89	1.84	9.54E2	5.02E2

0.00E0 = no detectable measurements
1984 - 1986 mean based on all net activity

3.3 SURFACE WATER

A total of 39 monthly surface water samples were analyzed for gamma emitting radionuclides. The samples were composited to create 12 quarterly samples for tritium analysis. Two indicator locations and one control location were sampled. One indicator location (208) is located near the liquid effluent discharge point.

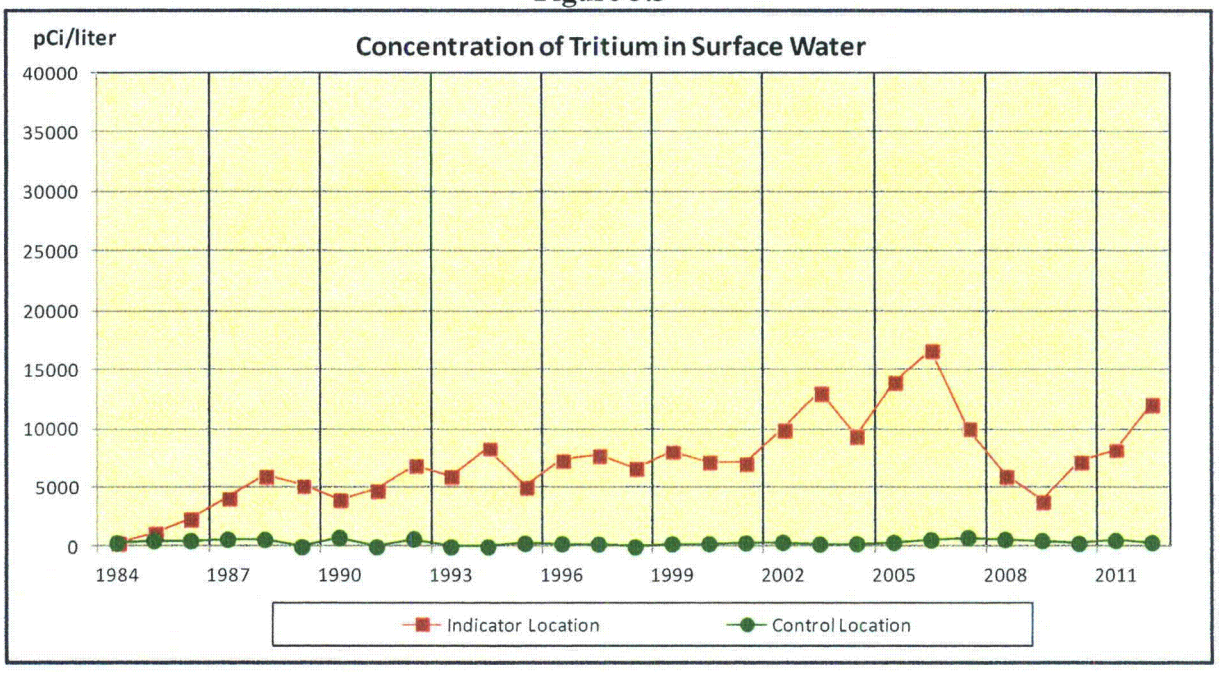
All 2012 indicator location samples contained tritium with an average concentration of 6,510 pCi/l. Indicator Location 208 (Discharge Canal) showed a range of activities from 3,650 to 33,000 pCi/l which had the highest mean concentration of 12,100 pCi/l. Tritium was detected in all four control samples during 2012 with an average concentration of 371 pCi/l. Tritium in surface water was higher in 2012 than in the past several years due to dual unit shut down that occurred in December of 2011. A larger than normal amount of water was released from the plant to support the shutdown. This activity is addressed in reference 6.15.

No gamma emitting radionuclides were identified in 2012 surface water samples. Gamma spectroscopy analysis detected Co-58 and Co-60 in one indicator sample during 2011. Table 3.3 summarizes the indicator annual means of radionuclides detected since the change in the gamma spectroscopy analysis system in 1987. Visual inspection of the tabular data did not reveal any increasing trends.

Figure 3.3 displays the highest indicator and control annual means for tritium since 1984. Table 3.3 lists the highest indicator annual means.

The concentration of tritium in surface water is affected by releases from the Catawba plant and the McGuire Nuclear Station, located approximately 40 miles upstream of the Catawba plant on the Catawba River.

Figure 3.3



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. A drinking water pathway exists for Catawba Nuclear Station, so this limit does not apply for surface water. See section 3.2 for drinking water results.

Table 3.3 Mean Concentrations of Radionuclides in Surface Water (pCi/l)

YEAR	Co-58	Co-60	Nb-95	Cs-137	H-3 Indicator	H-3 Control
1984	4.59E-1	5.71E-1	6.48E-1	9.08E-1	3.35E2	3.18E2
1985	3.46E0	4.83E-2	2.70E0	8.19E-1	1.19E3	5.05E2
1986	3.10E-1	-4.12E-2	2.05E0	4.85E-1	2.34E3	5.05E2
1987	0.00E0	3.10E0	4.30E0	9.90E0	4.17E3	6.20E2
1988	9.20E0	0.00E0	0.00E0	0.00E0	6.03E3	6.07E2
1989	0.00E0	0.00E0	0.00E0	0.00E0	5.27E3	0.00E0
1990	6.50E0	0.00E0	0.00E0	0.00E0	3.98E3	7.73E2
1991	0.00E0	0.00E0	0.00E0	0.00E0	4.87E3	0.00E0
1992	0.00E0	0.00E0	0.00E0	0.00E0	6.91E3	6.64E2
1993	4.70E0	1.80E0	0.00E0	0.00E0	5.98E3	0.00E0
1994	0.00E0	0.00E0	0.00E0	0.00E0	8.42E3	0.00E0
1995	0.00E0	0.00E0	0.00E0	0.00E0	5.13E3	2.89E2
1996	0.00E0	0.00E0	0.00E0	0.00E0	7.36E3	2.61E2
1997	0.00E0	0.00E0	0.00E0	0.00E0	7.77E3	2.20E2
1998	0.00E0	0.00E0	0.00E0	0.00E0	6.61E3	0.00E0
1999	0.00E0	0.00E0	0.00E0	0.00E0	8.13E3	2.41E2
2000	0.00E0	0.00E0	0.00E0	0.00E0	7.19E3	2.56E2
2001	0.00E0	0.00E0	0.00E0	0.00E0	7.13E3	3.28E2
2002	0.00E0	0.00E0	0.00E0	0.00E0	1.00E4	3.80E2
2003	0.00E0	0.00E0	0.00E0	0.00E0	1.31E4	2.37E2
2004	0.00E0	0.00E0	0.00E0	0.00E0	9.43E3	2.60E2
2005	0.00E0	0.00E0	0.00E0	0.00E0	1.40E4	3.78E2
2006	0.00E0	0.00E0	0.00E0	0.00E0	1.67E4	5.83E2
2007	0.00E0	0.00E0	0.00E0	0.00E0	1.01E4	7.82E2
2008	6.80E0	1.16E1	0.00E0	0.00E0	6.02E3	6.31E2
2009	9.40E0	1.06E1	0.00E0	0.00E0	3.93E3	5.29E2
2010	0.00E0	0.00E0	0.00E0	0.00E0	7.26E3	2.94E2
2011	8.75E0	1.96E1	0.00E0	0.00E0	8.29E3	5.41E2
2012	0.00E0	0.00E0	0.00E0	0.00E0	1.21E4	3.71E2

0.00E0 = no detectable measurements 1984 - 1986 mean based on all net activity

3.4 GROUND WATER

A total of four ground water samples was collected and analyzed for gamma emitters and tritium. There is one indicator location and no control location.

Naturally occurring K-40 was the only radionuclide identified during 2012. There have been no radionuclides identified in ground water samples since 1988.

3.5 MILK

A total of 26 milk samples was analyzed by gamma spectroscopy and low level iodine during 2012. There was one control location sampled. No indicator dairies were identified by the 2012 land use census.

There were no gamma emitting radionuclides identified in milk samples during 2012. Airborne Cs-137 has not been released from the plant since 1992.

Cs-137 was last detected in an indicator sample during 1996. The occurrence of Cs-137 in milk samples has been noted several times since 1984. Cs-137 attributable to past nuclear weapons testing is known to exist in many environmental media at low, highly variable levels.

Table 3.5 lists highest indicator location annual mean and control location annual mean for Cs-137 since the preoperational period. Concentrations are similar for the two sample types. Cs-137 is the only radionuclide, other than K-40 and Be-7, reported in milk samples since 1988.

Table 3.5 Mean Concentration of Radionuclides in Milk

YEAR	Cs-137 Indicator (pCi/l)	Cs-137 Control (pCi/l)
1984	2.95E0	2.98E0
1985	2.11E0	2.12E0
1986	3.76E0	4.54E0
1987	5.00E0	5.50E0
1988	3.20E0	3.80E0
1989	0.00E0	0.00E0
1990	8.00E0	6.70E0
1991	0.00E0	0.00E0
1992	3.40E0	5.00E0
1993	5.00E0	0.00E0
1994	2.80E0	0.00E0
1995	8.60E0	0.00E0
1996	6.05E0	0.00E0
1997	0.00E0	0.00E0
1998	0.00E0	0.00E0
1999	0.00E0	0.00E0
2000	0.00E0	0.00E0
2001	0.00E0	0.00E0
2002	0.00E0	0.00E0
2003	0.00E0	0.00E0
2004	NO INDICATOR LOCATION	0.00E0
2005	NO INDICATOR LOCATION	0.00E0
2006	NO INDICATOR LOCATION	0.00E0
2007	NO INDICATOR LOCATION	0.00E0
2008	NO INDICATOR LOCATION	0.00E0
2009	NO INDICATOR LOCATION	0.00E0
2010	NO INDICATOR LOCATION	0.00E0
2012	NO INDICATOR LOCATION	0.00E0
2012	NO INDICATOR LOCATION	0.00E0

0.00E0 = no detectable measurements
1984 - 1986 mean based on all net activity

3.6 BROADLEAF VEGETATION

Gamma spectroscopy was performed on 60 broadleaf vegetation samples during 2012. Four indicator locations and one control location were sampled.

There were no gamma emitting radionuclides identified in vegetation samples during 2012. K-40 and Be-7 were observed in broadleaf vegetation samples.

Figure 3.6 shows indicator and control annual means for Cs-137 in vegetation since 1984. Table 3.6 lists indicator and annual means. Values shown from 1984 to 2012 show a stable trend for Cs-137 in vegetation.

No airborne Cs-137 has been released from the plant since 1992. Cs-137 attributable to past nuclear weapons testing is known to exist in many environmental media at low and highly variable levels.

Figure 3.6

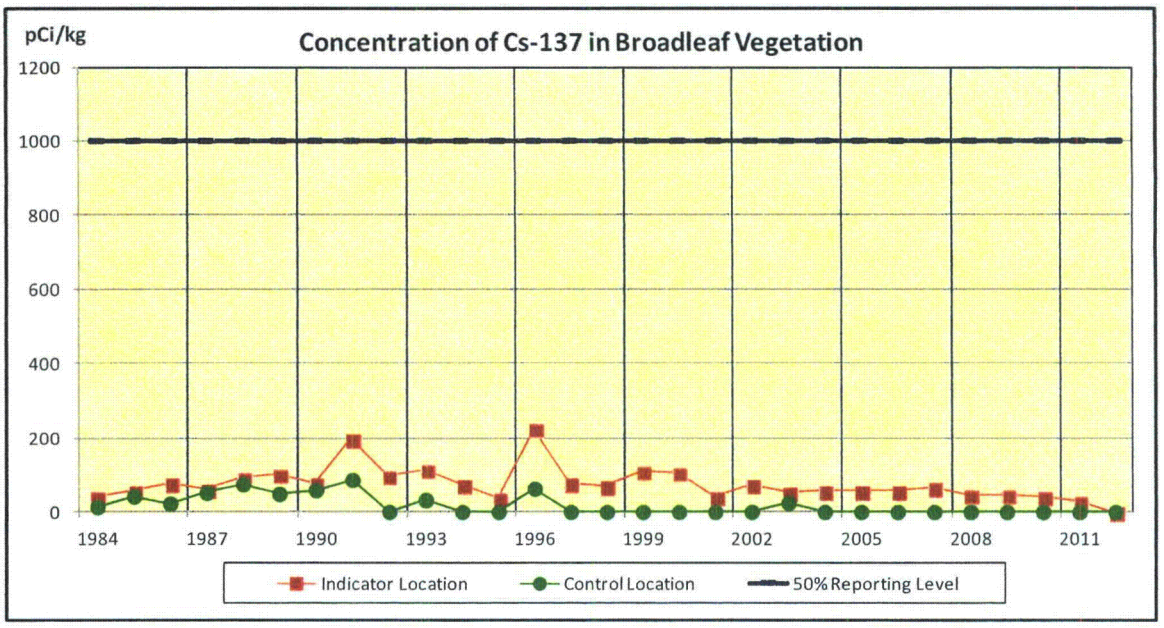


Table 3.6 Mean Concentration of Radionuclides in Broadleaf Vegetation

YEAR	Cs-137 Indicator (pCi/kg)	Cs-137 Control (pCi/kg)
1984	3.76E1	1.30E1
1985	5.48E1	4.16E1
1986	7.42E1	2.22E1
1987	6.10E1	5.10E1
1988	9.10E1	7.40E1
1989	1.00E2	4.80E1
1990	7.70E1	5.80E1
1991	1.98E2	8.60E1
1992	9.70E1	0.00E0
1993	1.13E2	3.20E1
1994	7.00E1	0.00E0
1995	3.60E1	0.00E0
1996	2.23E2	6.22E1
1997	7.57E1	0.00E0
1998	6.53E1	0.00E0
1999	1.08E2	0.00E0
2000	1.04E2	0.00E0
2001	3.76E1	0.00E0
2002	7.02E1	0.00E0
2003	4.96E1	2.40E1
2004	5.45E1	0.00E0
2005	5.48E1	0.00E0
2006	5.79E1	0.00E0
2007	6.31E1	0.00E0
2008	4.44E1	0.00E0
2009	4.25E1	0.00E0
2010	3.77E1	0.00E0
2011	2.62E1	0.00E0
2012	0.00E0	0.00E0

0.00E0 = no detectable measurements
1984 - 1986 mean based on all net activity
2011 concentration affected by Fukushima Daiichi

3.7 FOOD PRODUCTS

Collection of food product samples (crops) from an irrigated garden began in 1989. The irrigated garden is located on Lake Wylie downstream from CNS, Location 260. During the 2012 growing season, nine samples were collected and analyzed for gamma radionuclides. There is no control location for this media type.

Table 3.7 shows Cs-137 indicator location highest annual mean concentrations since 1989.

K-40 and Be-7 were observed in food product samples.

Table 3.7 Mean Concentration of Radionuclides in Food Products

YEAR	Cs-137 Indicator (pCi/kg)
1989	0.00E0
1990	0.00E0
1991	0.00E0
1992	0.00E0
1993	2.50E1
1994	0.00E0
1995	0.00E0
1996	0.00E0
1997	0.00E0
1998	0.00E0
1999	0.00E0
2000	0.00E0
2001	0.00E0
2002	0.00E0
2003	0.00E0
2004	0.00E0
2005	0.00E0
2006	0.00E0
2007	0.00E0
2008	0.00E0
2009	0.00E0
2010	0.00E0
2011	0.00E0
2012	0.00E0

0.00E0 = no detectable measurements
There is no control location for Food Products.

3.8 FISH

Gamma spectroscopy was performed on 12 fish samples collected during 2012. One downstream indicator location and one control location were sampled.

Co-58, Co-60, and Cs-137 are normally the predominant radionuclides identified in fish samples. Cs-137 was detected in one indicator sample in 2012 at a concentration of 18.4 pCi/kg, which is 0.92% of the reporting level. Cs-137 was not detected in any control location samples.

Figures 3.8-1, 3.8-2, and 3.8-3 are graphs displaying annual mean concentrations for Co-58, Co-60, and Cs-137. Table 3.8 depicts the highest indicator location annual mean for radionuclides detected. In addition, radionuclides identified in fish samples since 1988 have been included in the table. Overall, radionuclides have not shown a significant trend or accumulation.

K-40 was observed in some fish samples collected during 2012.

Figure 3.8-1

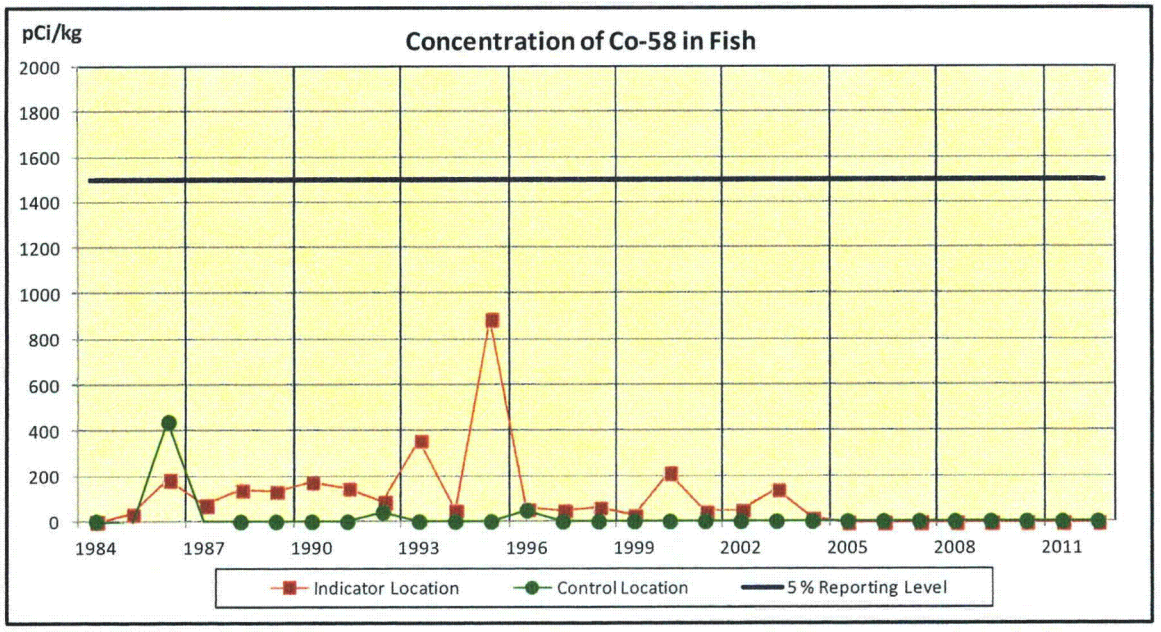


Figure 3.8-2

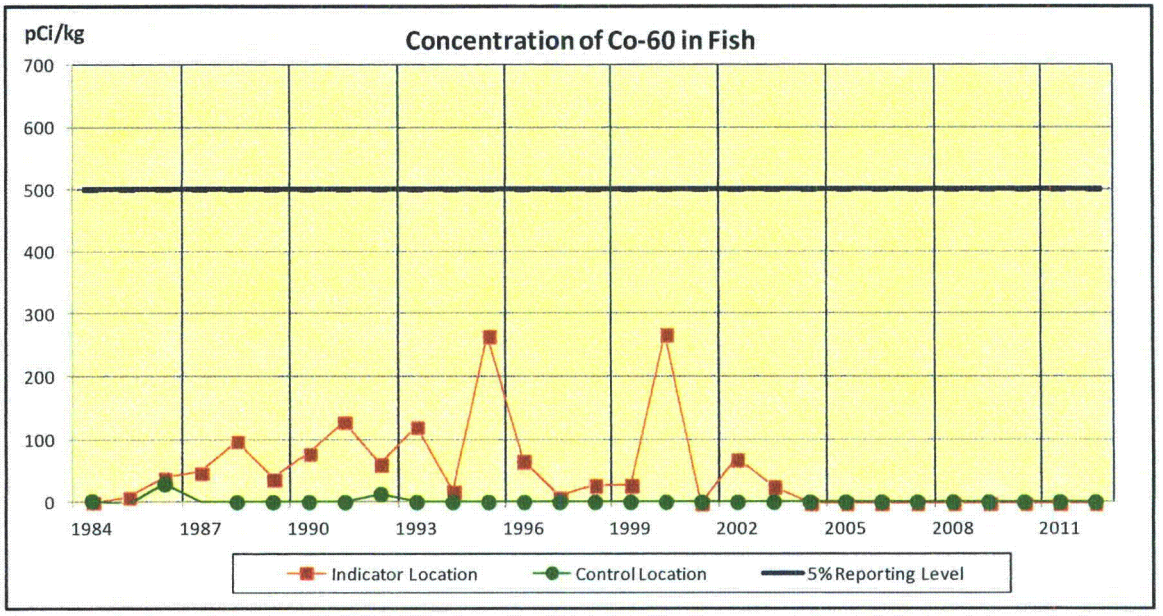


Figure 3.8-3

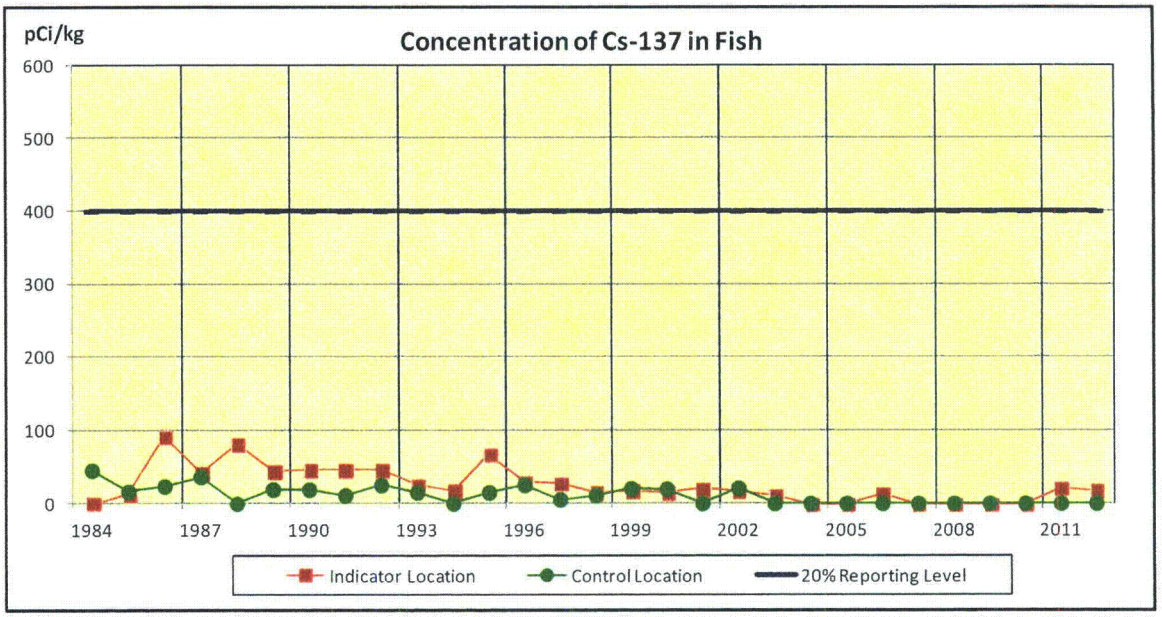


Table 3.8 Mean Concentrations of Radionuclides in Fish (pCi/kg)

Year	Mn-54	Co-58	Co-60	Cs-134	Cs-137	Nb-95	Fe-59	Sb-122	Sb-125
1984	3.07E0	3.00E0	6.11E-1	-5.32E0	1.83E0	0.00E0	0.00E0	0.00E0	0.00E0
1985	7.68E-1	3.40E1	9.11E0	3.22E0	1.28E1	5.07E0	0.00E0	0.00E0	0.00E0
1986	2.01E1	1.86E2	4.01E1	3.51E1	9.29E1	0.00E0	7.30E0	0.00E0	0.00E0
1987	7.24E0	7.57E1	4.81E1	3.83E0	4.27E1	5.40E0	0.00E0	0.00E0	0.00E0
1988	2.85E1	1.40E2	9.70E1	1.67E1	8.24E1	0.00E0	0.00E0	0.00E0	0.00E0
1989	8.28E0	1.33E2	3.83E1	1.47E1	4.37E1	8.58E-1	0.00E0	0.00E0	0.00E0
1990	2.51E1	1.75E2	7.77E1	1.32E1	4.66E1	3.33E0	0.00E0	7.00E0	9.25E0
1991	3.15E1	1.46E2	1.29E2	1.03E1	4.60E1	7.90E-1	2.30E0	0.00E0	7.45E0
1992	1.34E1	9.02E1	6.20E1	1.27E1	4.61E1	0.00E0	0.00E0	0.00E0	0.00E0
1993	2.14E1	3.58E2	1.21E2	2.73E0	2.56E1	0.00E0	0.00E0	0.00E0	0.00E0
1994	1.91E0	4.75E1	1.81E1	0.00E0	1.75E1	0.00E0	0.00E0	0.00E0	1.45E1
1995	5.65E1	8.90E2	2.66E2	0.00E0	6.77E1	1.38E1	0.00E0	0.00E0	0.00E0
1996	0.00E0	5.95E1	6.68E1	0.00E0	3.02E1	0.00E0	0.00E0	0.00E0	0.00E0
1997	0.00E0	4.93E1	9.88E0	0.00E0	2.74E1	0.00E0	0.00E0	0.00E0	0.00E0
1998	0.00E0	6.44E1	2.86E1	0.00E0	1.58E1	0.00E0	0.00E0	0.00E0	0.00E0
1999	0.00E0	3.12E1	2.71E1	0.00E0	1.87E1	0.00E0	0.00E0	0.00E0	0.00E0
2000	0.00E0	2.13E2	2.69E2	0.00E0	1.52E1	0.00E0	0.00E0	0.00E0	0.00E0
2001	0.00E0	4.66E1	0.00E0	0.00E0	2.08E1	0.00E0	0.00E0	0.00E0	0.00E0
2002	0.00E0	5.23E1	7.00E1	0.00E0	1.73E1	0.00E0	0.00E0	0.00E0	0.00E0
2003	0.00E0	1.43E2	2.61E1	0.00E0	1.19E1	0.00E0	0.00E0	0.00E0	0.00E0
2004	4.92E1	1.81E1	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2005	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2006	0.00E0	0.00E0	0.00E0	0.00E0	1.44E1	0.00E0	0.00E0	0.00E0	0.00E0
2007	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2008	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2009	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2010	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2011	0.00E0	0.00E0	0.00E0	0.00E0	2.16E1	0.00E0	0.00E0	0.00E0	0.00E0
2012	0.00E0	0.00E0	0.00E0	0.00E0	1.84E1	0.00E0	0.00E0	0.00E0	0.00E0

0.00E0 = no detectable measurements

3.9 SHORELINE SEDIMENT

During 2012, a total of 6 shoreline sediment samples was analyzed, four from two indicator locations and two from the control location.

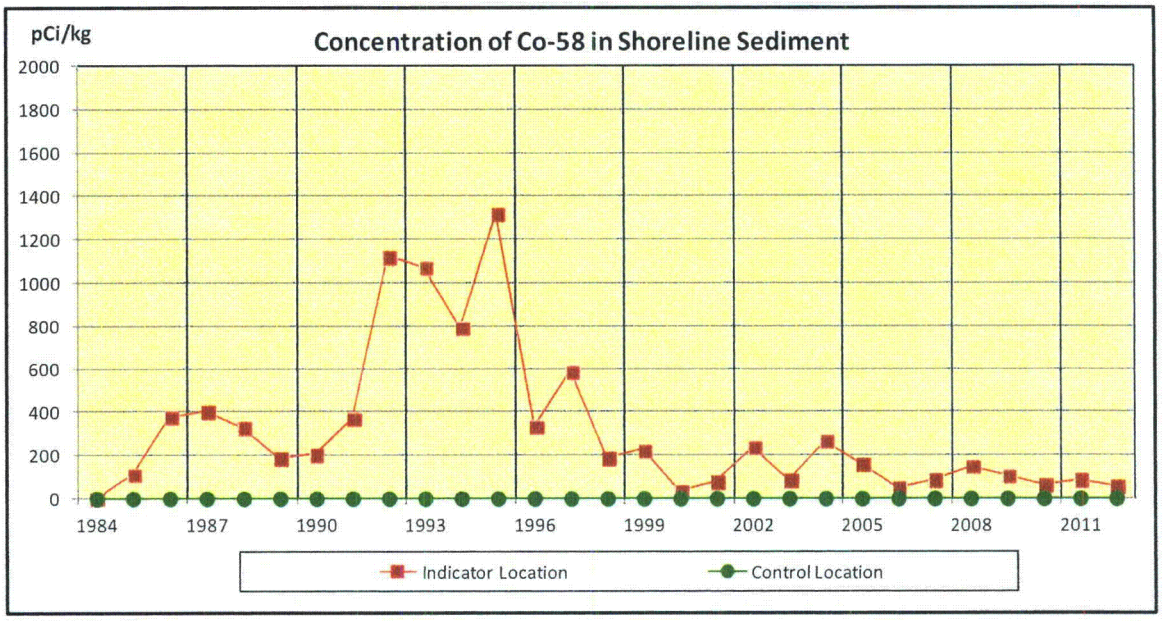
Co-58 and Co-60 were identified in two samples collected from indicator location 208, which is closest to the plant's liquid effluent release point. Cs-137 was identified in one sample collected from location 208. Naturally occurring K-40 was identified in many of the indicator and control locations. Activity released in plant effluents has decreased since 1996 and as a result decreased activity has been measured in the environment.

The shoreline sediment location with the highest annual mean for all detectable radionuclides was location 208. Radionuclides identified at location 208 consist of Co-58 with an annual mean concentration of 55.9 pCi/kg, Co-60 with an annual mean concentration of 170 pCi/kg, and Cs-137 with an annual mean concentration of 31.5 pCi/kg. Naturally occurring K-40 and Be-7 were also identified in samples from this location.

Table 3.9 lists highest indicator location annual mean since 1984. Included in the table are radionuclides that have been identified in shoreline sediment samples since 1988.

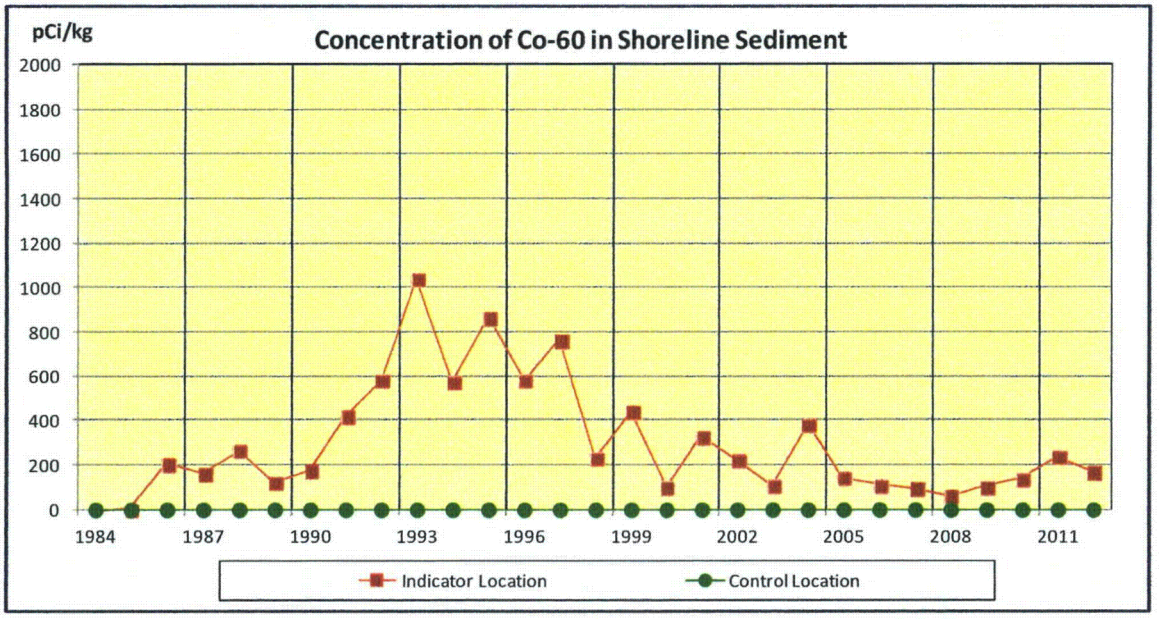
Figures 3.9-1, 3.9-2, and 3.9-3 are graphs displaying annual mean concentrations for Co-58, Co-60, and Cs-137.

Figure 3.9-1



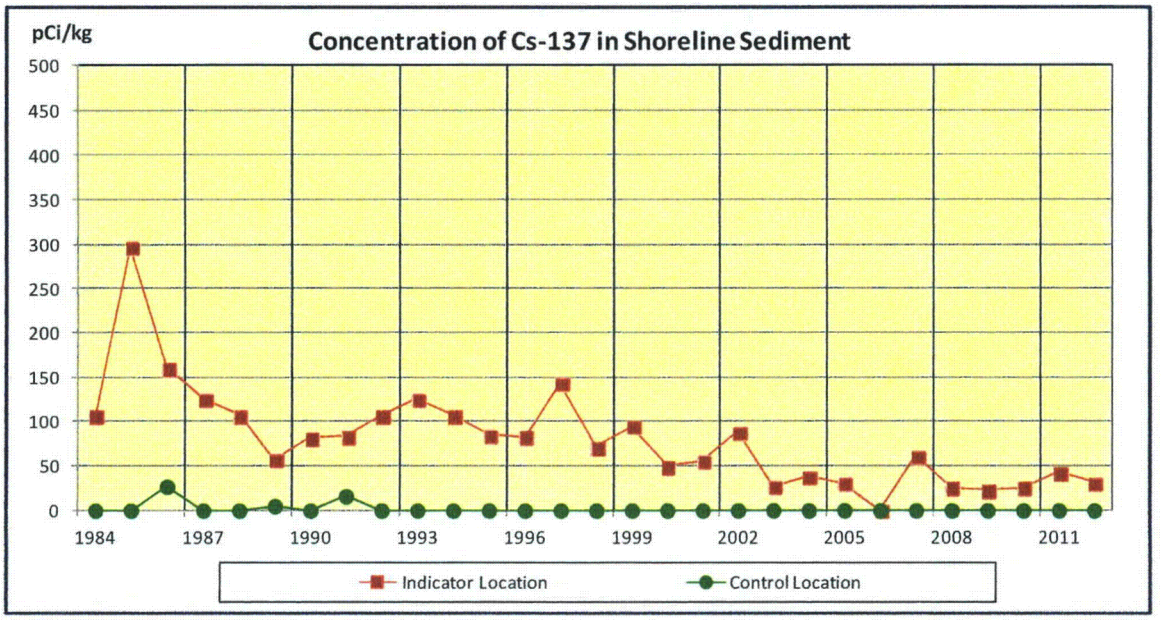
There is no reporting level for Co-58 in Shoreline Sediment

Figure 3.9-2



There is no reporting level for Co-60 in Shoreline Sediment

Figure 3.9-3



There is no reporting level for Cs-137 in Shoreline Sediment

Table 3.9 Mean Concentrations of Radionuclides in Shoreline Sediment (pCi/kg)

Year	Mn-54	Co-58	Co-60	Nb-95	Zr-95	Cs-134	Cs-137	Co-57	Sb-125
1984	1.03E0	4.40E0	-2.34E0	0.00E0	0.00E0	3.19E1	1.07E2	0.00E0	0.00E0
1985	-3.12E0	1.16E2	5.18E0	0.00E0	0.00E0	2.11E2	2.97E2	0.00E0	0.00E0
1986	1.09E2	3.79E2	2.05E2	0.00E0	3.96E1	6.50E1	1.61E2	0.00E0	0.00E0
1987	8.83E1	4.08E2	1.61E2	4.22E1	0.00E0	6.08E1	1.26E2	0.00E0	0.00E0
1988	1.07E2	3.29E2	2.63E2	2.28E1	7.54E0	2.59E1	1.07E2	7.65E-1	3.68E0
1989	4.58E1	1.94E2	1.21E2	5.02E0	0.00E0	1.65E1	5.77E1	0.00E0	1.57E1
1990	5.39E1	2.08E2	1.77E2	0.00E0	0.00E0	1.66E1	8.18E1	0.00E0	7.15E0
1991	8.50E1	3.70E2	4.19E2	5.30E0	0.00E0	1.82E1	8.33E1	1.20E0	1.50E1
1992	1.17E2	1.13E3	5.80E2	3.50E0	0.00E0	1.69E1	1.07E2	3.00E0	2.70E1
1993	1.33E2	1.07E3	1.04E3	0.00E0	0.00E0	2.80E1	1.26E2	2.47E1	2.16E2
1994	4.93E1	7.98E2	5.73E2	0.00E0	0.00E0	5.67E0	1.07E2	4.38E0	4.60E1
1995	1.02E2	1.33E3	8.65E2	1.13E2	0.00E0	0.00E0	8.50E1	3.69E1	1.49E2
1996	8.73E1	3.39E2	5.81E2	0.00E0	0.00E0	0.00E0	8.30E1	0.00E0	1.96E2
1997	6.96E1	5.90E2	7.64E2	0.00E0	0.00E0	0.00E0	1.43E2	0.00E0	1.76E2
1998	3.07E1	1.88E2	2.30E2	0.00E0	0.00E0	0.00E0	7.11E1	0.00E0	0.00E0
1999	7.28E1	2.29E2	4.39E2	0.00E0	0.00E0	0.00E0	9.42E1	0.00E0	1.40E2
2000	0.00E0	3.90E1	1.03E2	0.00E0	0.00E0	0.00E0	4.96E1	0.00E0	0.00E0
2001	3.86E1	8.27E1	3.29E2	0.00E0	0.00E0	0.00E0	5.58E1	0.00E0	0.00E0
2002	3.51E1	2.41E2	2.22E2	0.00E0	0.00E0	0.00E0	8.83E1	0.00E0	0.00E0
2003	2.17E1	8.75E1	1.08E2	0.00E0	0.00E0	0.00E0	2.69E1	0.00E0	0.00E0
2004	6.60E1	2.67E2	3.83E2	0.00E0	0.00E0	0.00E0	3.79E1	0.00E0	0.00E0
2005	0.00E0	1.61E2	1.41E2	0.00E0	0.00E0	0.00E0	3.04E1	0.00E0	0.00E0
2006	0.00E0	5.40E1	1.11E2	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2007	0.00E0	8.77E1	9.46E1	0.00E0	0.00E0	0.00E0	6.13E1	0.00E0	0.00E0
2008	0.00E0	1.48E2	6.24E1	0.00E0	0.00E0	0.00E0	2.57E1	0.00E0	0.00E0
2009	0.00E0	1.10E2	1.04E2	0.00E0	0.00E0	0.00E0	2.27E1	0.00E0	0.00E0
2010	0.00E0	6.56E1	1.37E2	0.00E0	0.00E0	0.00E0	2.56E1	0.00E0	0.00E0
2011	0.00E0	8.36E1	2.36E2	0.00E0	0.00E0	3.62E1	4.33E1	1.05E1	0.00E0
2012	0.00E0	5.59E1	1.70E2	0.00E0	0.00E0	0.00E0	3.15E1	0.00E0	0.00E0

0.00E0 = no detectable measurements
1984 - 1986 mean based on all net activity
Negative values are calculated as zeroes

3.10 DIRECT GAMMA RADIATION

3.10.1 ENVIRONMENTAL TLD

In 2012, 164 TLDs were analyzed, 152 at indicator locations and 12 at control locations. TLDs are collected and analyzed quarterly. A transit background for environmental TLDs is determined based on ANSI N545. The highest annual mean exposure for an indicator location was 96.0 milliroentgen. The annual mean exposure for the control locations was 61.3 milliroentgen.

Figure 3.10-1 and Table 3.10-A show TLD inner ring (site boundary), outerRing (4-5 miles), and control location annual averages in milliroentgen per year. Preoperational data and rolling ten year operational data averages are also given. As shown in the graph, inner ring, outer ring, and control data averages historically compare closely. Inner and outer ring averages comprise a number of data points with control averages representing only three locations.

Figures 3.10-2 and 3.10-3 show the TLD mean for each inner and outer ring TLD location from 1986 through 2012.

The calculated total body dose (from gaseous effluents) for 2012 was 1.93E0 mrem, which is 2.41% of the average inner ring TLD values. Therefore, it can be concluded that discharges from the plant had very little impact upon the measured TLD values.

A TLD intercomparison program is conducted as part of the quality assurance program. Results of this program are included in section 5.10.

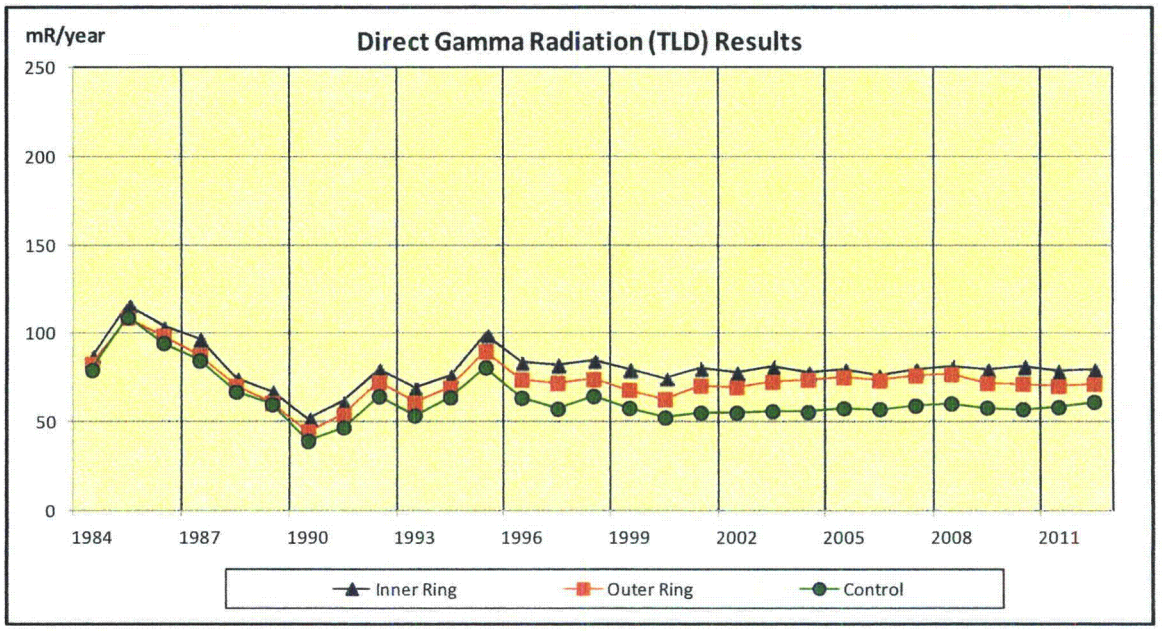
3.10.2 ISFSI

The Catawba Independent Spent Fuel Storage Installation (ISFSI) is a secured area constructed to provide dry storage for spent nuclear fuel. The principal components of the ISFSI are concrete vertical storage modules that hold stainless steel dry storage canisters containing irradiated fuel assemblies.

The ISFSI is located approximately 300 meters north of the Unit 2 reactor building. TLD results are evaluated quarterly to identify trends and demonstrate compliance with dose and dose rate limits at the ISFSI boundaries, the Owner Control fence north of ISFSI and at the Exclusion Area Boundary in the west sector. Catawba began storage of spent fuel at the ISFSI in 2007.

Doses measured by environmental TLDs show little or no change since the current TLD system was implemented.

Figure 3.10-1



There is no reporting level for Direct Radiation (TLD)

Table 3.10-A Direct Gamma Radiation (TLD) Results

Year	Inner Ring Average (mR/yr)	Outer Ring Average (mR/yr)	Control Average (mR/yr)
1984*	87.5	82.6	79.3
1985	117	109	109
1986	104	98.5	94.4
1987	97.0	87.4	84.7
1988	74.6	70.3	67.1
1989	67.1	60.8	60.0
1990	52.0	44.5	39.1
1991	62.0	54.1	46.7
1992	80.4	72.5	64.5
1993	70.3	60.9	53.6
1994	76.3	69.3	63.9
1995	99.6	89.7	80.8
1996	84.3	73.9	63.6
1997	82.4	71.9	57.4
1998	85.3	74.2	64.6
1999	80.0	68.1	57.8
2000	75.0	63.0	52.4
2001	81.0	70.5	55.2
2002	78.8	69.5	55.2
2003	81.7	72.6	56.0
2004	78.6	73.8	55.6
2005	79.8	75.2	57.7
2006	76.9	73.6	57.2
2007	80.5	76.4	59.2
2008	81.5	77.1	60.4
2009	79.9	71.9	58.0
2010	81.4	71.6	57.2
2011	78.9	70.3	58.3
Average (2002 – 2011)	79.8	73.2	57.5
2012	80.1	71.6	61.3

* Preoperational Data

Figure 3.10-2

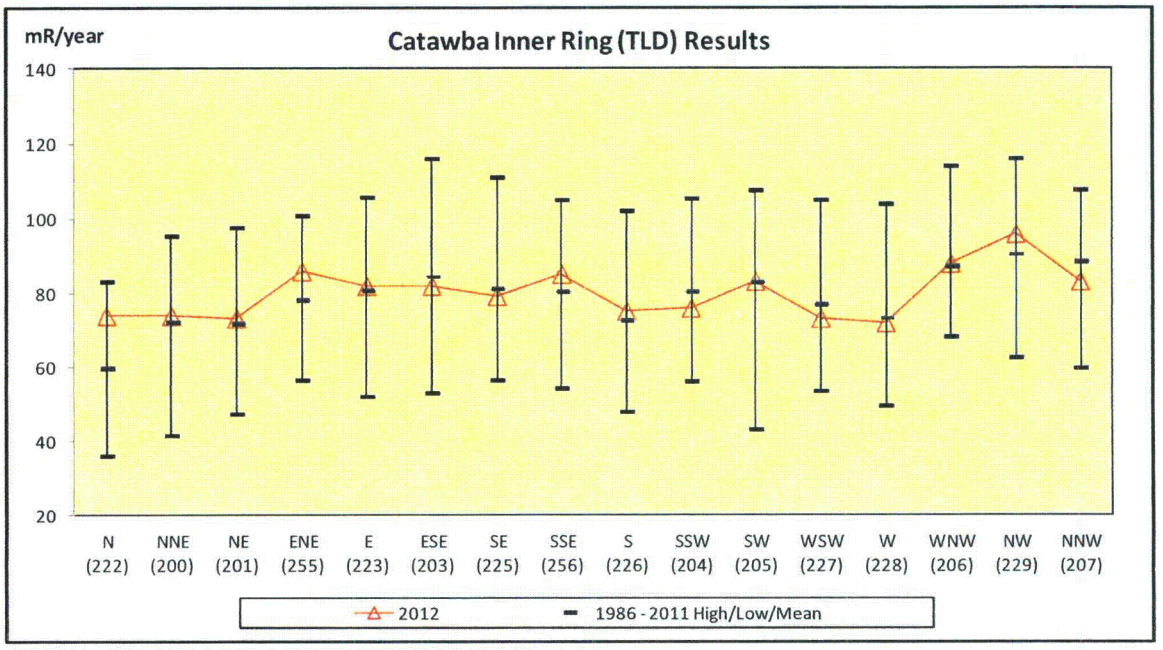


Table 3.10-B Direct Gamma Radiation (TLD) Results Inner Ring (mR/year)

Sector	Location	1986 – 2011 Mean	1986 – 2011 Low	1986 – 2011 High	2012
N	222	6.02E+01	3.63E+01	8.33E+01	7.40E+01
NNE	200	7.25E+01	4.17E+01	9.54E+01	7.40E+01
NE	201	7.22E+01	4.75E+01	9.76E+01	7.32E+01
ENE	255	7.87E+01	5.66E+01	1.01E+02	8.60E+01
E	223	8.13E+01	5.22E+01	1.06E+02	8.20E+01
ESE	203	8.50E+01	5.32E+01	1.16E+02	8.20E+01
SE	225	8.19E+01	5.66E+01	1.11E+02	7.92E+01
SSE	256	8.11E+01	5.45E+01	1.05E+02	8.52E+01
S	226	7.28E+01	4.81E+01	1.02E+02	7.52E+01
SSW	204	8.08E+01	5.63E+01	1.05E+02	7.60E+01
SW	205	8.35E+01	4.33E+01	1.08E+02	8.32E+01
WSW	227	7.74E+01	5.37E+01	1.05E+02	7.32E+01
W	228	7.38E+01	4.97E+01	1.04E+02	7.20E+01
WNW	206	8.78E+01	6.83E+01	1.14E+02	8.80E+01
NW	229	9.08E+01	6.27E+01	1.16E+02	9.60E+01
NNW	207	8.90E+01	5.99E+01	1.08E+02	8.32E+01

Figure 3.10-3

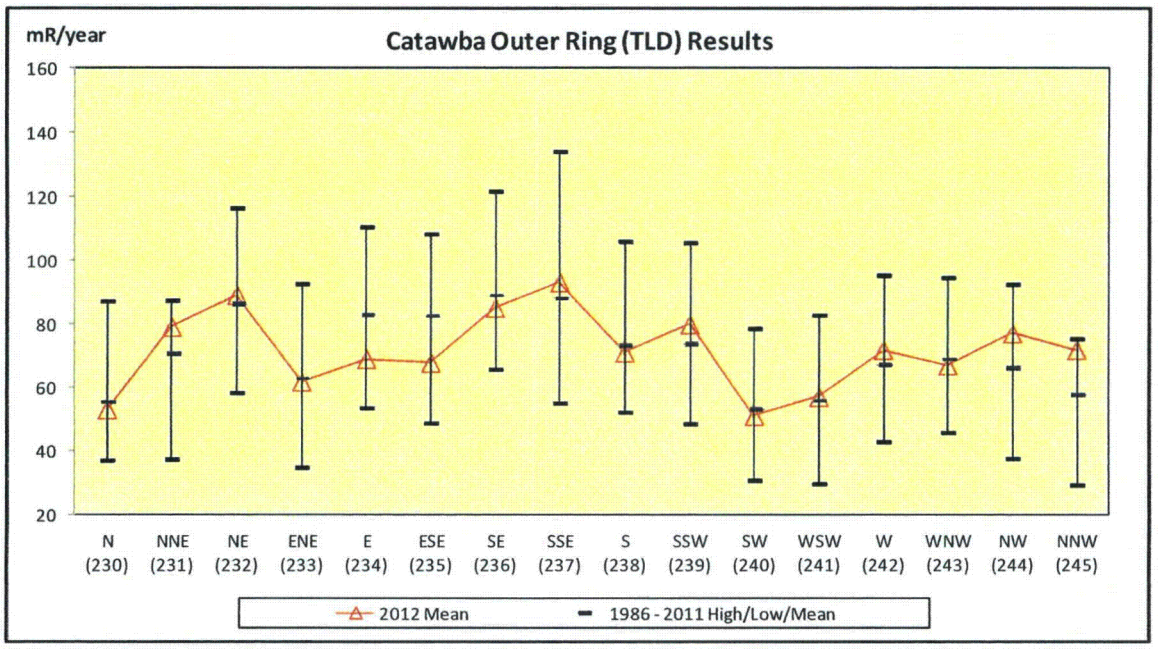


Table 3.10-C Direct Gamma Radiation (TLD) Results Outer Ring (mR/year)

Sector	Location	1986 – 2011 Mean	1986 – 2011 Low	1986 – 2011 High	2012
N	230	5.63E+01	3.72E+01	8.73E+01	5.32E+01
NNE	231	7.17E+01	3.75E+01	8.75E+01	7.92E+01
NE	232	8.71E+01	5.85E+01	1.17E+02	8.92E+01
ENE	233	6.38E+01	3.50E+01	9.27E+01	6.20E+01
E	234	8.35E+01	5.37E+01	1.11E+02	6.92E+01
ESE	235	8.32E+01	4.89E+01	1.09E+02	6.80E+01
SE	236	8.97E+01	6.60E+01	1.22E+02	8.52E+01
SSE	237	8.90E+01	5.53E+01	1.34E+02	9.32E+01
S	238	7.40E+01	5.24E+01	1.06E+02	7.12E+01
SSW	239	7.45E+01	4.87E+01	1.06E+02	8.00E+01
SW	240	5.38E+01	3.10E+01	7.87E+01	5.12E+01
WSW	241	5.68E+01	2.99E+01	8.29E+01	5.72E+01
W	242	6.77E+01	4.31E+01	9.55E+01	7.20E+01
WNW	243	6.96E+01	4.60E+01	9.47E+01	6.72E+01
NW	244	6.68E+01	3.78E+01	9.26E+01	7.72E+01
NNW	245	5.87E+01	2.95E+01	7.55E+01	7.20E+01

3.11 LAND USE CENSUS

The 2012 Annual Land Use Census was conducted July 9, and July 10, 2012 as required by SLC 16.11-14. Table 3.11 summarizes census results. A map indicating identified locations is shown in Figure 3.11.

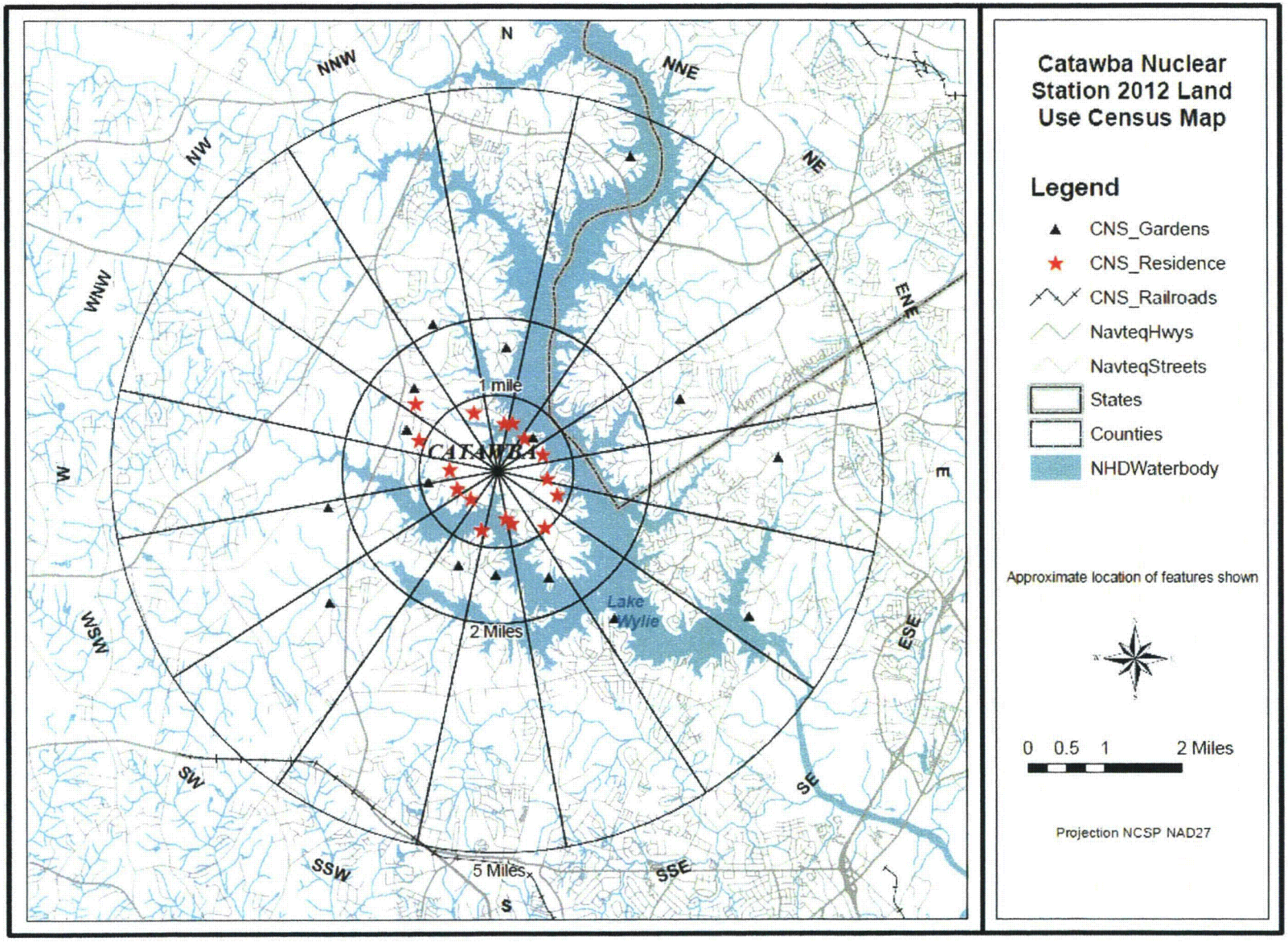
During the 2012 census no irrigated gardens (superior to existing gardens) or milk locations were identified. The nearest residence is located in the NE sector at 0.56 miles. No environmental program changes were required as a result of the 2012 land use census.

Table 3.11 Catawba 2012 Land Use Census Results

Sector		Distance (Miles)	Sector		Distance (Miles)
N	Nearest Residence	0.63	S	Nearest Residence	0.63
	Nearest Garden (irrigated)	1.55		Nearest Garden	1.25
	Nearest Milk Animal	-		Nearest Milk Animal	-
NNE	Nearest Residence	0.66	SSW	Nearest Residence	0.81
	Nearest Garden	4.47		Nearest Garden	1.34
	Nearest Milk Animal	-		Nearest Milk Animal	-
NE	Nearest Residence	0.56	SW	Nearest Residence	0.63
	Nearest Garden	0.68		Nearest Garden	2.54
	Nearest Milk Animal	-		Nearest Milk Animal	-
ENE	Nearest Residence	0.61	WSW	Nearest Residence	0.57
	Nearest Garden	2.84		Nearest Garden	2.03
	Nearest Milk Animal	-		Nearest Milk Animal	-
E	Nearest Residence	0.65	W	Nearest Residence	0.68
	Nearest Garden	3.52		Nearest Garden	0.96
	Nearest Milk Animal	-		Nearest Milk Animal	-
ESE	Nearest Residence	0.84	WNW	Nearest Residence	1.10
	Nearest Garden	3.70		Nearest Garden	1.36
	Nearest Milk Animal	-		Nearest Milk Animal	-
SE	Nearest Residence	0.97	NW	Nearest Residence	1.39
	Nearest Garden (irrigated)	2.55		Nearest Garden	1.54
	Nearest Milk Animal	-		Nearest Milk Animal	-
SSE	Nearest Residence	0.74	NNW	Nearest Residence	0.86
	Nearest Garden	1.64		Nearest Garden	2.13
	Nearest Milk Animal	-		Nearest Milk Animal	-

"-" indicates no occurrences within the 5 mile radius

Figure 3.11


N
NNW
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NE
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SW
SE
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S
1 mile
2 Miles
5 Miles
CATAWBA
Lake Wylie
Catawba Nuclear Station 2012 Land Use Census Map
Legend
CNS_Gardens
CNS_Residence
CNS_Railroads
NavteqHwys
NavteqStreets
States
Counties
NHDWaterbody
Approximate location of features shown
0 0.5 1 2 Miles
Projection NCSP NAD27

4.0 EVALUATION OF DOSE

4.1 DOSE FROM ENVIRONMENTAL MEASUREMENTS

Annual doses to maximum exposed individuals were estimated based on measured concentrations of radionuclides in 2012 CNS REMP samples. The primary purpose of estimating doses based on sample results is to allow comparison to effluent program dose estimates.

Doses based on sample results were calculated using the methodology and data presented in NRC Regulatory Guide 1.109. Measured radionuclide concentrations, averaged over the entire year for a specific radionuclide, indicator location and sample type, were used to calculate REMP-based doses. Where applicable, average background concentration at the corresponding control location was subtracted. Regulatory Guide 1.109 consumption rates for the maximum exposed individual were used in the calculations. When the guide listed "NO DATA" as the dose factor for a given radionuclide and organ, a dose factor of zero was assumed.

Maximum dose estimates (Highest Annual Mean Concentration) based on broadleaf vegetation, drinking water, fish, and shoreline sediment sample results are reported in Table 4.1-A. The individual critical population and pathway dose calculations are reported in Table 4.1-B.

REMP-based dose estimates are not reported for airborne radioiodine, airborne particulate, milk, or ground water sample types because no radionuclides attributable to CNS operations were detected. Naturally occurring K-40 and Be-7 were detected in some samples but were not included in any REMP-based dose estimates. Dose estimates are not reported for surface water because sampled surface water is not considered to be a potable drinking water source although surface water tritium concentrations are used in calculating doses from fish. Exposure estimates based upon REMP TLD results are discussed in Section 3.10.

The maximum environmental organ dose estimate for any single sample type (excluding TLD results) collected during 2012 was 6.54E-2 mrem to the adult liver from consuming fish.

4.2 ESTIMATED DOSE FROM RELEASES

Throughout the year, dose estimates were calculated based on actual 2012 liquid and gaseous effluent release data. Effluent-based dose estimates were calculated using the RETDAS computer program which employs methodology and data presented in NRC Regulatory Guide 1.109. These doses are shown in Table 4.1-A along with the corresponding REMP-based dose estimates. Summaries of RETDAS dose calculations are reported in the Annual Radioactive Effluent Release Report (reference 6.6).

The effluent-based liquid release doses are summations of the dose contributions from the drinking water, fish, and shoreline pathways. For iodine, particulate, and tritium exposure the effluent-based gaseous release doses are summations of the dose contributors from ground/plane, inhalation, milk and vegetation pathways.

4.3 COMPARISON OF DOSES

The environmental and effluent dose estimates given in Table 4.1-A agree reasonably well. The similarity of the doses indicate that the radioactivity levels in the environment do not differ significantly from those expected based on effluent measurements and modeling of the environmental exposure pathways. This indicates that effluent program dose estimates are both valid and reasonably conservative.

There are some differences in how effluent and environmental doses are calculated that affect the comparison. Doses calculated from environmental data are conservative because they are based on a mean that includes only samples with a net positive activity versus a mean that includes all sample results (i.e. zero results are not included in the mean). Also, airborne tritium is not measured in environmental samples but is used to calculate effluent doses.

Additionally, in 2010 Catawba began reporting estimated dose from effluent Carbon 14 (C-14). This change came about with the issuing of Regulatory Guide 1.21, Revision 2, Measuring, Evaluating and Reporting Radioactive Material in Liquid and Gaseous Effluents and Solid Waste. A description of this change is found in the 2010 Annual Radiological Effluent Release Report. C-14 is not measured in the environment and therefore, environmental and effluent doses from C-14 cannot be compared directly.

In calculations based on liquid release pathways, drinking water, fish, and shoreline sediment were the predominant dose pathways based on environmental and effluent data. The maximum total organ dose based on 2012 environmental sample results was 1.01E-1 mrem to the child liver. The maximum total organ dose of 7.68E-2 mrem for liquid effluent-based estimates was to child liver.

In calculations based on gaseous release pathways, vegetation was the predominant dose pathway for effluent samples. The maximum total organ dose for gaseous effluent estimates was 4.49E0 mrem to the child bone. No radioactivity was detected from gaseous pathways in environmental samples; therefore, there is no calculated dose.

The doses calculated do not exceed 40CFR190 or 10CFR50 dose commitment limits for members of the public. Doses to members of the public attributable to the operation of CNS are being maintained well within regulatory limits.

TABLE 4.1-A

CATAWBA NUCLEAR STATION
2012 ENVIRONMENTAL AND EFFLUENT DOSE COMPARISON

LIQUID RELEASE PATHWAY

Organ	Environmental or Effluent Data	Critical Age [1]	Critical Pathway [2]	Location	Maximum Dose [3] (mrem)
Skin	Environmental	Teen	Shoreline Sediment	208 (0.45 mi S)	2.15E-03
Skin	Effluent	Teen	Shoreline Sediment	Discharge Pt.	7.58E-03
Bone	Environmental	Child	Fish	208 (0.45 mi S)	4.15E-02
Bone	Effluent	Teen	Shoreline Sediment	Discharge Pt.	8.62E-03
Liver	Environmental	Child	Fish	208 (0.45 mi S)	1.01E-01
Liver	Effluent	Child	Drinking Water	7.30 mi SSE	7.68E-02
T. Body	Environmental	Adult	Fish	208 (0.45 mi S)	8.55E-02
T. Body	Effluent	Child	Drinking Water	7.30 mi SSE	7.50E-02
Thyroid	Environmental	Child	Drinking Water	214 (7.30 mi SSE)	6.16E-02
Thyroid	Effluent	Child	Drinking Water	7.30 mi SSE	7.33E-02
Kidney	Environmental	Child	Drinking Water	214 (7.30 mi SSE)	7.45E-02
Kidney	Effluent	Child	Drinking Water	7.30 mi SSE	7.46E-02
Lung	Environmental	Child	Drinking Water	214 (7.30 mi SSE)	6.62E-02
Lung	Effluent	Child	Drinking Water	7.30 mi SSE	7.36E-02
GI-LLI	Environmental	Child	Drinking Water	214 (7.30 mi SSE)	6.18E-02
GI-LLI	Effluent	Child	Drinking Water	7.30 mi SSE	7.57E-02

(1) Critical Age is the highest total dose (all pathways) to an age group.

(2) Critial Pathway is the highest individual dose within the identified Critical Age group.

(3) Maximum dose is a summation of the fish, drinking water and shoreline sediment pathways.

GASEOUS RELEASE PATHWAY

IODINE, PARTICULATE, and TRITIUM

Organ	Environmental or Effluent Data	Critical Age [1]	Critical Pathway [2]	Location	Maximum Dose [3] (mrem)
Skin	Environmental	-	-	-	0.00E+00
Skin	Effluent	-	-	-	0.00E+00
Bone	Environmental	-	-	-	0.00E+00
Bone	Effluent	Child	Vegetation	0.5 mi NE	4.49E+00
Liver	Environmental	-	-	-	0.00E+00
Liver	Effluent	Child	Vegetation	0.5 mi NE	1.93E+00
T. Body	Environmental	-	-	-	0.00E+00
T. Body	Effluent	Child	Vegetation	0.5 mi NE	1.93E+00
Thyroid	Environmental	-	-	-	0.00E+00
Thyroid	Effluent	Child	Vegetation	0.5 mi NE	1.93E+00
Kidney	Environmental	-	-	-	0.00E+00
Kidney	Effluent	Child	Vegetation	0.5 mi NE	1.93E+00
Lung	Environmental	-	-	-	0.00E+00
Lung	Effluent	Child	Vegetation	0.5 mi NE	1.93E+00
GI-LLI	Environmental	-	-	-	0.00E+00
GI-LLI	Effluent	Child	Vegetation	0.5 mi NE	1.93E+00

(1) Critical Age is the highest total dose (all pathways) to an age group.

(2) Critial Pathway is the highest individual dose within the identified Critical Age group.

(3) Maximum dose is a summation of the ground/plane, inhalation, milk and vegetation pathways.

TABLE 4.1-B

Maximum Individual Dose for 2012 based on Environmental Measurements (mrem) for Catawba Nuclear Station

Age	Sample Medium	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Skin
Infant	Airborne	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Drinking Water	0.00E+00	4.59E-02	4.59E-02	4.59E-02	4.59E-02	4.59E-02	4.59E-02	0.00E+00
	Milk	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	TOTAL	0.00E+00	4.59E-02	4.59E-02	4.59E-02	4.59E-02	4.59E-02	4.59E-02	0.00E+00
Child	Airborne	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Drinking Water	0.00E+00	4.68E-02	4.68E-02	4.68E-02	4.68E-02	4.68E-02	4.68E-02	0.00E+00
	Milk	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Broadleaf Vegetation	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Fish	4.15E-02	5.45E-02	2.07E-02	1.48E-02	2.77E-02	1.94E-02	1.50E-02	0.00E+00
	Shoreline Sediment	0.00E+00	0.00E+00	3.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.49E-04
	TOTAL	4.15E-02	1.01E-01	6.79E-02	6.16E-02	7.45E-02	6.62E-02	6.18E-02	4.49E-04
Teen	Airborne	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Drinking Water	0.00E+00	2.44E-02	2.44E-02	2.44E-02	2.44E-02	2.44E-02	2.44E-02	0.00E+00
	Milk	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Broadleaf Vegetation	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Fish	3.30E-02	6.18E-02	3.32E-02	1.79E-02	3.28E-02	2.37E-02	1.85E-02	0.00E+00
	Shoreline Sediment	1.83E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-03
	TOTAL	3.48E-02	8.62E-02	5.76E-02	4.23E-02	5.72E-02	4.81E-02	4.29E-02	2.15E-03
Adult	Airborne	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Drinking Water	0.00E+00	3.46E-02	3.46E-02	3.46E-02	3.46E-02	3.46E-02	3.46E-02	0.00E+00
	Milk	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Broadleaf Vegetation	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Fish	3.08E-02	6.54E-02	5.09E-02	2.33E-02	3.76E-02	2.80E-02	2.41E-02	0.00E+00
	Shoreline Sediment	3.28E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.85E-04
	TOTAL	3.11E-02	1.00E-01	8.55E-02	5.79E-02	7.22E-02	6.26E-02	5.87E-02	3.85E-04

Note: Dose tables are provided for sample media displaying positive nuclide occurrence.

Catawba Nuclear Station
Dose from Drinking Water Pathway for 2012 Data
Maximum Exposed Infant

Infant Dose from Drinking Water Pathway (mrem) = Usage (l) x Dose Factor (mrem/pCi ingested) x Concentration (pCi/l)

Usage (intake in one year) = 330 l

				Ingestion Dose Factor				Highest Annual Net Mean Concentration		Dose (mrem)						
Radionuclide	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Indicator Location	Water (pCi/l)	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
Mn-54	NO DATA	1.99E-05	4.51E-06	NO DATA	4.41E-06	NO DATA	7.31E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-58	NO DATA	3.60E-06	8.98E-06	NO DATA	NO DATA	NO DATA	8.97E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Fe-59	3.08E-05	5.38E-05	2.12E-05	NO DATA	NO DATA	1.59E-05	2.57E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60	NO DATA	1.08E-05	2.55E-05	NO DATA	NO DATA	NO DATA	2.57E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zn-65	1.84E-05	6.31E-05	2.91E-05	NO DATA	3.06E-05	NO DATA	5.33E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb-95	4.20E-08	1.73E-08	1.00E-08	NO DATA	1.24E-08	NO DATA	1.46E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zr-95	2.06E-07	5.02E-08	3.56E-08	NO DATA	5.41E-08	NO DATA	2.50E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-131	3.59E-05	4.23E-05	1.86E-05	1.39E-02	4.94E-05	NO DATA	1.51E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	3.77E-04	7.03E-04	7.10E-05	NO DATA	1.81E-04	7.42E-05	1.91E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	5.22E-04	6.11E-04	4.33E-05	NO DATA	1.64E-04	6.64E-05	1.91E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BaLa-140	1.71E-04	1.71E-07	8.81E-06	NO DATA	4.06E-08	1.05E-07	4.20E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
H-3	NO DATA	3.08E-07	3.08E-07	3.08E-07	3.08E-07	3.08E-07	3.08E-07	214	452	0.00E+00	4.59E-02	4.59E-02	4.59E-02	4.59E-02	4.59E-02	4.59E-02
						Dose Commitment (mrem) =				0.00E+00	4.59E-02	4.59E-02	4.59E-02	4.59E-02	4.59E-02	4.59E-02

Catawba Nuclear Station

Dose from Drinking Water Pathway for 2012 Data

Maximum Exposed Child

Child Dose from Drinking Water Pathway (mrem) = Usage (l) x Dose Factor (mrem/pCi ingested) x Concentration (pCi/l)

Usage (intake in one year) = 510 l

	Ingestion Dose Factor							Highest Annual Net Mean Concentration		Dose (mrem)						
Radionuclide	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Indicator Location	Water (pCi/l)	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
Mn-54	NO DATA	1.07E-05	2.85E-06	NO DATA	3.00E-06	NO DATA	8.98E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-58	NO DATA	1.80E-06	5.51E-06	NO DATA	NO DATA	NO DATA	1.05E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Fe-59	1.65E-05	2.67E-05	1.33E-05	NO DATA	NO DATA	7.74E-06	2.78E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
C0-60	NO DATA	5.29E-06	1.56E-05	NO DATA	NO DATA	NO DATA	2.93E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zn-65	1.37E-05	3.65E-05	2.27E-05	NO DATA	2.30E-05	NO DATA	6.41E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb-95	2.25E-08	8.76E-09	6.26E-09	NO DATA	8.23E-09	NO DATA	1.62E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zr-95	1.16E-07	2.55E-08	2.27E-08	NO DATA	3.65E-08	NO DATA	2.66E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-131	1.72E-05	1.73E-05	9.83E-06	5.72E-03	2.84E-05	NO DATA	1.54E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	2.34E-04	3.84E-04	8.10E-05	NO DATA	1.19E-04	4.27E-05	2.07E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	3.27E-04	3.13E-04	4.62E-05	NO DATA	1.02E-04	3.67E-05	1.96E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BaLa-140	8.31E-05	7.28E-08	4.85E-06	NO DATA	2.37E-08	4.34E-08	4.21E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
H-3	NO DATA	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	214	452	0.00E+00	4.68E-02	4.68E-02	4.68E-02	4.68E-02	4.68E-02	4.68E-02
						Dose Commitment (mrem) =				0.00E+00	4.68E-02	4.68E-02	4.68E-02	4.68E-02	4.68E-02	4.68E-02

Catawba Nuclear Station
Dose from Fish Pathway for 2012 Data
Maximum Exposed Child

Child Dose from Fish Pathway (mrem) = Usage (kg) x Dose Factor (mrem/pCi ingested) x Concentration (pCi/kg)

H-3 Concentration in Fish = Surface Water pCi/l x Bioaccumulation Factor 0.9 pCi/kg per pCi/l = 11729 pCi/l x 0.9 = 10556 pCi/kg

Usage (intake in one year) = **6.9 kg**

	Ingestion Dose Factor							Highest Annual Net Mean Concentration		Dose (mrem)						
Radionuclide	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Indicator Location	Fish (pCi/kg)	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
Mn-54	NO DATA	1.07E-05	2.85E-06	NO DATA	3.00E-06	NO DATA	8.98E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-58	NO DATA	1.80E-06	5.51E-06	NO DATA	NO DATA	NO DATA	1.05E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Fe-59	1.65E-05	2.67E-05	1.33E-05	NO DATA	NO DATA	7.74E-06	2.78E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
C0-60	NO DATA	5.29E-06	1.56E-05	NO DATA	NO DATA	NO DATA	2.93E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zn-65	1.37E-05	3.65E-05	2.27E-05	NO DATA	2.30E-05	NO DATA	6.41E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	2.34E-04	3.84E-04	8.10E-05	NO DATA	1.19E-04	4.27E-05	2.07E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	3.27E-04	3.13E-04	4.62E-05	NO DATA	1.02E-04	3.67E-05	1.96E-06	208	18.4	4.15E-02	3.97E-02	5.87E-03	0.00E+00	1.29E-02	4.66E-03	2.49E-04
H-3	NO DATA	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	208	10556	0.00E+00	1.48E-02	1.48E-02	1.48E-02	1.48E-02	1.48E-02	1.48E-02
						Dose Commitment (mrem) =				4.15E-02	5.45E-02	2.07E-02	1.48E-02	2.77E-02	1.94E-02	1.50E-02

Catawba Nuclear Station
Dose from Shoreline Sediment Pathway for 2012 Data
Maximum Exposed Child

Shoreline Recreation =	14	hr (in one year)
Shore Width Factor =	0.2	
Sediment Surface Mass =	40	kg/m^2

Child Dose from Shoreline Sediment Pathway (mrem) = Shoreline Recreation (hr) x External Dose Factor (mrem/hr per pCi/m^2) x Shore Width Factor x Sediment Surface Mass (kg/m^2) x Sediment Concentration (pCi/kg)

	External Dose Factor Standing on Contaminated Ground		Highest Annual Net Mean Concentration		Dose	
	(mrem/hr per pCi/m^2)		Indicator	Sediment	(mrem)	
Radionuclide	T. Body	Skin	Location	(pCi/kg)	T. Body	Skin
Mn-54	5.80E-09	6.80E-09	ALL	0.00	0.00E+00	0.00E+00
* Co-57	9.10E-10	1.00E-09	ALL	0.00	0.00E+00	0.00E+00
Co-58	7.00E-09	8.20E-09	208	55.9	4.38E-05	5.13E-05
Co-60	1.70E-08	2.00E-08	208	170	3.24E-04	3.81E-04
Cs-134	1.20E-08	1.40E-08	ALL	0.00	0.00E+00	0.00E+00
Cs-137	4.20E-09	4.90E-09	208	31.5	1.48E-05	1.73E-05
		Dose Commitment (mrem) =			3.82E-04	4.49E-04

* Dose Factor from Reference 6.17

Catawba Nuclear Station
Dose from Drinking Water Pathway for 2012 Data
Maximum Exposed Teen

Teen Dose from Drinking Water Pathway (mrem) = Usage (l) x Dose Factor (mrem/pCi ingested) x Concentration (pCi/l)

Usage (intake in one year) = 510 l

				Ingestion Dose Factor				Highest Annual Net Mean Concentration		Dose (mrem)						
Radionuclide	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Indicator Location	Water (pCi/l)	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
Mn-54	NO DATA	5.90E-06	1.17E-06	NO DATA	1.76E-06	NO DATA	1.21E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-58	NO DATA	9.72E-07	2.24E-06	NO DATA	NO DATA	NO DATA	1.34E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Fe-59	5.87E-06	1.37E-05	5.29E-06	NO DATA	NO DATA	4.32E-06	3.24E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60	NO DATA	2.81E-06	6.33E-06	NO DATA	NO DATA	NO DATA	3.66E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zn-65	5.76E-06	2.00E-05	9.33E-06	NO DATA	1.28E-05	NO DATA	8.47E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb-95	8.22E-09	4.56E-09	2.51E-09	NO DATA	4.42E-09	NO DATA	1.95E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zr-95	4.12E-08	1.30E-08	8.94E-09	NO DATA	1.91E-08	NO DATA	3.00E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-131	5.85E-06	8.19E-06	4.40E-06	2.39E-03	1.41E-05	NO DATA	1.62E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	8.37E-05	1.97E-04	9.14E-05	NO DATA	6.26E-05	2.39E-05	2.45E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	1.12E-04	1.49E-04	5.19E-05	NO DATA	5.07E-05	1.97E-05	2.12E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BaLa-140	2.84E-05	3.48E-08	1.83E-06	NO DATA	1.18E-08	2.34E-08	4.38E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
H-3	NO DATA	1.06E-07	1.06E-07	1.06E-07	1.06E-07	1.06E-07	1.06E-07	214	452	0.00E+00	2.44E-02	2.44E-02	2.44E-02	2.44E-02	2.44E-02	2.44E-02
						Dose Commitment (mrem)=				0.00E+00	2.44E-02	2.44E-02	2.44E-02	2.44E-02	2.44E-02	2.44E-02

Catawba Nuclear Station

Dose from Fish Pathway for 2012 Data

Maximum Exposed Teen

Teen Dose from Fish Pathway (mrem) = Usage (kg) x Dose Factor (mrem/pCi ingested) x Concentration (pCi/kg)

H-3 Concentration in Fish = Surface Water pCi/l x Bioaccumulation Factor 0.9 pCi/kg per pCi/l = 11729 pCi/l x 0.9 = 10556 pCi/kg

Usage (intake in one year) = **16 kg**

	Ingestion Dose Factor							Highest Annual Net Mean Concentration		Dose (mrem)						
Radionuclide	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Location	(pCi/kg)	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
Mn-54	NO DATA	5.90E-06	1.17E-06	NO DATA	1.76E-06	NO DATA	1.21E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-58	NO DATA	9.72E-07	2.24E-06	NO DATA	NO DATA	NO DATA	1.34E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Fe-59	5.87E-06	1.37E-05	5.29E-06	NO DATA	NO DATA	4.32E-06	3.24E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60	NO DATA	2.81E-06	6.33E-06	NO DATA	NO DATA	NO DATA	3.66E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zn-65	5.76E-06	2.00E-05	9.33E-06	NO DATA	1.28E-05	NO DATA	8.47E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	8.37E-05	1.97E-04	9.14E-05	NO DATA	6.26E-05	2.39E-05	2.45E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	1.12E-04	1.49E-04	5.19E-05	NO DATA	5.07E-05	1.97E-05	2.12E-06	208	18.4	3.30E-02	4.39E-02	1.53E-02	0.00E+00	1.49E-02	5.80E-03	6.24E-04
H-3	NO DATA	1.06E-07	1.06E-07	1.06E-07	1.06E-07	1.06E-07	1.06E-07	208	10556	0.00E+00	1.79E-02	1.79E-02	1.79E-02	1.79E-02	1.79E-02	1.79E-02
						Dose Commitment (mrem) =				3.30E-02	6.18E-02	3.32E-02	1.79E-02	3.28E-02	2.37E-02	1.85E-02

Catawba Nuclear Station
Dose from Shoreline Sediment Pathway for 2012 Data
Maximum Exposed Teen

Shoreline Recreation = 67 **hr (in one year)**
Shore Width Factor = 0.2
Sediment Surface Mass = 40 **kg/m^2**

Teen Dose from Shoreline Sediment Pathway (mrem) = Shoreline Recreation (hr) x External Dose Factor (mrem/hr per pCi/m2) x Shore Width Factor x Sediment Surface Mass (kg/m^2) x Sediment Concentration (pCi/kg)

	External Dose Factor Standing on Contaminated Ground (mrem/hr per pCi/m^2)		Highest Annual Net Mean Concentration		Dose (mrem)	
Radionuclide	T. Body	Skin	Indicator Location	Sediment (pCi/kg)	T. Body	Skin
Mn-54	5.80E-09	6.80E-09	ALL	0.00	0.00E+00	0.00E+00
* Co-57	9.10E-10	1.00E-09	208	0.00	0.00E+00	0.00E+00
Co-58	7.00E-09	8.20E-09	208	55.9	2.10E-04	2.46E-04
Co-60	1.70E-08	2.00E-08	208	170	1.55E-03	1.82E-03
Cs-134	1.20E-08	1.40E-08	208	0.00	0.00E+00	0.00E+00
Cs-137	4.20E-09	4.90E-09	208	31.5	7.09E-05	8.27E-05
	Dose Commitment (mrem) =				1.83E-03	2.15E-03

* Dose Factor from Reference 6.17

Catawba Nuclear Station

Dose from Drinking Water Pathway for 2012 Data

Maximum Exposed Adult

Adult Dose from Drinking Water Pathway (mrem) = Usage (l) x Dose Factor (mrem/pCi ingested) x Concentration (pCi/l)

Usage (intake in one year) = 730 l

				Ingestion Dose Factor				Highest Annual Net Mean Concentration		Dose (mrem)						
Radionuclide	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Indicator Location	Water (pCi/l)	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
Mn-54	NO DATA	4.57E-06	8.72E-07	NO DATA	1.36E-06	NO DATA	1.40E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-58	NO DATA	7.45E-07	1.67E-06	NO DATA	NO DATA	NO DATA	1.51E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Fe-59	4.34E-06	1.02E-05	3.91E-06	NO DATA	NO DATA	2.85E-06	3.40E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60	NO DATA	2.14E-06	4.72E-06	NO DATA	NO DATA	NO DATA	4.02E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zn-65	4.84E-06	1.54E-05	6.96E-06	NO DATA	1.03E-05	NO DATA	9.70E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb-95	6.22E-09	3.46E-09	1.86E-09	NO DATA	3.42E-09	NO DATA	2.10E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zr-95	3.04E-08	9.75E-09	6.60E-09	NO DATA	1.53E-08	NO DATA	3.09E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-131	4.16E-06	5.95E-06	3.41E-06	1.95E-03	1.02E-05	NO DATA	1.57E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	6.22E-05	1.48E-04	1.21E-04	NO DATA	4.79E-05	1.59E-05	2.59E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	7.97E-05	1.09E-04	7.14E-05	NO DATA	3.70E-05	1.23E-05	2.11E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BaLa-140	2.03E-05	2.55E-08	1.33E-06	NO DATA	8.67E-09	1.46E-08	4.18E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
H-3	NO DATA	1.05E-07	1.05E-07	1.05E-07	1.05E-07	1.05E-07	1.05E-07	214	452	0.00E+00	3.46E-02	3.46E-02	3.46E-02	3.46E-02	3.46E-02	3.46E-02
						Dose Commitment (mrem) =				0.00E+00	3.46E-02	3.46E-02	3.46E-02	3.46E-02	3.46E-02	3.46E-02

Catawba Nuclear Station
Dose from Fish Pathway for 2012 Data
Maximum Exposed Adult

Adult Dose from Fish Pathway (mrem) = Usage (kg) x Dose Factor (mrem/pCi ingested) x Concentration (pCi/kg)

H-3 Concentration in Fish = Surface Water pCi/l x Bioaccumulation Factor 0.9 pCi/kg per pCi/l = 11729 pCi/l x 0.9 = 10556 pCi/kg

Usage (intake in one year) = 21 kg

	Ingestion Dose Factor							Highest Annual Net Mean Concentration		Dose (mrem)						
Radionuclide	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Location	(pCi/kg)	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
Mn-54	NO DATA	4.57E-06	8.72E-07	NO DATA	1.36E-06	NO DATA	1.40E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-58	NO DATA	7.45E-07	1.67E-06	NO DATA	NO DATA	NO DATA	1.51E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Fe-59	4.34E-06	1.02E-05	3.91E-06	NO DATA	NO DATA	2.85E-06	3.40E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60	NO DATA	2.14E-06	4.72E-06	NO DATA	NO DATA	NO DATA	4.02E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zn-65	4.84E-06	1.54E-05	6.96E-06	NO DATA	1.03E-05	NO DATA	9.70E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	6.22E-05	1.48E-04	1.21E-04	NO DATA	4.79E-05	1.59E-05	2.59E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	7.97E-05	1.09E-04	7.14E-05	NO DATA	3.70E-05	1.23E-05	2.11E-06	208	18.4	3.08E-02	4.21E-02	2.76E-02	0.00E+00	1.43E-02	4.75E-03	8.15E-04
H-3	NO DATA	1.05E-07	1.05E-07	1.05E-07	1.05E-07	1.05E-07	1.05E-07	208	10556	0.00E+00	2.33E-02	2.33E-02	2.33E-02	2.33E-02	2.33E-02	2.33E-02
						Dose Commitment (mrem) =				3.08E-02	6.54E-02	5.09E-02	2.33E-02	3.76E-02	2.80E-02	2.41E-02

Catawba Nuclear Station
Dose from Shoreline Sediment Pathway for 2012 Data
Maximum Exposed Adult

Shoreline Recreation = 12 hr (in one year)
Shore Width Factor = 0.2
Sediment Surface Mass = 40 kg/m^2

Adult Dose from Shoreline Sediment Pathway (mrem) = Shoreline Recreation (hr) x External Dose Factor (mrem/hr per pCi/m2) x Shore Width Factor x Sediment Surface Mass (kg/m^2) x Sediment Concentration (pCi/kg)

	External Dose Factor Standing on Contaminated Ground		Highest Annual Net Mean Concentration		Dose	
	(mrem/hr per pCi/m^2)				(mrem)	
Radionuclide	T. Body	Skin	Indicator Location	Sediment (pCi/kg)	T. Body	Skin
Mn-54	5.80E-09	6.80E-09	ALL	0.00	0.00E+00	0.00E+00
* Co-57	9.10E-10	1.00E-09	ALL	0.00	0.00E+00	0.00E+00
Co-58	7.00E-09	8.20E-09	208	55.9	3.76E-05	4.40E-05
Co-60	1.70E-08	2.00E-08	208	170	2.77E-04	3.26E-04
Cs-134	1.20E-08	1.40E-08	ALL	0.00	0.00E+00	0.00E+00
Cs-137	4.20E-09	4.90E-09	208	31.5	1.27E-05	1.48E-05
	Dose Commitment (mrem) =				3.28E-04	3.85E-04

* Dose Factor from Reference 6.17

5.0 QUALITY ASSURANCE

5.1 SAMPLE COLLECTION

EnRad Laboratories, Fisheries, and Aquatic Ecology performed the environmental sample collections as specified by approved sample collection procedures.

5.2 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 Corporation's Environmental Center.

5.3 DOSIMETRY ANALYSIS

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

5.4 LABORATORY EQUIPMENT QUALITY ASSURANCE

5.4.1 DAILY QUALITY CONTROL

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

5.4.2 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 out of limits.

5.4.3 BATCH PROCESSING

Method quality control samples are analyzed with sample analyses that are processed in batches. These include gross beta in drinking water and tritium analyses.

5.5 DUKE ENERGY INTERCOMPARISON PROGRAM

EnRad Laboratories participated in the Duke Energy Nuclear Generation Department Intercomparison Program during 2012. Interlaboratory cross-check standards,

including Marinelli beakers, air filters, air cartridges, gross beta in water, and tritium in water samples were analyzed at various times of the year. A summary of the EnRad Laboratory program results for 2012 is documented in Table 5.0-A.

5.6 ECKERT & ZIEGLER ANALYTICS CROSS CHECK PROGRAM

EnRad Laboratories participated in the Eckert & Ziegler Analytics Cross Check Program during 2012. Cross-check standards including, Marinelli beakers, air filters, tritium in water, and Iodine in milk samples were analyzed at various times of the year. A summary of the EnRad Laboratory program results for 2012 is documented in Table 5.0-B.

5.7 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 2012 is documented in Table 5.0-C.

5.8 DUKE ENERGY AUDITS

The Catawba Radiation Protection Section was audited by the Quality Assurance Group in 2012 (reference 6.14). Audits at Catawba, McGuire, Oconee, and EnRad Laboratories identified procedure and report enhancements (references 6.16, 6.17, 6.18). No environmental monitoring issues were identified.

5.9 U.S. NUCLEAR REGULATORY COMMISSION INSPECTIONS

The Catawba Nuclear Station Radiological Environmental Monitoring Program was not audited by the NRC in 2012, but was audited in 2011 (reference 6.12). No findings were noted in the 2011 audit report.

5.10 STATE OF SOUTH CAROLINA INTERCOMPARISON PROGRAM

Catawba Nuclear Station routinely participates with the Bureau of Radiological Health of the State's Department of Health and Environmental Control (DHEC) in an intercomparison program. The Memorandum of Agreement (MOA) between SC DHEC and Duke Energy describes the sampling frequency and analysis parameters for drinking water, surface water, milk, fish, vegetation, and shoreline sediment samples collected by EnRad Laboratories. Samples are routinely split with DHEC for intercomparison analysis. DHEC collects air samples near two of the locations sampled for air by CNS. Results of the analyses performed on split and duplicate samples are sent to DHEC.

5.11 TLD INTERCOMPARISON PROGRAM

5.11.1 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 Nuclear Technology Services Intercomparison Report is documented in Table 5.0-D.

5.11.2 INTERNAL CROSSCHECK (DUKE ENERGY)

Radiation Dosimetry and Records participates in a quarterly TLD intracomparison program administered internally by the Dosimetry Lab. The Dosimetry Lab Staff irradiates environmental dosimeters quarterly and submits them for analysis of the unknown estimated delivered exposure. A summary of the Internal Cross Check (Duke Energy) Result is documented in Table 5.0-D.

TABLE 5.0-A
DUKE ENERGY
INTERLABORATORY COMPARISON PROGRAM

2012 CROSS-CHECK RESULTS FOR ENRAD LABORATORIES

Cross-Check samples are normally analyzed a minimum of three times. A status of "3 Pass" indicates that all three analyses yielded results within the designated acceptance range. A status of "2 Pass" indicates that two analyses of the cross check was performed and both analyses yielded results within the designated acceptance range. A status of "1 Pass" indicates that one analysis of the cross-check was performed and yielded results within the designated acceptance range. If applicable, footnote explanations are included following this table.

Gamma in Water 3.5 liters

Reference Date	Sample I.D.	Nuclide	Acceptance Range pCi/l	Reference Value pCi/l	Mean Reported Value pCi/l	Cross Check Status
2/28/2012	Q121GWR	Cr-51	6.92 - 12.27 E3	9.23 E3	9.10 E3	3 Pass
		Mn-54	2.15 - 3.81 E3	2.87 E3	3.01 E3	3 Pass
		Co-58	1.64 - 2.90 E3	2.18 E3	2.18 E3	3 Pass
		Fe-59	2.29 - 4.06 E3	3.05 E3	3.19 E3	3 Pass
		Co-60	2.98 - 5.28 E3	3.97 E3	4.12 E3	3 Pass
		Zn-65	3.69 - 6.55 E3	4.93 E3	5.09 E3	3 Pass
		Cs-134	1.62 - 2.86 E3	2.15 E3	1.95 E3	3 Pass
		Cs-137	1.69 - 3.00 E3	2.25 E3	2.18 E3	3 Pass
		Ce-141	3.89 - 6.90 E3	5.19 E3	5.17 E3	3 Pass
5/31/2012	Q122GWR	Cr-51	2.66 - 4.72 E3	3.55 E3	3.76 E3	3 Pass
		Mn-54	6.35 - 11.26 E2	8.46 E2	9.00 E2	3 Pass
		Co-58	4.96 - 8.80 E2	6.62 E2	6.78 E2	3 Pass
		Fe-59	7.41 - 13.13 E2	9.87 E2	10.73 E2	3 Pass
		Co-60	1.67 - 2.96 E3	2.22 E3	2.31 E3	3 Pass
		Zn-65	0.97 - 1.71 E3	1.29 E3	1.40 E3	3 Pass
		Cs-134	0.83 - 1.47 E3	1.10 E3	1.06 E3	3 Pass
		Cs-137	0.99 - 1.76 E3	1.32 E3	1.30 E3	3 Pass
		Ce-141	5.19 - 9.20 E2	6.92 E2	7.20 E2	3 Pass
8/23/2012	Q123GWSL	Cr-51	1.76 - 3.12 E5	2.34 E5	2.24 E5	3 Pass
		Mn-54	0.84 - 1.49 E5	1.12 E5	1.12 E5	3 Pass
		Co-58	5.08 - 9.01 E4	6.77 E4	6.54 E4	3 Pass
		Fe-59	0.87 - 1.55 E5	1.17 E5	1.19 E5	3 Pass
		Co-60	6.27 - 11.12 E4	8.36 E4	8.52 E4	3 Pass
		Zn-65	0.84 - 1.48 E5	1.11 E5	1.14 E5	3 Pass
		Cs-134	4.50 - 7.99 E4	6.00 E4	5.57 E4	3 Pass
		Cs-137	7.12 - 12.63 E4	9.50 E4	8.71 E4	3 Pass
		Ce-141	1.07 - 1.89 E5	1.42 E5	1.37 E5	3 Pass

Gamma in Water 3.5 liters, continued

Reference Date	Sample I.D.	Nuclide	Acceptance Range pCi/l	Reference Value pCi/l	Mean Reported Value pCi/l	Cross Check Status
12/3/2012	Q124GWR	Cr-51	6.84 - 12.10 E3	9.12 E3	9.19 E3	2 Pass
		Mn-54	2.12 - 3.75 E3	2.82 E3	2.92 E3	2 Pass
		Co-58	1.86 -3.30 E3	2.48 E3	2.48 E3	2 Pass
		Fe-59	2.21 - 3.92 E3	2.95 E3	3.09 E3	2 Pass
		Co-60	3.11 - 5.51 E3	4.14 E3	4.36 E3	2 Pass
		Zn-65	3.42 - 6.06 E3	4.56 E3	4.74 E3	2 Pass
		Cs-134	3.04 - 5.39 E3	4.05 E3	3.98 E3	2 Pass
		Cs-137	2.13 - 3.78 E3	2.84 E3	2.72 E3	2 Pass
		Ce-141	0.99 - 1.76 E3	1.32 E3	1.36 E3	2 Pass

Gamma in Water 1.0 liter

Reference Date	Sample I.D.	Nuclide	Acceptance Range pCi/l	Reference Value pCi/l	Mean Reported Value pCi/l	Cross Check Status
2/28/2012	Q121GWR	Cr-51	6.92 - 12.27 E3	9.23 E3	8.95 E3	3 Pass
		Mn-54	2.15 - 3.81 E3	2.87 E3	2.87 E3	3 Pass
		Co-58	1.64 - 2.90 E3	2.18 E3	2.07 E3	3 Pass
		Fe-59	2.29 - 4.06 E3	3.05 E3	3.05 E3	3 Pass
		Co-60	2.98 - 5.28 E3	3.97 E3	3.93 E3	3 Pass
		Zn-65	3.69 - 6.55 E3	4.93 E3	4.85 E3	3 Pass
		Cs-134	1.62 - 2.86 E3	2.15 E3	1.86 E3	3 Pass
		Cs-137	1.69 - 3.00 E3	2.25 E3	2.08 E3	3 Pass
		Ce-141	3.89 - 6.90 E3	5.19 E3	4.85 E3	3 Pass
5/31/2012	Q122GWR	Cr-51	2.66 - 4.72 E3	3.55 E3	3.69 E3	3 Pass
		Mn-54	6.35 - 11.26 E2	8.46 E2	8.96 E2	3 Pass
		Co-58	4.96 - 8.80 E2	6.62 E2	6.64 E2	3 Pass
		Fe-59	7.41 - 13.13 E2	9.87 E2	10.53 E2	3 Pass
		Co-60	1.67 - 2.96 E3	2.22 E3	2.27 E3	3 Pass
		Zn-65	0.97 - 1.71 E3	1.29 E3	1.39 E3	3 Pass
		Cs-134	0.83 - 1.47 E3	1.10 E3	1.04 E3	3 Pass
		Cs-137	0.99 - 1.76 E3	1.32 E3	1.29 E3	3 Pass
		Ce-141	5.19 - 9.20 E2	6.92 E2	6.86 E2	3 Pass
8/23/2012	Q123GWSL	Cr-51	1.76 - 3.12 E5	2.34 E5	2.23 E5	3 Pass
		Mn-54	0.84 - 1.49 E5	1.12 E5	1.12 E5	3 Pass
		Co-58	5.08 - 9.01 E4	6.77 E4	6.64 E4	3 Pass
		Fe-59	0.87 - 1.55 E5	1.17 E5	1.19 E5	3 Pass
		Co-60	6.27 - 11.12 E4	8.36 E4	8.42 E4	3 Pass
		Zn-65	0.84 - 1.48 E5	1.11 E5	1.13 E5	3 Pass
		Cs-134	4.50 - 7.99 E4	6.00 E4	5.62 E4	3 Pass
		Cs-137	7.12 - 12.63 E4	9.50 E4	8.84 E4	3 Pass
		Ce-141	1.07 - 1.89 E5	1.42 E5	1.36 E5	3 Pass

Gamma in Water 1.0 liter, continued

Reference Date	Sample I.D.	Nuclide	Acceptance Range pCi/l	Reference Value pCi/l	Mean Reported Value pCi/l	Cross Check Status
12/3/2012	Q124GWR	Cr-51	6.84 - 12.10 E3	9.12 E3	9.55 E3	1 Pass
		Mn-54	2.12 - 3.75 E3	2.82 E3	3.07 E3	1 Pass
		Co-58	1.86 -3.30 E3	2.48 E3	2.60 E3	1 Pass
		Fe-59	2.21 - 3.92 E3	2.95 E3	3.24 E3	1 Pass
		Co-60	3.11 - 5.51 E3	4.14 E3	4.49 E3	1 Pass
		Zn-65	3.42 - 6.06 E3	4.56 E3	5.08 E3	1 Pass
		Cs-134	3.04 - 5.39 E3	4.05 E3	3.98 E3	1 Pass
		Cs-137	2.13 - 3.78 E3	2.84 E3	2.84 E3	1 Pass
		Ce-141	0.99 - 1.76 E3	1.32 E3	1.38 E3	1 Pass

Gamma in Water 0.5 liter

Reference Date	Sample I.D.	Nuclide	Acceptance Range pCi/l	Reference Value pCi/l	Mean Reported Value pCi/l	Cross Check Status
2/28/2012	Q121GWR	Cr-51	6.92 - 12.27 E3	9.23 E3	8.85 E3	3 Pass
		Mn-54	2.15 - 3.81 E3	2.87 E3	2.90 E3	3 Pass
		Co-58	1.64 - 2.90 E3	2.18 E3	2.07 E3	3 Pass
		Fe-59	2.29 - 4.06 E3	3.05 E3	3.11 E3	3 Pass
		Co-60	2.98 - 5.28 E3	3.97 E3	3.96 E3	3 Pass
		Zn-65	3.69 - 6.55 E3	4.93 E3	4.93 E3	3 Pass
		Cs-134	1.62 - 2.86 E3	2.15 E3	1.81 E3	3 Pass
		Cs-137	1.69 - 3.00 E3	2.25 E3	2.08 E3	3 Pass
		Ce-141	3.89 - 6.90 E3	5.19 E3	4.91 E3	3 Pass
5/31/2012	Q122GWR	Cr-51	2.66 - 4.72 E3	3.55 E3	3.65 E3	3 Pass
		Mn-54	6.35 - 11.26 E2	8.46 E2	8.84 E2	3 Pass
		Co-58	4.96 - 8.80 E2	6.62 E2	6.50 E2	3 Pass
		Fe-59	7.41 - 13.13 E2	9.87 E2	10.73 E2	3 Pass
		Co-60	1.67 - 2.96 E3	2.22 E3	2.23 E3	3 Pass
		Zn-65	0.97 - 1.71 E3	1.29 E3	1.38 E3	3 Pass
		Cs-134	0.83 - 1.47 E3	1.10 E3	0.97 E3	3 Pass
		Cs-137	0.99 - 1.76 E3	1.32 E3	1.26 E3	3 Pass
		Ce-141	5.19 - 9.20 E2	6.92 E2	6.77 E2	3 Pass
8/23/2012	Q123GWSL	Cr-51	1.76 - 3.12 E5	2.34 E5	2.28 E5	3 Pass
		Mn-54	0.84 - 1.49 E5	1.12 E5	1.15 E5	3 Pass
		Co-58	5.08 - 9.01 E4	6.77 E4	6.68 E4	3 Pass
		Fe-59	0.87 - 1.55 E5	1.17 E5	1.22 E5	3 Pass
		Co-60	6.27 - 11.12 E4	8.36 E4	8.61 E4	3 Pass
		Zn-65	0.84 - 1.48 E5	1.11 E5	1.17 E5	3 Pass
		Cs-134	4.50 - 7.99 E4	6.00 E4	5.56 E4	3 Pass
		Cs-137	7.12 - 12.63 E4	9.50 E4	8.97 E4	3 Pass
		Ce-141	1.07 - 1.89 E5	1.42 E5	1.38 E5	3 Pass

Gamma in Water 0.5 liter, continued

Reference Date	Sample I.D.	Nuclide	Acceptance Range pCi/l	Reference Value pCi/l	Mean Reported Value pCi/l	Cross Check Status
12/3/2012	Q124GWR	Cr-51	6.84 - 12.10 E3	9.12 E3	9.30 E3	1 Pass
		Mn-54	2.12 - 3.75 E3	2.82 E3	2.88 E3	1 Pass
		Co-58	1.86 -3.30 E3	2.48 E3	2.44 E3	1 Pass
		Fe-59	2.21 - 3.92 E3	2.95 E3	3.13 E3	1 Pass
		Co-60	3.11 - 5.51 E3	4.14 E3	4.26 E3	1 Pass
		Zn-65	3.42 - 6.06 E3	4.56 E3	4.74 E3	1 Pass
		Cs-134	3.04 - 5.39 E3	4.05 E3	3.84 E3	1 Pass
		Cs-137	2.13 - 3.78 E3	2.84 E3	2.69 E3	1 Pass
		Ce-141	0.99 - 1.76 E3	1.32 E3	1.33 E3	1 Pass

Gamma in Water 0.25 liter

Reference Date	Sample I.D.	Nuclide	Acceptance Range pCi/l	Reference Value pCi/l	Mean Reported Value pCi/l	Cross Check Status
2/28/2012	Q121GWR	Cr-51	6.92 - 12.27 E3	9.23 E3	8.90 E3	3 Pass
		Mn-54	2.15 - 3.81 E3	2.87 E3	2.95 E3	3 Pass
		Co-58	1.64 - 2.90 E3	2.18 E3	2.11 E3	3 Pass
		Fe-59	2.29 - 4.06 E3	3.05 E3	3.10 E3	3 Pass
		Co-60	2.98 - 5.28 E3	3.97 E3	3.93 E3	3 Pass
		Zn-65	3.69 - 6.55 E3	4.93 E3	4.96 E3	3 Pass
		Cs-134	1.62 - 2.86 E3	2.15 E3	1.82 E3	3 Pass
		Cs-137	1.69 - 3.00 E3	2.25 E3	2.11 E3	3 Pass
		Ce-141	3.89 - 6.90 E3	5.19 E3	4.91 E3	3 Pass

Gamma in Filter

Reference Date	Sample I.D.	Nuclide	Acceptance Range pCi	Reference Value pCi	Mean Reported Value pCi	Cross Check Status
9/13/2012	E10237	Cr-51	1.61 - 2.85 E2	2.14 E2	2.04 E2	1 Pass
		Mn-54	1.27 - 2.25 E2	1.69 E2	1.68 E2	1 Pass
		Co-58	6.50 - 11.53 E1	8.67 E1	8.43 E1	1 Pass
		Fe-59	0.96 - 1.79 E2	1.31 E2	1.31 E2	1 Pass
		Co-60	0.98 - 1.74 E2	1.31 E2	1.36 E2	1 Pass
		Zn-65	1.25 - 2.21 E2	1.66 E2	1.70 E2	1 Pass
		Cs-134	7.01 - 12.42 E1	9.34 E1	9.12 E1	1 Pass
		Cs-137	1.13 - 2.00 E2	1.50 E2	1.37 E2	1 Pass
		Ce-141	1.06 - 1.88 E2	1.41 E2	1.34 E2	1 Pass
12/6/2012	E10318	Cr-51	2.81 - 4.99 E2	3.75 E2	3.14 E2	1 Pass
		Mn-54	0.94 - 1.66 E2	1.25 E2	1.20 E2	1 Pass
		Co-58	0.80 - 1.41 E1	1.06 E2	1.05 E2	1 Pass
		Fe-59	0.94 - 1.66 E2	1.25 E2	1.29 E2	1 Pass
		Co-60	1.38 - 2.45 E2	1.84 E2	1.95 E2	1 Pass
		Zn-65	1.51 - 2.67 E2	2.01 E2	1.84 E2	1 Pass
		Cs-134	1.34 - 2.38 E1	1.79 E2	1.71 E2	1 Pass
		Cs-137	0.95 - 1.68 E2	1.26 E2	1.19 E2	1 Pass
		Ce-141	4.13 - 7.33 E1	5.51 E1	4.60 E1	1 Pass

Iodine in Milk

Reference Date	Sample I.D.	Nuclide	Acceptance Range pCi/l	Reference Value pCi/l	Mean Reported Value pCi/l	Cross Check Status
7/17/2012	Q123LIM1	I-131	1.44 - 2.55 E2	1.92 E2	1.95 E2	3 Pass
7/17/2012	Q123LIM2	I-131	1.52 - 2.70 E3	2.03 E3	2.09 E3	3 Pass
7/17/2012	Q123LIM3	I-131	4.28 - 7.58 E2	5.70 E2	5.90 E2	3 Pass

Iodine on Cartridge

Reference Date	Sample I.D.	Nuclide	Acceptance Range pCi	Reference Value pCi	Mean Reported Value pCi	Cross Check Status
9/13/2012	E10238	I-131	7.29 - 12.93 E1	9.72 E1	10.02 E1	2 Pass
12/6/2012	E10319	I-131	5.45 - 9.67 E1	7.27 E1	7.50 E1	3 Pass

Beta in Water

Reference Date	Sample I.D.	Nuclide	Acceptance Range pCi/l	Reference Value pCi/l	Mean Reported Value pCi/l	Cross Check Status
6/6/2012	Q122ABW1	Cs-137	6.89 - 12.21 E1	9.18 E1	9.22 E1	3 Pass
6/6/2012	Q122ABW2	Cs-137	2.89 - 5.12 E2	3.85 E2	3.99 E2	3 Pass
6/6/2012	Q122ABW3	Cs-137	1.71 - 3.03 E2	2.28 E2	2.34 E2	3 Pass

Beta Air Particulate

Reference Date	Sample I.D.	Nuclide	Acceptance Range pCi	Reference Value pCi	Mean Reported Value pCi	Cross Check Status
5/11/2012	A27290A	Cs-137	6.40 - 11.34 E2	8.53 E2	8.51 E2	3 Pass
8/17/2012	A27829	Cs-137	6.05 - 10.72 E2	8.06 E2	7.76 E2	3 Pass

Tritium in Water

Reference Date	Sample I.D.	Nuclide	Acceptance Range pCi/l	Reference Value pCi/l	Mean Reported Value pCi/l	Cross Check Status
2/28/2012	Q121TWR1	H-3	1.45 - 2.57 E6	1.93 E6	1.94 E6	3 Pass
2/28/2012	Q121TWR2	H-3	3.22 - 5.70 E5	4.29 E5	4.33 E5	3 Pass
2/28/2012	Q121TWR3	H-3	4.83 - 8.57 E3	6.44 E3	6.43 E3	3 Pass
5/31/2012	Q122TWR1	H-3	7.49 - 13.28 E3	9.98 E3	10.07 E3	3 Pass
5/31/2012	Q122TWR2	H-3	5.35 - 9.49 E2	7.14 E2	7.17 E2	3 Pass
5/31/2012	Q122TWR3	H-3	1.85 - 3.28 E3	2.47 E3	2.46 E3	3 Pass
8/23/2012	Q123TWR1	H-3	5.05 - 8.96 E5	6.74 E5	6.81 E5	3 Pass
8/23/2012	Q123TWR2	H-3	2.17 - 3.85 E6	2.89 E6	2.89 E6	3 Pass
8/23/2012	Q123TWR3	H-3	4.96 - 8.80 E2	6.61 E2	7.26 E2	3 Pass

TABLE 5.0-B
ECKERT & ZIEGLER ANALYTICS
CROSS CHECK PROGRAM

2012 CROSS-CHECK RESULTS FOR ENRAD LABORATORIES

Cross-Check samples are received, prepared, and analyzed. Results are reported directly to Eckert & Ziegler Analytics. If applicable, footnote explanations are included following this table.

Gamma in Water 3.5 liters

Reference Date	Sample I.D.	Nuclide	Acceptance Range Ratio	Reference Value pCi/l	Reported Value pCi/l	Ratio	Cross Check Status
3/15/2012	E10049	I-131	0.80 - 1.20	9.38E+01	9.78E+01	1.04	Pass
		Ce-141	0.80 - 1.20	1.84E+02	1.90E+02	1.03	Pass
		Cr-51	0.80 - 1.20	3.09E+02	3.14E+02	1.02	Pass
		Cs-134	0.80 - 1.20	1.06E+02	9.65E+01	0.91	Pass
		Cs-137	0.80 - 1.20	1.13E+02	1.12E+02	1.00	Pass
		Co-58	0.80 - 1.20	9.34E+01	9.33E+01	1.00	Pass
		Mn-54	0.80 - 1.20	1.38E+02	1.45E+02	1.05	Pass
		Fe-59	0.80 - 1.20	1.19E+02	1.31E+02	1.10	Pass
		Zn-65	0.80 - 1.20	2.35E+02	2.42E+02	1.03	Pass
		Co-60	0.80 - 1.20	1.97E+02	2.10E+02	1.07	Pass
9/13/2012	E10242	I-131	0.80 - 1.20	9.99E+01	1.05E+02	1.05	Pass
		Ce-141	0.80 - 1.20	2.51E+02	2.56E+02	1.02	Pass
		Cr-51	0.80 - 1.20	3.80E+02	4.08E+02	1.07	Pass
		Cs-134	0.80 - 1.20	1.66E+02	1.52E+02	0.92	Pass
		Cs-137	0.80 - 1.20	2.67E+02	2.58E+02	0.97	Pass
		Co-58	0.80 - 1.20	1.54E+02	1.50E+02	0.97	Pass
		Mn-54	0.80 - 1.20	3.00E+02	3.06E+02	1.02	Pass
		Fe-59	0.80 - 1.20	2.33E+02	2.45E+02	1.05	Pass
		Zn-65	0.80 - 1.20	2.95E+02	3.16E+02	1.07	Pass
		Co-60	0.80 - 1.20	2.33E+02	2.43E+02	1.04	Pass

Gamma in Milk

Reference Date	Sample I.D.	Nuclide	Acceptance Range Ratio	Reference Value pCi/l	Reported Value pCi/l	Ratio	Cross Check Status
6/14/2012	E10142	I-131	0.80 - 1.20	9.97E+01	9.84E+01	0.99	Pass
		Ce-141	0.80 - 1.20	8.22E+01	8.25E+01	1.00	Pass
		Cr-51	0.80 - 1.20	4.02E+02	4.20E+02	1.05	Pass
		Cs-134	0.80 - 1.20	1.74E+02	1.59E+02	0.91	Pass
		Cs-137	0.80 - 1.20	2.12E+02	2.11E+02	1.00	Pass
		Co-58	0.80 - 1.20	9.23E+01	9.37E+01	1.01	Pass
		Mn-54	0.80 - 1.20	1.32E+02	1.35E+02	1.02	Pass
		Fe-59	0.80 - 1.20	1.28E+02	1.37E+02	1.07	Pass
		Zn-65	0.80 - 1.20	1.99E+02	2.05E+02	1.03	Pass
		Co-60	0.80 - 1.20	3.55E+02	3.64E+02	1.02	Pass

Gamma in Filter

Reference Date	Sample I.D.	Nuclide	Acceptance Range Ratio	Reference Value pCi	Reported Value pCi	Ratio	Cross Check Status
6/14/2012	E10138	Ce-141	0.80 - 1.20	7.50E+01	8.35E+01	1.11	Pass
		Cr-51	0.80 - 1.20	3.66E+02	3.71E+02	1.01	Pass
		Cs-134	0.80 - 1.20	1.59E+02	1.64E+02	1.03	Pass
		Cs-137	0.80 - 1.20	1.93E+02	1.89E+02	0.98	Pass
		Co-58	0.80 - 1.20	8.42E+01	8.93E+01	1.06	Pass
		Mn-54	0.80 - 1.20	1.21E+02	1.24E+02	1.03	Pass
		Fe-59	0.80 - 1.20	1.17E+02	1.32E+02	1.13	Pass
		Zn-65	0.80 - 1.20	1.82E+02	2.02E+02	1.11	Pass
		Co-60	0.80 - 1.20	3.24E+02	3.42E+02	1.05	Pass
9/13/2012	E10244	Ce-141	0.80 - 1.20	1.29E+02	1.32E+02	1.03	Pass
		Cr-51	0.80 - 1.20	1.95E+02	2.04E+02	1.05	Pass
		Cs-134	0.80 - 1.20	8.51E+01	8.90E+01	1.05	Pass
		Cs-137	0.80 - 1.20	1.37E+02	1.40E+02	1.02	Pass
		Co-58	0.80 - 1.20	7.89E+01	8.59E+01	1.09	Pass
		Mn-54	0.80 - 1.20	1.54E+02	1.63E+02	1.06	Pass
		Fe-59	0.80 - 1.20	1.19E+02	1.36E+02	1.14	Pass
		Zn-65	0.80 - 1.20	1.51E+02	1.67E+02	1.10	Pass
		Co-60	0.80 - 1.20	1.19E+02	1.30E+02	1.09	Pass

Iodine in Milk

Reference Date	Sample I.D.	Nuclide	Acceptance Range Ratio	Reference Value pCi/l	Reported Value pCi/l	Ratio	Cross Check Status
9/13/2012	E10239	I-131	0.80 - 1.20	9.98E+01	1.00E+02	1.00	Pass

I-131 in Charcoal Cartridge

Reference Date	Sample I.D.	Nuclide	Acceptance Range Ratio	Reference Value pCi	Reported Value pCi	Ratio	Cross Check Status
6/14/2012	E10139	I-131	0.80 - 1.20	9.73E+01	9.24E+01	0.95	Pass

Beta in Water

Reference Date	Sample I.D.	Nuclide	Acceptance Range Ratio	Reference Value pCi/l	Reported Value pCi/l	Ratio	Cross Check Status
6/14/2012	E10140	Cs-137	0.80 - 1.20	1.48E+02	1.63E+02	1.10	Pass

Beta in Air Filter

Reference Date	Sample I.D.	Nuclide	Acceptance Range Ratio	Reference Value pCi	Reported Value pCi	Ratio	Cross Check Status
3/15/2012	E10050A	Cs-137	0.80 - 1.20	1.61E+02	1.62E+02	1.01	Pass
9/13/2012	E10240	Cs-137	0.80 - 1.20	1.67E+02	1.52E+02	0.91	Pass
9/13/2012	E10241	Cs-137	0.80 - 1.20	9.10E+01	8.46E+01	0.93	Pass

Tritium in Water

Reference Date	Sample I.D.	Nuclide	Acceptance Range Ratio	Reference Value pCi/l	Reported Value pCi/l	Ratio	Cross Check Status
3/15/2012	E10052	H-3	0.80 - 1.20	4.47E+03	4.28E+03	0.96	Pass
6/14/2012	E10141	H-3	0.80 - 1.20	4.97E+03	4.70E+03	0.95	Pass
9/13/2012	E10243	H-3	0.80 - 1.20	1.30E+04	1.31E+04	1.01	Pass

TABLE 5.0-C

ENVIRONMENTAL RESOURCE ASSOCIATES (ERA) PROFICIENCY TESTING

2012 PROFICIENCY TEST RESULTS FOR ENRAD LABORATORIES

North Carolina Department of Health and Human Services Laboratory Certification
EnRad Laboratories, Laboratory Number 37817

Proficiency test samples are received, prepared, analyzed, and reported to Environmental Resource Associates as described in the instruction package within the study period. Proficiency test data are reported to ERA for evaluation. ERA reports proficiency test results to the North Carolina Department of Health and Human Services, North Carolina Public Drinking Water Laboratory Certification Program.

If applicable, footnote explanations are included following this data table.

Gamma Emitters in Water

Reference Date	Sample I.D.	Nuclide	Acceptance Range pCi/l	Reference Value pCi/l	Reported Value pCi/l	Proficiency Check Status
4/9/2012	RAD-89*	Ba-133	69.1 - 90.5	8.23E+01	8.21E+01	Pass
		Cs-134	60.6 - 81.6	7.42E+01	6.86E+01	Pass
		Cs-137	140 - 172	1.55E+02	1.45E+02	Pass
		Co-60	65.6 - 82.6	7.29E+01	7.78E+01	Pass
		Zn-65	94.5 - 125	1.05E+02	1.14E+02	Pass
10/5/2012	RAD-91**	Ba-133	71.3 - 93.3	8.48E+01	8.60E+01	Pass
		Cs-134	62.6 - 84.3	7.66E+01	6.41E+01	Pass
		Cs-137	165 - 203	1.83E+02	1.68E+02	Pass
		Co-60	70.5 - 88.5	7.83E+01	7.88E+01	Pass
		Zn-65	184 - 240	2.04E+02	2.09E+02	Pass

Tritium in Water

Reference Date	Sample I.D.	Nuclide	Acceptance Range pCi/l	Reference Value pCi/l	Reported Value pCi/l	Proficiency Check Status
4/9/2012	RAD-89*	H-3	13800 - 17400	1.58E+04	1.52E+04	Pass
10/5/2012	RAD-91**	H-3	4190 - 5380	4.89E+03	4.80E+03	Pass

** ERA study period 4/9/2012 - 5/24/2012, ERA data report issue date 6/4/2012*

*** ERA study period 10/5/2012 - 11/19/2012, ERA data report issue date 11/28/2012*

I-131 in Water

Reference Date	Sample I.D.	Nuclide	Acceptance Range pCi/l	Reference Value pCi/l	Reported Value pCi/l	Proficiency Check Status
10/5/2012	RAD-91**	I-131	20.6 - 29.4	2.48E+01	2.47E+01	Pass

** ERA study period 4/9/2012 - 5/24/2012, ERA data report issue date 6/4/2012*

*** ERA study period 10/5/2012 - 11/19/2012, ERA data report issue date 11/28/2012*

TABLE 5.0-D

2012 ENVIRONMENTAL DOSIMETER CROSS-CHECK RESULTS

Nuclear Technology Services

1st Quarter 2012

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
102442	78.8	77.4	1.81	<+/-15%	Pass
102257	83.0	77.4	7.22	<+/-15%	Pass
102337	77.7	77.4	0.40	<+/-15%	Pass
102221	78.3	77.4	1.15	<+/-15%	Pass
102483	82.3	77.4	6.37	<+/-15%	Pass
		Average Bias (B)	3.39		
		Standard Deviation (S)	3.16		
		Measure Performance |B|+S	6.55	<15%	Pass

2nd Quarter 2012

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
102414	17.4	17.0	2.29	<+/-15%	Pass
102430	17.9	17.0	5.00	<+/-15%	Pass
102462	18.0	17.0	5.94	<+/-15%	Pass
102490	16.9	17.0	-0.65	<+/-15%	Pass
102523	18.4	17.0	8.35	<+/-15%	Pass
		Average Bias (B)	4.19		
		Standard Deviation (S)	3.47		
		Measure Performance |B|+S	7.65	<15%	Pass

3rd Quarter 2012

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
102508	76.2	74.7	2.02	<+/-15%	Pass
102393	75.3	74.7	0.87	<+/-15%	Pass
102281	77.2	74.7	3.29	<+/-15%	Pass
102373	77.6	74.7	3.84	<+/-15%	Pass
102311	78.0	74.7	4.47	<+/-15%	Pass
		Average Bias (B)	2.90		
		Standard Deviation (S)	1.45		
		Measure Performance |B|+S	4.35	<15%	Pass

4th Quarter 2012

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
102432	94.0	90.4	3.94	<+/-15%	Pass
102452	95.9	90.4	6.07	<+/-15%	Pass
102453	94.1	90.4	4.09	<+/-15%	Pass
102455	99.6	90.4	10.10	<+/-15%	Pass
102473	91.8	90.4	1.56	<+/-15%	Pass
		Average Bias (B)	5.15		
		Standard Deviation (S)	3.19		
		Measure Performance |B|+S	8.34	<15%	Pass

Internal Crosscheck (Duke Energy)

1st Quarter 2012

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
102046	32.6	33.0	-1.27	<+/-15%	Pass
102017	32.1	33.0	-2.82	<+/-15%	Pass
102250	32.2	33.0	-2.42	<+/-15%	Pass
102082	32.0	33.0	-3.12	<+/-15%	Pass
102339	32.0	33.0	-3.15	<+/-15%	Pass
102332	31.9	33.0	-3.48	<+/-15%	Pass
102436	32.0	33.0	-3.18	<+/-15%	Pass
102255	32.4	33.0	-1.97	<+/-15%	Pass
102238	32.6	33.0	-1.36	<+/-15%	Pass
101256	31.1	33.0	-5.88	<+/-15%	Pass
		Average Bias (B)	-2.87		
		Standard Deviation (S)	1.31		
		Measure Performance |B|+S	4.18	<15%	Pass

2nd Quarter 2012

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
102468	34.2	35.0	-2.26	<+/-15%	Pass
102437	35.4	35.0	1.00	<+/-15%	Pass
102371	34.0	35.0	-2.77	<+/-15%	Pass
102402	34.2	35.0	-2.40	<+/-15%	Pass
102406	35.6	35.0	1.66	<+/-15%	Pass
102012	34.3	35.0	-2.14	<+/-15%	Pass
102496	32.1	35.0	-8.29	<+/-15%	Pass
102391	34.2	35.0	-2.34	<+/-15%	Pass
102407	34.8	35.0	-0.63	<+/-15%	Pass
102336	35.2	35.0	0.51	<+/-15%	Pass
		Average Bias (B)	-1.77		
		Standard Deviation (S)	2.80		
		Measure Performance |B|+S	4.56	<15%	Pass

3rd Quarter 2012

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
102149	39.1	40.0	-2.27	<+/-15%	Pass
102318	38.9	40.0	-2.78	<+/-15%	Pass
102364	38.6	40.0	-3.55	<+/-15%	Pass
102433	39.6	40.0	-1.00	<+/-15%	Pass
102434	39.7	40.0	-0.78	<+/-15%	Pass
102083	38.3	40.0	-4.20	<+/-15%	Pass
102019	38.4	40.0	-4.13	<+/-15%	Pass
102280	38.0	40.0	-5.03	<+/-15%	Pass
102154	39.1	40.0	-2.20	<+/-15%	Pass
102286	37.9	40.0	-5.28	<+/-15%	Pass
		Average Bias (B)	-3.12		
		Standard Deviation (S)	1.57		
		Measure Performance |B|+S	4.69	<15%	Pass

4th Quarter 2012

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
102258	30.6	30.0	2.03	<+/-15%	Pass
102373	29.2	30.0	-2.70	<+/-15%	Pass
102001	30.0	30.0	0.07	<+/-15%	Pass
102311	29.0	30.0	-3.50	<+/-15%	Pass
102296	28.9	30.0	-3.60	<+/-15%	Pass
102281	29.1	30.0	-2.97	<+/-15%	Pass
102227	30.5	30.0	1.53	<+/-15%	Pass
102393	29.0	30.0	-3.30	<+/-15%	Pass
102163	28.9	30.0	-3.70	<+/-15%	Pass
102248	30.0	30.0	0.00	<+/-15%	Pass
		Average Bias (B)	-1.61		
		Standard Deviation (S)	2.27		
		Measure Performance |B|+S	3.88	<15%	Pass

6.0 REFERENCES

6.1 Catawba Selected License Commitment Report

6.2 Catawba Technical Specifications

6.3 Catawba Updated Final Safety Analysis Review

6.4 Catawba Offsite Dose Calculation Manual

6.5 Catawba Annual Environmental Operating Report 1985 - 2011

6.6 Catawba Annual Effluent Report 1985 - 2012

6.7 Probability and Statistics in Engineering and Management Science, Hines and Montgomery, 1969, pages 287-293.

6.8 Practical Statistics for the Physical Sciences, Havilcek and Crain, 1988, pages 83-93.

6.9 Nuclear Regulatory Commission Regulatory Guide 1.109, Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purposes of Evaluating Compliance with 10CFR50, Appendix I.

6.10 EnRad Laboratories Operating Procedures

6.11 RETDAS, Radiological Effluent Tracking and Dose Assessment Software, Canberra Version 3.5.1, DPC Revision #4.0

6.12 NRC Integrated Inspection Report 05000413/2011004 and 05000414/2011004

6.13 NCRP (2009). National Council on Radiation Protection and Measurements. *Ionizing Radiation Exposure of the Population of the United States*, NCRP Report No. 160 (National Council on Radiation Protection and Measurements, Bethesda, Maryland).

6.14 Radiological Effluents Control Audit 12-18 (NOS)(REC)(CNS)

6.15 Problem Investigation Program Database, V 3.4.3, Duke Energy Company, C-12-00024

6.16 Radiological Effluents Control Audit 12-20 (NOS)(REC)(MNS)

6.17 Radiological Effluents Control Audit 12-19 (NOS)(REC)(ONS)

6.18 Radiological Effluents Control Audit 12-21 (NOS)(REC)(NGO)

APPENDIX A

ENVIRONMENTAL SAMPLING
&
ANALYSIS PROCEDURES

APPENDIX A

ENVIRONMENTAL SAMPLING AND ANALYSIS PROCEDURES

Adherence to established procedures for sampling and analysis of all environmental media at Catawba Nuclear Station was required to ensure compliance with Station Selected Licensee Commitments. Analytical procedures were employed to ensure that Selected Licensee Commitments detection capabilities were achieved.

Environmental sampling and analyses were performed by EnRad Laboratories, Dosimetry and Records, Fisheries and Aquatic Ecology.

This appendix describes the environmental sampling frequencies and analysis procedures by media type.

I. CHANGE OF SAMPLING PROCEDURES

No changes were made to the sampling procedure during 2012.

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 and broadleaf vegetation are ground to achieve a homogeneous mixture. Soils and sediments are dried, sifted to remove foreign objects (rocks, clams, glass, etc.) then transferred to appropriate counting geometry.

Low-level iodine analyses are performed by passing a designated sample aliquot through a pre-weighed amount of ion exchange resin to remove and concentrate any iodine in the aqueous sample (milk). The resin is then dried, mixed thoroughly, and a net resin weight determined before being transferred to appropriate counting geometry and analyzed by gamma spectroscopy.

Tritium analyses are performed quarterly by using low-level environmental liquid scintillation analysis technique on a Packard 2550 liquid scintillation system or Perkin-Elmer 2900TR liquid scintillation system. Tritium samples are distilled and batch processed with a tritium spike and blank to verify instrument performance and sample preparation technique are acceptable.

Gross beta analysis is performed by concentrating a designated aliquot of sample precipitate and analyzing by Tennelec XLB Series 5 gas-flow proportional counters.

Samples are batch processed with a blank to ensure sample contamination has not occurred.

III. CHANGE OF ANALYSIS PROCEDURES

No analysis procedures were changed during 2012.

IV. SAMPLING AND ANALYSIS PROCEDURES

A.1 AIRBORNE PARTICULATE AND RADIOIODINE

Airborne particulate and radioiodine samples at each of five 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 sampler. 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 and air particulate. A weekly gross beta analysis was performed on each filter. The continuous composite samples were collected from the locations listed below.

Location 200	=	Site Boundary (0.63 mi. NNE)
Location 201	=	Site Boundary (0.53 mi. NE)
Location 205	=	Site Boundary (0.25 mi. SW)
Location 212	=	Tega Cay (3.32 mi. E)
Location 258	=	Fairhope Road (9.84 mi. W)

A.2 DRINKING WATER

Monthly composite drinking water samples were collected at each of two locations. A gross beta and gamma analysis was performed on monthly composites. Tritium analysis was performed on the quarterly composites. The composites were collected monthly from the locations listed below.

Location 214	=	Rock Hill Water Supply (7.30 mi. SSE)
Location 218	=	Belmont Water Supply (13.5 mi. NNE)

A.3 SURFACE WATER

Monthly composite samples were collected at each of three locations. A gamma analysis was performed on the monthly composites. Tritium analysis was performed on the quarterly composites. The composites were collected monthly from the locations listed below.

Location 208	=	Discharge Canal (0.45 mi. S)

Location 211 = Wylie Dam (4.06 mi. ESE)
Location 215 = River Pointe - Hwy 49 (4.21 mi. NNE)

A.4 GROUND WATER

Grab samples were collected quarterly from a residential well at one location. A gamma analysis and tritium analysis were performed on each sample. The samples were collected from the location listed below.

Location 254 = Residence (0.82 mi. N)

A.5 MILK

Biweekly grab samples were collected at one location. A gamma and low-level Iodine-131 analysis was performed on each sample. The biweekly grab samples were collected from the location listed below.

Location 221 = Dairy (14.5 mi. NW)

A.6 BROADLEAF VEGETATION

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

Location 200 = Site Boundary (0.63 mi. NNE)
Location 201 = Site Boundary (0.53 mi. NE)
Location 222 = Site Boundary (0.70 mi. N)
Location 226 = Site Boundary (0.48 mi. S)
Location 258 = Fairhope Road (9.84 mi. W)

A.7 FOOD PRODUCTS

Monthly samples were collected when available during the harvest season at one location. A gamma analysis was performed on each sample. The samples were collected from the location listed below.

Location 260 = Irrigated Gardens (2.00 mi. SSE)

A.8 FISH

Semiannual samples were collected at each of two locations. A gamma analysis was performed on the edible portions of each sample. Boney fish (i.e. Sunfish) were prepared whole minus the head and tail portions. The samples were collected from the locations listed below.

Location 208 = Discharge Canal (0.45 mi. S)
Location 216 = Hwy 49 Bridge (4.19 mi. NNE)

A.9 SHORELINE SEDIMENT

Semiannual samples were collected at each of three locations. A gamma analysis was performed on each sample following the drying and removal of rocks and clams. The samples were collected from the locations listed below.

Location 208 = Discharge Canal (0.45 mi. S)
Location 210 = Ebenezer Access (2.31 mi. SE)
Location 215 = River Pointe - Hwy 49 (4.21 mi. NNE)

A.10 DIRECT GAMMA RADIATION (TLD)

Thermoluminescent dosimeters (TLD) were collected quarterly at forty-one locations. 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 16 TLDs, one in each meteorological sector in the general area of the site boundary.

* An outer ring of 16 TLDs, one in each meteorological sector in the 6 to 8 kilometer range.

* The remaining TLDs were placed in special interest areas such as population centers, residential areas, schools, and at three control locations.

A.11 ANNUAL LAND USE CENSUS

An Annual Land Use Census was conducted to identify within a distance of 8 kilometers (5.0 miles) from the station, 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

* The Nearest Milk-giving Animal (cow, goat, etc.)

The census was conducted during the growing season from 7/9 – 7/10/2012. Results are shown in Table 3.11. No changes were made to the sampling procedures during 2012 as a result of the 2012 census.

V. GLOBAL POSITIONING SYSTEM (GPS) ANALYSIS

The Catawba site centerline used for GPS measurements was referenced from the Catawba Nuclear Station Updated Final Safety Analysis Report (UFSAR), section 2.1.1.1, Specification of Location. Waypoint coordinates used for CNS GPS measurements were latitude 35°-3'-5"N and longitude 81°-4'-10"W. Maps and tables were generated using North American Datum (NAD) 27. Data normally reflect accuracy to within 2 to 5 meters from point of measurement. All GPS field measurements were taken as close as possible to the item of interest. Distances for the locations are displayed using three significant figures.

APPENDIX B

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

SUMMARY OF RESULTS

2012

Environmental Radiological Monitoring Program Summary

Facility: Catawba Nuclear Station **Docket No. 50-413,414**

Location: York County, South Carolina **Report Period: 01-JAN-2012 to 31-DEC-2012**

Medium or Pathway Sampled Unit of Measurement	Type and Total Number of Analyses Performed	Lower Limit of Detection (LLD)	All Indicator Locations Mean (Fraction) Range	Location with Highest Annual Mean Name, Distance, Direction Location Code	 Mean (Fraction) Range	Control Location Mean (Fraction) Range	No. of Non-Routine Report Meas.
Air Particulate (pCi/m3)						258 (9.84 mi W)	
BETA	260	1.00E-02	2.05E-2 (208/208)	205	2.09E-2 (52/52)	1.97E-2 (52/52)	0
			9.69E-3 - 3.50E-2	(0.25 mi SW)	1.11E-2 - 3.50E-2	9.63E-3 - 3.39E-2	
CS-134	260	5.00E-02	0.00 (0/208)		0.00 (0/52)	0.00 (0/52)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
CS-137	260	6.00E-02	0.00 (0/208)		0.00 (0/52)	0.00 (0/52)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
I-131	260	7.00E-02	0.00 (0/208)		0.00 (0/52)	0.00 (0/52)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	

Mean and range based upon detectable measurements only
Fraction of detectable measurements at specified locations is indicated in parentheses, (Fraction)
Zero range indicates no detectable activity measurements

Environmental Radiological Monitoring Program Summary

Facility: Catawba Nuclear Station **Docket No. 50-413,414**

Location: York County, South Carolina **Report Period: 01-JAN-2012 to 31-DEC-2012**

Medium or Pathway Sampled Unit of Measurement	Type and Total Number of Analyses Performed	Lower Limit of Detection (LLD)	All Indicator Locations Mean (Fraction) Range	Location with Highest Annual Mean Name, Distance, Direction Location Code	 Mean (Fraction) Range	Control Location Mean (Fraction) Range	No. of Non-Routine Report Meas.
Air Radioiodine (pCi/m3)						258 (9.84 mi W)	
CS-134	260	5.00E-02	0.00 (0/208)		0.00 (0/52)	0.00 (0/52)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
CS-137	260	6.00E-02	0.00 (0/208)		0.00 (0/52)	0.00 (0/52)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
I-131	260	7.00E-02	0.00 (0/208)		0.00 (0/52)	0.00 (0/52)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	

Mean and range based upon detectable measurements only
Fraction of detectable measurements at specified locations is indicated in parentheses, (Fraction)
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Environmental Radiological Monitoring Program Summary

Facility: Catawba Nuclear Station **Docket No. 50-413,414**

Location: York County, South Carolina **Report Period: 01-JAN-2012 to 31-DEC-2012**

Medium or Pathway Sampled Unit of Measurement	Type and Total Number of Analyses Performed	Lower Limit of Detection (LLD)	All Indicator Locations Mean (Fraction) Range	Location with Highest Annual Mean Name, Distance, Direction Location Code	 Mean (Fraction) Range	Control Location Mean (Fraction) Range	No. of Non-Routine Report Meas.
Drinking Water (pCi/liter)						218 (13.5 mi NNE)	
BALA-140	26	15	0.00 (0/13)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
BETA	26	4	1.89 (12/13)	214	1.89 (12/13)	1.84 (13/13)	0
			1.10 - 2.62	(7.30 mi SSE)	1.10 - 2.62	0.89 - 2.68	
CO-58	26	15	0.00 (0/13)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
CO-60	26	15	0.00 (0/13)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
CS-134	26	15	0.00 (0/13)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
CS-137	26	18	0.00 (0/13)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
FE-59	26	30	0.00 (0/13)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
H-3	8	2000	954 (4/4)	214	954 (4/4)	502 (4/4)	0
			662 - 1600	(7.30 mi SSE)	662 - 1600	406 - 647	
I-131	26	15	0.00 (0/13)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
MN-54	26	15	0.00 (0/13)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
NB-95	26	15	0.00 (0/13)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
ZN-65	26	30	0.00 (0/13)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
ZR-95	26	15	0.00 (0/13)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	

Mean and range based upon detectable measurements only
Fraction of detectable measurements at specified locations is indicated in parentheses, (Fraction)
Zero range indicates no detectable activity measurements

Environmental Radiological Monitoring Program Summary

Facility: Catawba Nuclear Station **Docket No. 50-413,414**

Location: York County, South Carolina **Report Period: 01-JAN-2012 to 31-DEC-2012**

Medium or Pathway Sampled Unit of Measurement	Type and Total Number of Analyses Performed	Lower Limit of Detection (LLD)	All Indicator Locations Mean (Fraction) Range	Location with Highest Annual Mean Name, Distance, Direction Location Code	 Mean (Fraction) Range	Control Location Mean (Fraction) Range	No. of Non-Routine Report Meas.
Surface Water (pCi/liter)						215 (4.21 mi NNE)	
	BALA-140 39	15	0.00 (0/26)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	CO-58 39	15	0.00 (0/26)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	CO-60 39	15	0.00 (0/26)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	CS-134 39	15	0.00 (0/26)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	CS-137 39	18	0.00 (0/26)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	FE-59 39	30	0.00 (0/26)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	H-3 12	2000	6510 (8/8)	208	12100 (4/4)	371 (4/4)	0
			608 - 33000	(0.45 mi S)	3650 - 33000	268 - 409	
	I-131 39	15	0.00 (0/26)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	MN-54 39	15	0.00 (0/26)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	NB-95 39	15	0.00 (0/26)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	ZN-65 39	30	0.00 (0/26)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	ZR-95 39	15	0.00 (0/26)		0.00 (0/13)	0.00 (0/13)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	

Mean and range based upon detectable measurements only
Fraction of detectable measurements at specified locations is indicated in parentheses, (Fraction)
Zero range indicates no detectable activity measurements

Environmental Radiological Monitoring Program Summary

Facility: Catawba Nuclear Station **Docket No. 50-413,414**

Location: York County, South Carolina **Report Period: 01-JAN-2012 to 31-DEC-2012**

Medium or Pathway Sampled Unit of Measurement	Type and Total Number of Analyses Performed	Lower Limit of Detection (LLD)	All Indicator Locations Mean (Fraction) Range	Location with Highest Annual Mean Name, Distance, Direction Location Code	 Mean (Fraction) Range	Control Location Mean (Fraction) Range	No. of Non-Routine Report Meas.
Ground Water (pCi/liter)						NO CONTROL LOCATION	
	BALA-140 4	15	0.00 (0/4)		0.00 (0/4)	0.00 (0/0)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	CO-58 4	15	0.00 (0/4)		0.00 (0/4)	0.00 (0/0)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	CO-60 4	15	0.00 (0/4)		0.00 (0/4)	0.00 (0/0)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	CS-134 4	15	0.00 (0/4)		0.00 (0/4)	0.00 (0/0)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	CS-137 4	18	0.00 (0/4)		0.00 (0/4)	0.00 (0/0)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	FE-59 4	30	0.00 (0/4)		0.00 (0/4)	0.00 (0/0)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	H-3 4	2000	0.00 (0/4)		0.00 (0/4)	0.00 (0/0)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	I-131 4	15	0.00 (0/4)		0.00 (0/4)	0.00 (0/0)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	MN-54 4	15	0.00 (0/4)		0.00 (0/4)	0.00 (0/0)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	NB-95 4	15	0.00 (0/4)		0.00 (0/4)	0.00 (0/0)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	ZN-65 4	30	0.00 (0/4)		0.00 (0/4)	0.00 (0/0)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	ZR-95 4	15	0.00 (0/4)		0.00 (0/4)	0.00 (0/0)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	

Mean and range based upon detectable measurements only
Fraction of detectable measurements at specified locations is indicated in parentheses, (Fraction)
Zero range indicates no detectable activity measurements

Environmental Radiological Monitoring Program Summary

Facility: Catawba Nuclear Station **Docket No. 50-413,414**

Location: York County, South Carolina **Report Period: 01-JAN-2012 to 31-DEC-2012**

Medium or Pathway Sampled Unit of Measurement	Type and Total Number of Analyses Performed	Lower Limit of Detection (LLD)	All Indicator Locations Mean (Fraction) Range	Location with Highest Annual Mean Name, Distance, Direction Location Code	 Mean (Fraction) Range	Control Location Mean (Fraction) Range	No. of Non-Routine Report Meas.
Milk (pCi/liter)			NO INDICATOR LOCATION			221 (14.5 mi NW)	
	BALA-140 26	15	0.00 (0/0)		0.00 (0/0)	0.00 (0/26)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	CS-134 26	15	0.00 (0/0)		0.00 (0/0)	0.00 (0/26)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	CS-137 26	18	0.00 (0/0)		0.00 (0/0)	0.00 (0/26)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	I-131 26	15	0.00 (0/0)		0.00 (0/0)	0.00 (0/26)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	LLI-131 26	1	0.00 (0/0)		0.00 (0/0)	0.00 (0/26)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	

Mean and range based upon detectable measurements only
Fraction of detectable measurements at specified locations is indicated in parentheses, (Fraction)
Zero range indicates no detectable activity measurements

Environmental Radiological Monitoring Program Summary

Facility: Catawba Nuclear Station **Docket No. 50-413,414**

Location: York County, South Carolina **Report Period: 01-JAN-2012 to 31-DEC-2012**

Medium or Pathway Sampled Unit of Measurement	Type and Total Number of Analyses Performed		Lower Limit of Detection (LLD)	All Indicator Locations Mean (Fraction) Range	Location with Highest Annual Mean Name, Distance, Direction Location Code	 Mean (Fraction) Range	Control Location Mean (Fraction) Range	No. of Non-Routine Report Meas.
Broadleaf Vegetation (pCi/kg-wet)							258 (9.84 mi W)	
	CS-134	60	60	0.00 (0/48)		0.00 (0/12)	0.00 (0/12)	0
				0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	CS-137	60	80	0.00 (0/48)		0.00 (0/12)	0.00 (0/12)	0
				0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	I-131	60	60	0.00 (0/48)		0.00 (0/12)	0.00 (0/12)	0
				0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	

Mean and range based upon detectable measurements only
Fraction of detectable measurements at specified locations is indicated in parentheses, (Fraction)
Zero range indicates no detectable activity measurements

Environmental Radiological Monitoring Program Summary

Facility: Catawba Nuclear Station **Docket No. 50-413,414**

Location: York County, South Carolina **Report Period: 01-JAN-2012 to 31-DEC-2012**

Medium or Pathway Sampled Unit of Measurement	Type and Total Number of Analyses Performed	Lower Limit of Detection (LLD)	All Indicator Locations Mean (Fraction) Range	Location with Highest Annual Mean Name, Distance, Direction Location Code	 Mean (Fraction) Range	Control Location Mean (Fraction) Range	No. of Non-Routine Report Meas.
Food Products (pCi/kg-wet)						NO CONTROL LOCATION	
	CS-134 9	60	0.00 (0/9)		0.00 (0/9)	0.00 (0/0)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	CS-137 9	80	0.00 (0/9)		0.00 (0/9)	0.00 (0/0)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	I-131 9	60	0.00 (0/9)		0.00 (0/9)	0.00 (0/0)	0
			0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	

Mean and range based upon detectable measurements only
Fraction of detectable measurements at specified locations is indicated in parentheses, (Fraction)
Zero range indicates no detectable activity measurements

Environmental Radiological Monitoring Program Summary

Facility: Catawba Nuclear Station **Docket No. 50-413,414**

Location: York County, South Carolina **Report Period: 01-JAN-2012 to 31-DEC-2012**

Medium or Pathway Sampled Unit of Measurement	Type and Total Number of Analyses Performed		Lower Limit of Detection (LLD)	All Indicator Locations Mean (Fraction) Range	Location with Highest Annual Mean Name, Distance, Direction Location Code	 Mean (Fraction) Range	Control Location Mean (Fraction) Range	No. of Non-Routine Report Meas.
Fish (pCi/kg-wet)							216 (4.19 mi NNE)	
	CO-58	12	130	0.00 (0/6)		0.00 (0/6)	0.00 (0/6)	0
				0.00 - 0.00		0.00 (0/6)	0.00 - 0.00	
	CO-60	12	130	0.00 (0/6)		0.00 - 0.00	0.00 (0/6)	0
				0.00 - 0.00		0.00 (0/6)	0.00 - 0.00	
	CS-134	12	130	0.00 (0/6)		0.00 (0/6)	0.00 (0/6)	0
				0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	CS-137	12	150	18.4 (1/6)	208	18.4 (1/6)	0.00 (0/6)	0
				18.4 - 18.4	(0.45 mi S)	18.4 - 18.4	0.00 - 0.00	
	FE-59	12	260	0.00 (0/6)		0.00 (0/6)	0.00 (0/6)	0
				0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	MN-54	12	130	0.00 (0/6)		0.00 (0/6)	0.00 (0/6)	0
				0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	ZN-65	12	260	0.00 (0/6)		0.00 (0/6)	0.00 (0/6)	0
				0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	

Mean and range based upon detectable measurements only
Fraction of detectable measurements at specified locations is indicated in parentheses, (Fraction)
Zero range indicates no detectable activity measurements

Environmental Radiological Monitoring Program Summary

Facility: Catawba Nuclear Station **Docket No. 50-413,414**

Location: York County, South Carolina **Report Period: 01-JAN-2012 to 31-DEC-2012**

Medium or Pathway Sampled Unit of Measurement	Type and Total Number of Analyses Performed		Lower Limit of Detection (LLD)	All Indicator Locations Mean (Fraction) Range	Location with Highest Annual Mean Name, Distance, Direction Location Code	 Mean (Fraction) Range	Control Location Mean (Fraction) Range	No. of Non-Routine Report Meas.
Shoreline Sediment (pCi/kg-dry)							215 (4.21 mi NNE)	
	MN-54	6	0	0.00 (0/4)		0.00 (0/2)	0.00 (0/2)	0
				0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	CO-57	6	0	0.00 (0/4)		0.00 (0/2)	0.00 (0/2)	0
				0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	CO-58	6	0	55.9 (2/4)	208	55.9 (2/2)	0.00 (0/2)	0
				54.8 - 56.9	(0.45 mi S)	54.8 - 56.9	0.00 - 0.00	
	CO-60	6	0	170 (2/4)	208	170 (2/2)	0.00 (0/2)	0
				146 - 194	(0.45 mi S)	146 - 194	0.00 - 0.00	
	CS-134	6	150	0.00 (0/4)		0.00 (0/2)	0.00 (0/2)	0
				0.00 - 0.00		0.00 - 0.00	0.00 - 0.00	
	CS-137	6	180	31.5 (1/4)	208	31.5 (1/2)	0.00 (0/2)	0
				31.5 - 31.5	(0.45 mi S)	31.5 - 31.5	0.00 - 0.00	

Mean and range based upon detectable measurements only
Fraction of detectable measurements at specified locations is indicated in parentheses, (Fraction)
Zero range indicates no detectable activity measurements
If LLD is equal to 0.00, then the LLD is not required by Selected Licensee Commitments

Environmental Radiological Monitoring Program Summary

Facility: Catawba Nuclear Station **Docket No. 50-413,414**

Location: York County, South Carolina **Report Period: 01-JAN-2012 to 31-DEC-2012**

Medium or Pathway Sampled Unit of Measurement	Type and Total Number of Analyses Performed	Lower Limit of Detection (LLD)	All Indicator Locations Mean (Fraction) Range	Location with Highest Annual Mean Name, Distance, Direction Location Code	 Mean (Fraction) Range	Control Location Mean (Fraction) Range	No. of Non-Routine Report Meas.
Direct Radiation TLD (mR/standard quarter)						217 (10.3 mi SSE) 247 (7.33 mi ESE) 251 (9.72 mi WNW)	
	164	0.00E+00	18.6 (152/152) 12.0 - 27.0	229 (0.84 mi NW)	24.0 (4/4) 22.0 - 27.0	15.3 (12/12) 12.0 - 20.0	0

Mean and range based upon detectable measurements only
Fraction of detectable measurements at specified locations is indicated in parentheses, (Fraction)
Zero range indicates no detectable activity measurements

APPENDIX C

SAMPLING DEVIATIONS
&
UNAVAILABLE ANALYSES

APPENDIX C

CATAWBA NUCLEAR STATION
SAMPLING DEVIATIONS & UNAVAILABLE ANALYSES

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

C.1 SAMPLING DEVIATIONS

Air Particulate and Air Radioiodines

Location	Scheduled Collection Dates	Actual Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action Identity
205	4/3 – 4/10/2012	4/3 – 4/10/2012	PI	Power to sampling equipment interrupted for about 8 hours during composite period due to possible power disruption. No work request/repair was necessary.	G-12-00754
205	8/7 – 8/14/2012	8/7 – 8/14/2012	PI	Power to sampling equipment interrupted for about 3 hours, possibly attributable to power delivery component reconfiguration during the composite period. No work request/repair was necessary.	G-12-01500

C.2 UNAVAILABLE ANALYSES

There were no unavailable samples for 2012.

APPENDIX D

ANALYTICAL DEVIATIONS

No Analytical deviations were incurred for the
2012 Radiological Environmental Monitoring Program

APPENDIX E

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM RESULTS

2012

This appendix includes sample analysis report summaries and supportive data generated from each sample medium for 2012.

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	227178	Sample Dates: 1/4/2012 - 1/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.29E-02	1.68E-03	3.53E-03
			I-131	<8.03E-03	0.00E+00	8.03E-03
			Cs-134	<9.60E-03	0.00E+00	9.60E-03
			Cs-137	<1.06E-02	0.00E+00	1.06E-02
			Be-7	1.29E-01	2.91E-02	6.76E-02
			K-40	<2.21E-01	0.00E+00	2.21E-01
Sample ID:	227312	Sample Dates: 1/10/2012 - 1/17/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.70E-02	1.35E-03	2.90E-03
			I-131	<1.84E-02	0.00E+00	1.84E-02
			Cs-134	<1.27E-02	0.00E+00	1.27E-02
			Cs-137	<1.78E-02	0.00E+00	1.78E-02
			Be-7	1.34E-01	4.88E-02	1.21E-01
			K-40	<3.89E-01	0.00E+00	3.89E-01
Sample ID:	227526	Sample Dates: 1/17/2012 - 1/24/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.86E-02	1.34E-03	2.67E-03
			I-131	<1.32E-02	0.00E+00	1.32E-02
			Cs-134	<2.52E-02	0.00E+00	2.52E-02
			Cs-137	<1.87E-02	0.00E+00	1.87E-02
			Be-7	<1.90E-01	0.00E+00	1.90E-01
			K-40	<3.62E-01	0.00E+00	3.62E-01
Sample ID:	227848	Sample Dates: 1/24/2012 - 1/31/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.56E-02	1.36E-03	3.12E-03
			I-131	<1.97E-02	0.00E+00	1.97E-02
			Cs-134	<2.09E-02	0.00E+00	2.09E-02
			Cs-137	<1.89E-02	0.00E+00	1.89E-02
			Be-7	<1.81E-01	0.00E+00	1.81E-01
			K-40	<5.15E-01	0.00E+00	5.15E-01
Sample ID:	228115	Sample Dates: 1/31/2012 - 2/7/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.71E-02	1.35E-03	2.91E-03
			I-131	<6.24E-03	0.00E+00	6.24E-03
			Cs-134	<6.58E-03	0.00E+00	6.58E-03
			Cs-137	<7.52E-03	0.00E+00	7.52E-03
			Be-7	1.43E-01	3.36E-02	4.84E-02
			K-40	1.81E-01	4.04E-02	6.41E-02
Sample ID:	229426	Sample Dates: 2/7/2012 - 2/14/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.05E-02	1.42E-03	2.84E-03
			I-131	<1.75E-02	0.00E+00	1.75E-02
			Cs-134	<2.66E-02	0.00E+00	2.66E-02
			Cs-137	<1.85E-02	0.00E+00	1.85E-02
			Be-7	<2.19E-01	0.00E+00	2.19E-01
			K-40	<4.77E-01	0.00E+00	4.77E-01
Sample ID:	230052	Sample Dates: 2/14/2012 - 2/21/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.63E-02	1.33E-03	2.90E-03
			I-131	<6.18E-03	0.00E+00	6.18E-03
			Cs-134	<6.70E-03	0.00E+00	6.70E-03
			Cs-137	<9.68E-03	0.00E+00	9.68E-03
			Be-7	9.45E-02	3.16E-02	5.07E-02
			K-40	1.77E-01	5.00E-02	1.06E-01
Sample ID:	230727	Sample Dates: 2/21/2012 - 2/28/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.45E-02	1.33E-03	3.15E-03
			I-131	<1.57E-02	0.00E+00	1.57E-02
			Cs-134	<1.29E-02	0.00E+00	1.29E-02
			Cs-137	<1.52E-02	0.00E+00	1.52E-02
			Be-7	2.09E-01	6.54E-02	1.42E-01
			K-40	<2.75E-01	0.00E+00	2.75E-01
Sample ID:	230936	Sample Dates: 2/28/2012 - 3/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.77E-02	1.31E-03	2.64E-03
			I-131	<5.67E-03	0.00E+00	5.67E-03
			Cs-134	<7.56E-03	0.00E+00	7.56E-03
			Cs-137	<5.39E-03	0.00E+00	5.39E-03
			Be-7	1.28E-01	3.38E-02	5.08E-02

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	230936	Sample Dates: 2/28/2012 - 3/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			K-40	3.29E-01	5.48E-02	9.42E-02
Sample ID:	231646	Sample Dates: 3/6/2012 - 3/13/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.77E-02	1.35E-03	2.79E-03
			I-131	<5.59E-03	0.00E+00	5.59E-03
			Cs-134	<6.65E-03	0.00E+00	6.65E-03
			Cs-137	<7.15E-03	0.00E+00	7.15E-03
			Be-7	1.87E-01	3.49E-02	5.36E-02
			K-40	<1.08E-01	0.00E+00	1.08E-01
Sample ID:	232460	Sample Dates: 3/13/2012 - 3/20/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.56E-02	1.32E-03	2.92E-03
			I-131	<7.12E-03	0.00E+00	7.12E-03
			Cs-134	<1.04E-02	0.00E+00	1.04E-02
			Cs-137	<6.47E-03	0.00E+00	6.47E-03
			Be-7	1.46E-01	3.60E-02	7.26E-02
			K-40	<2.59E-01	0.00E+00	2.59E-01
Sample ID:	233300	Sample Dates: 3/20/2012 - 3/27/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.42E-02	1.32E-03	3.14E-03
			I-131	<5.96E-03	0.00E+00	5.96E-03
			Cs-134	<6.50E-03	0.00E+00	6.50E-03
			Cs-137	<5.74E-03	0.00E+00	5.74E-03
			Be-7	1.64E-01	2.81E-02	5.00E-02
			K-40	2.66E-01	4.94E-02	8.40E-02
Sample ID:	233541	Sample Dates: 3/27/2012 - 4/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.11E-02	1.45E-03	2.96E-03
			I-131	<2.20E-02	0.00E+00	2.20E-02
			Cs-134	<2.23E-02	0.00E+00	2.23E-02
			Cs-137	<1.75E-02	0.00E+00	1.75E-02
			Be-7	2.86E-01	5.40E-02	1.09E-01
			K-40	<4.46E-01	0.00E+00	4.46E-01
Sample ID:	234459	Sample Dates: 4/3/2012 - 4/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.67E-02	1.33E-03	2.84E-03
			I-131	<1.92E-02	0.00E+00	1.92E-02
			Cs-134	<1.29E-02	0.00E+00	1.29E-02
			Cs-137	<2.66E-02	0.00E+00	2.66E-02
			Be-7	1.98E-01	4.53E-02	8.84E-02
			K-40	<4.53E-01	0.00E+00	4.53E-01
Sample ID:	234887	Sample Dates: 4/10/2012 - 4/17/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.54E-02	1.35E-03	3.09E-03
			I-131	<1.73E-02	0.00E+00	1.73E-02
			Cs-134	<1.81E-02	0.00E+00	1.81E-02
			Cs-137	<2.31E-02	0.00E+00	2.31E-02
			Be-7	1.55E-01	5.93E-02	1.34E-01
			K-40	<4.78E-01	0.00E+00	4.78E-01
Sample ID:	235209	Sample Dates: 4/17/2012 - 4/24/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.40E-02	1.28E-03	2.96E-03
			I-131	<6.28E-03	0.00E+00	6.28E-03
			Cs-134	<6.57E-03	0.00E+00	6.57E-03
			Cs-137	<8.56E-03	0.00E+00	8.56E-03
			Be-7	1.19E-01	2.99E-02	5.10E-02
			K-40	1.77E-01	4.87E-02	9.95E-02
Sample ID:	235394	Sample Dates: 4/24/2012 - 5/1/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.72E-02	1.58E-03	2.89E-03
			I-131	<1.98E-02	0.00E+00	1.98E-02
			Cs-134	<1.68E-02	0.00E+00	1.68E-02
			Cs-137	<1.97E-02	0.00E+00	1.97E-02
			Be-7	3.10E-01	5.66E-02	1.31E-01
			K-40	<4.47E-01	0.00E+00	4.47E-01
Sample ID:	235732	Sample Dates: 5/1/2012 - 5/8/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.67E-02	1.35E-03	2.96E-03
			I-131	<6.20E-03	0.00E+00	6.20E-03
			Cs-134	<9.95E-03	0.00E+00	9.95E-03

Sample ID:	235732	Sample Dates: 5/1/2012 - 5/8/2012	Nuclide	Activity	1 Sigma Error	LLD
			Cs-137	<1.06E-02	0.00E+00	1.06E-02
			Be-7	1.92E-01	2.90E-02	4.81E-02
			K-40	<2.31E-01	0.00E+00	2.31E-01
Sample ID:	235978	Sample Dates: 5/8/2012 - 5/15/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.34E-02	1.32E-03	3.21E-03
			I-131	<1.59E-02	0.00E+00	1.59E-02
			Cs-134	<1.93E-02	0.00E+00	1.93E-02
			Cs-137	<9.62E-03	0.00E+00	9.62E-03
			Be-7	1.66E-01	4.16E-02	1.53E-01
			K-40	<4.49E-01	0.00E+00	4.49E-01
Sample ID:	236188	Sample Dates: 5/15/2012 - 5/22/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.72E-02	1.34E-03	2.83E-03
			I-131	<1.40E-02	0.00E+00	1.40E-02
			Cs-134	<1.78E-02	0.00E+00	1.78E-02
			Cs-137	<2.14E-02	0.00E+00	2.14E-02
			Be-7	1.10E-01	5.12E-02	1.42E-01
			K-40	<4.45E-01	0.00E+00	4.45E-01
Sample ID:	236501	Sample Dates: 5/22/2012 - 5/30/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.94E-02	1.30E-03	2.62E-03
			I-131	<1.28E-02	0.00E+00	1.28E-02
			Cs-134	<1.72E-02	0.00E+00	1.72E-02
			Cs-137	<2.03E-02	0.00E+00	2.03E-02
			Be-7	2.07E-01	4.31E-02	1.41E-01
			K-40	<4.14E-01	0.00E+00	4.14E-01
Sample ID:	236800	Sample Dates: 5/30/2012 - 6/5/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.06E-02	1.60E-03	3.46E-03
			I-131	<2.31E-02	0.00E+00	2.31E-02
			Cs-134	<2.56E-02	0.00E+00	2.56E-02
			Cs-137	<1.78E-02	0.00E+00	1.78E-02
			Be-7	1.58E-01	7.16E-02	1.90E-01
			K-40	<5.50E-01	0.00E+00	5.50E-01
Sample ID:	237126	Sample Dates: 6/5/2012 - 6/12/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.05E-02	1.23E-03	3.15E-03
			I-131	<1.64E-02	0.00E+00	1.64E-02
			Cs-134	<1.64E-02	0.00E+00	1.64E-02
			Cs-137	<1.78E-02	0.00E+00	1.78E-02
			Be-7	<2.20E-01	0.00E+00	2.20E-01
			K-40	<4.74E-01	0.00E+00	4.74E-01
Sample ID:	237301	Sample Dates: 6/12/2012 - 6/19/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.48E-02	1.34E-03	3.14E-03
			I-131	<7.63E-03	0.00E+00	7.63E-03
			Cs-134	<8.67E-03	0.00E+00	8.67E-03
			Cs-137	<1.05E-02	0.00E+00	1.05E-02
			Be-7	1.57E-01	4.82E-02	6.41E-02
			K-40	1.36E-01	3.78E-02	2.83E-02
Sample ID:	237977	Sample Dates: 6/19/2012 - 6/26/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.17E-02	1.47E-03	2.99E-03
			I-131	<5.88E-03	0.00E+00	5.88E-03
			Cs-134	<6.44E-03	0.00E+00	6.44E-03
			Cs-137	<6.99E-03	0.00E+00	6.99E-03
			Be-7	1.61E-01	3.30E-02	5.41E-02
			K-40	2.96E-01	5.74E-02	6.59E-02
Sample ID:	238729	Sample Dates: 6/26/2012 - 7/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.45E-02	1.61E-03	3.38E-03
			I-131	<6.19E-03	0.00E+00	6.19E-03
			Cs-134	<7.86E-03	0.00E+00	7.86E-03
			Cs-137	<6.67E-03	0.00E+00	6.67E-03
			Be-7	1.93E-01	2.85E-02	4.31E-02
			K-40	<1.77E-01	0.00E+00	1.77E-01
Sample ID:	239106	Sample Dates: 7/3/2012 - 7/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.71E-02	1.61E-03	3.03E-03

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID: 239106 **Sample Dates: 7/3/2012 - 7/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.16E-03	0.00E+00	6.16E-03
Cs-134	<5.41E-03	0.00E+00	5.41E-03
Cs-137	<9.12E-03	0.00E+00	9.12E-03
Be-7	1.98E-01	2.85E-02	3.64E-02
K-40	2.18E-01	6.09E-02	1.35E-01

Sample ID: 239878 **Sample Dates: 7/10/2012 - 7/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.24E-02	1.30E-03	3.22E-03
I-131	<1.48E-02	0.00E+00	1.48E-02
Cs-134	<1.28E-02	0.00E+00	1.28E-02
Cs-137	<1.72E-02	0.00E+00	1.72E-02
Be-7	<2.01E-01	0.00E+00	2.01E-01
K-40	<4.41E-01	0.00E+00	4.41E-01

Sample ID: 240002 **Sample Dates: 7/17/2012 - 7/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.47E-02	1.28E-03	2.86E-03
I-131	<5.85E-03	0.00E+00	5.85E-03
Cs-134	<8.85E-03	0.00E+00	8.85E-03
Cs-137	<8.63E-03	0.00E+00	8.63E-03
Be-7	1.03E-01	3.24E-02	5.39E-02
K-40	2.49E-01	6.24E-02	9.58E-02

Sample ID: 240324 **Sample Dates: 7/24/2012 - 7/31/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.98E-02	1.41E-03	2.88E-03
I-131	<5.61E-03	0.00E+00	5.61E-03
Cs-134	<6.09E-03	0.00E+00	6.09E-03
Cs-137	<9.20E-03	0.00E+00	9.20E-03
Be-7	1.61E-01	2.40E-02	4.52E-02
K-40	2.17E-01	5.46E-02	9.53E-02

Sample ID: 240959 **Sample Dates: 7/31/2012 - 8/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.40E-02	1.49E-03	2.77E-03
I-131	<1.82E-02	0.00E+00	1.82E-02
Cs-134	<2.10E-02	0.00E+00	2.10E-02
Cs-137	<1.22E-02	0.00E+00	1.22E-02
Be-7	1.04E-01	3.28E-02	1.49E-01
K-40	<3.61E-01	0.00E+00	3.61E-01

Sample ID: 241230 **Sample Dates: 8/7/2012 - 8/14/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.24E-02	1.23E-03	2.90E-03
I-131	<2.04E-02	0.00E+00	2.04E-02
Cs-134	<2.08E-02	0.00E+00	2.08E-02
Cs-137	<1.19E-02	0.00E+00	1.19E-02
Be-7	2.83E-01	5.89E-02	1.29E-01
K-40	<4.67E-01	0.00E+00	4.67E-01

Sample ID: 241537 **Sample Dates: 8/14/2012 - 8/21/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.37E-02	1.53E-03	3.04E-03
I-131	<2.00E-02	0.00E+00	2.00E-02
Cs-134	<1.64E-02	0.00E+00	1.64E-02
Cs-137	<1.78E-02	0.00E+00	1.78E-02
Be-7	1.24E-01	4.18E-02	1.29E-01
K-40	<4.42E-01	0.00E+00	4.42E-01

Sample ID: 242126 **Sample Dates: 8/21/2012 - 8/28/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.94E-02	1.67E-03	3.12E-03
I-131	<6.76E-03	0.00E+00	6.76E-03
Cs-134	<5.76E-03	0.00E+00	5.76E-03
Cs-137	<5.94E-03	0.00E+00	5.94E-03
Be-7	2.14E-01	3.45E-02	4.97E-02
K-40	<2.02E-01	0.00E+00	2.02E-01

Sample ID: 242455 **Sample Dates: 8/28/2012 - 9/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	9.69E-03	1.04E-03	2.56E-03
I-131	<4.92E-03	0.00E+00	4.92E-03
Cs-134	<3.71E-03	0.00E+00	3.71E-03
Cs-137	<7.10E-03	0.00E+00	7.10E-03
Be-7	7.96E-02	2.49E-02	5.04E-02
K-40	1.32E-01	5.02E-02	9.82E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID: 242982 **Sample Dates: 9/5/2012 - 9/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.90E-02	1.54E-03	3.34E-03
I-131	<2.05E-02	0.00E+00	2.05E-02
Cs-134	<2.27E-02	0.00E+00	2.27E-02
Cs-137	<3.03E-02	0.00E+00	3.03E-02
Be-7	<2.01E-01	0.00E+00	2.01E-01
K-40	4.53E-01	1.26E-01	3.34E-01

Sample ID: 243740 **Sample Dates: 9/11/2012 - 9/18/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.08E-02	1.43E-03	2.89E-03
I-131	<6.25E-03	0.00E+00	6.25E-03
Cs-134	<6.87E-03	0.00E+00	6.87E-03
Cs-137	<8.06E-03	0.00E+00	8.06E-03
Be-7	1.71E-01	3.45E-02	5.31E-02
K-40	3.18E-01	5.54E-02	1.01E-01

Sample ID: 244145 **Sample Dates: 9/18/2012 - 9/25/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.30E-02	1.47E-03	2.81E-03
I-131	<7.82E-03	0.00E+00	7.82E-03
Cs-134	<1.20E-02	0.00E+00	1.20E-02
Cs-137	<1.26E-02	0.00E+00	1.26E-02
Be-7	2.14E-01	4.15E-02	9.02E-02
K-40	<2.22E-01	0.00E+00	2.22E-01

Sample ID: 245017 **Sample Dates: 9/25/2012 - 10/2/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	3.07E-02	1.67E-03	3.01E-03
I-131	<1.30E-02	0.00E+00	1.30E-02
Cs-134	<1.99E-02	0.00E+00	1.99E-02
Cs-137	<1.76E-02	0.00E+00	1.76E-02
Be-7	2.17E-01	4.73E-02	1.33E-01
K-40	<4.20E-01	0.00E+00	4.20E-01

Sample ID: 245837 **Sample Dates: 10/2/2012 - 10/9/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.37E-02	1.55E-03	3.19E-03
I-131	<1.51E-02	0.00E+00	1.51E-02
Cs-134	<1.79E-02	0.00E+00	1.79E-02
Cs-137	<1.99E-02	0.00E+00	1.99E-02
Be-7	<2.08E-01	0.00E+00	2.08E-01
K-40	<3.55E-01	0.00E+00	3.55E-01

Sample ID: 246692 **Sample Dates: 10/9/2012 - 10/16/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.38E-02	1.57E-03	3.29E-03
I-131	<7.34E-03	0.00E+00	7.34E-03
Cs-134	<9.98E-03	0.00E+00	9.98E-03
Cs-137	<1.03E-02	0.00E+00	1.03E-02
Be-7	1.66E-01	3.84E-02	5.77E-02
K-40	<1.71E-01	0.00E+00	1.71E-01

Sample ID: 247100 **Sample Dates: 10/16/2012 - 10/23/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.31E-02	1.51E-03	2.99E-03
I-131	<1.41E-02	0.00E+00	1.41E-02
Cs-134	<1.82E-02	0.00E+00	1.82E-02
Cs-137	<1.74E-02	0.00E+00	1.74E-02
Be-7	<2.01E-01	0.00E+00	2.01E-01
K-40	<3.56E-01	0.00E+00	3.56E-01

Sample ID: 247416 **Sample Dates: 10/23/2012 - 10/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.24E-02	1.51E-03	3.11E-03
I-131	<1.27E-02	0.00E+00	1.27E-02
Cs-134	<1.80E-02	0.00E+00	1.80E-02
Cs-137	<2.32E-02	0.00E+00	2.32E-02
Be-7	<1.57E-01	0.00E+00	1.57E-01
K-40	<4.68E-01	0.00E+00	4.68E-01

Sample ID: 247754 **Sample Dates: 10/30/2012 - 11/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.39E-02	1.53E-03	3.03E-03
I-131	<1.89E-02	0.00E+00	1.89E-02
Cs-134	<1.62E-02	0.00E+00	1.62E-02
Cs-137	<2.41E-02	0.00E+00	2.41E-02
Be-7	1.73E-01	6.29E-02	1.28E-01

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	247754	Sample Dates: 10/30/2012 - 11/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			K-40	<5.51E-01	0.00E+00	5.51E-01
Sample ID:	247949	Sample Dates: 11/6/2012 - 11/13/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.93E-02	1.64E-03	3.02E-03
			I-131	<1.44E-02	0.00E+00	1.44E-02
			Cs-134	<1.46E-02	0.00E+00	1.46E-02
			Cs-137	<1.18E-02	0.00E+00	1.18E-02
			Be-7	2.51E-01	5.76E-02	1.46E-01
			K-40	<2.16E-01	0.00E+00	2.16E-01
Sample ID:	248353	Sample Dates: 11/13/2012 - 11/20/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.81E-02	1.72E-03	3.64E-03
			I-131	<1.69E-02	0.00E+00	1.69E-02
			Cs-134	<1.94E-02	0.00E+00	1.94E-02
			Cs-137	<1.82E-02	0.00E+00	1.82E-02
			Be-7	<2.37E-01	0.00E+00	2.37E-01
			K-40	<4.19E-01	0.00E+00	4.19E-01
Sample ID:	248632	Sample Dates: 11/20/2012 - 11/27/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	3.08E-02	1.69E-03	3.14E-03
			I-131	<1.75E-02	0.00E+00	1.75E-02
			Cs-134	<2.13E-02	0.00E+00	2.13E-02
			Cs-137	<1.56E-02	0.00E+00	1.56E-02
			Be-7	<2.80E-01	0.00E+00	2.80E-01
			K-40	<3.17E-01	0.00E+00	3.17E-01
Sample ID:	249005	Sample Dates: 11/27/2012 - 12/4/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	3.39E-02	1.73E-03	3.04E-03
			I-131	<2.09E-02	0.00E+00	2.09E-02
			Cs-134	<1.94E-02	0.00E+00	1.94E-02
			Cs-137	<1.97E-02	0.00E+00	1.97E-02
			Be-7	1.36E-01	5.34E-02	1.28E-01
			K-40	<3.50E-01	0.00E+00	3.50E-01
Sample ID:	249244	Sample Dates: 12/4/2012 - 12/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.87E-02	1.48E-03	3.38E-03
			I-131	<2.01E-02	0.00E+00	2.01E-02
			Cs-134	<1.30E-02	0.00E+00	1.30E-02
			Cs-137	<1.95E-02	0.00E+00	1.95E-02
			Be-7	<1.91E-01	0.00E+00	1.91E-01
			K-40	<4.44E-01	0.00E+00	4.44E-01
Sample ID:	249442	Sample Dates: 12/11/2012 - 12/18/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.33E-02	1.53E-03	3.09E-03
			I-131	<1.55E-02	0.00E+00	1.55E-02
			Cs-134	<2.11E-02	0.00E+00	2.11E-02
			Cs-137	<1.77E-02	0.00E+00	1.77E-02
			Be-7	<1.98E-01	0.00E+00	1.98E-01
			K-40	<4.45E-01	0.00E+00	4.45E-01
Sample ID:	249869	Sample Dates: 12/18/2012 - 12/26/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.54E-02	1.40E-03	2.48E-03
			I-131	<1.24E-02	0.00E+00	1.24E-02
			Cs-134	<1.92E-02	0.00E+00	1.92E-02
			Cs-137	<1.23E-02	0.00E+00	1.23E-02
			Be-7	<1.80E-01	0.00E+00	1.80E-01
			K-40	<5.18E-01	0.00E+00	5.18E-01
Sample ID:	250176	Sample Dates: 12/26/2012 - 1/2/2013	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.83E-02	1.37E-03	2.91E-03
			I-131	<1.47E-02	0.00E+00	1.47E-02
			Cs-134	<1.72E-02	0.00E+00	1.72E-02
			Cs-137	<1.49E-02	0.00E+00	1.49E-02
			Be-7	<1.90E-01	0.00E+00	1.90E-01
			K-40	<3.84E-01	0.00E+00	3.84E-01

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	227179	Sample Dates: 1/4/2012 - 1/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.41E-02	1.71E-03	3.55E-03

Sample ID:	227179	Sample Dates: 1/4/2012 - 1/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<7.04E-03	0.00E+00	7.04E-03
			Cs-134	<6.30E-03	0.00E+00	6.30E-03
			Cs-137	<9.33E-03	0.00E+00	9.33E-03
			Be-7	1.17E-01	3.32E-02	6.01E-02
			K-40	<2.52E-01	0.00E+00	2.52E-01
Sample ID:	227313	Sample Dates: 1/10/2012 - 1/17/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.75E-02	1.36E-03	2.88E-03
			I-131	<6.08E-03	0.00E+00	6.08E-03
			Cs-134	<6.44E-03	0.00E+00	6.44E-03
			Cs-137	<5.72E-03	0.00E+00	5.72E-03
			Be-7	1.32E-01	3.40E-02	5.64E-02
			K-40	1.93E-01	5.69E-02	7.86E-02
Sample ID:	227527	Sample Dates: 1/17/2012 - 1/24/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.60E-02	1.28E-03	2.67E-03
			I-131	<7.94E-03	0.00E+00	7.94E-03
			Cs-134	<5.86E-03	0.00E+00	5.86E-03
			Cs-137	<7.62E-03	0.00E+00	7.62E-03
			Be-7	1.53E-01	3.41E-02	6.01E-02
			K-40	1.21E-01	4.94E-02	9.07E-02
Sample ID:	227849	Sample Dates: 1/24/2012 - 1/31/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.51E-02	1.34E-03	3.11E-03
			I-131	<4.47E-03	0.00E+00	4.47E-03
			Cs-134	<6.29E-03	0.00E+00	6.29E-03
			Cs-137	<9.13E-03	0.00E+00	9.13E-03
			Be-7	1.10E-01	3.46E-02	5.88E-02
			K-40	<1.81E-01	0.00E+00	1.81E-01
Sample ID:	228116	Sample Dates: 1/31/2012 - 2/7/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.94E-02	1.41E-03	2.94E-03
			I-131	<1.91E-02	0.00E+00	1.91E-02
			Cs-134	<1.94E-02	0.00E+00	1.94E-02
			Cs-137	<2.43E-02	0.00E+00	2.43E-02
			Be-7	<2.45E-01	0.00E+00	2.45E-01
			K-40	3.22E-01	9.72E-02	2.10E-01
Sample ID:	229427	Sample Dates: 2/7/2012 - 2/14/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.02E-02	1.41E-03	2.83E-03
			I-131	<7.17E-03	0.00E+00	7.17E-03
			Cs-134	<1.07E-02	0.00E+00	1.07E-02
			Cs-137	<1.43E-02	0.00E+00	1.43E-02
			Be-7	1.19E-01	2.54E-02	6.85E-02
			K-40	2.43E-01	6.49E-02	1.60E-01
Sample ID:	230053	Sample Dates: 2/14/2012 - 2/21/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.79E-02	1.37E-03	2.89E-03
			I-131	<6.43E-03	0.00E+00	6.43E-03
			Cs-134	<8.06E-03	0.00E+00	8.06E-03
			Cs-137	<1.00E-02	0.00E+00	1.00E-02
			Be-7	1.06E-01	2.91E-02	5.47E-02
			K-40	2.70E-01	6.43E-02	1.06E-01
Sample ID:	230728	Sample Dates: 2/21/2012 - 2/28/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.50E-02	1.35E-03	3.16E-03
			I-131	<1.68E-02	0.00E+00	1.68E-02
			Cs-134	<1.28E-02	0.00E+00	1.28E-02
			Cs-137	<2.14E-02	0.00E+00	2.14E-02
			Be-7	1.14E-01	4.22E-02	1.30E-01
			K-40	<4.45E-01	0.00E+00	4.45E-01
Sample ID:	230937	Sample Dates: 2/28/2012 - 3/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.72E-02	1.31E-03	2.65E-03
			I-131	<7.60E-03	0.00E+00	7.60E-03
			Cs-134	<6.33E-03	0.00E+00	6.33E-03
			Cs-137	<8.31E-03	0.00E+00	8.31E-03
			Be-7	2.10E-01	3.05E-02	4.18E-02
			K-40	2.58E-01	6.36E-02	1.48E-01

Sample ID: 231647 **Sample Dates: 3/6/2012 - 3/13/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.71E-02	1.33E-03	2.78E-03
I-131	<1.70E-02	0.00E+00	1.70E-02
Cs-134	<1.83E-02	0.00E+00	1.83E-02
Cs-137	<1.52E-02	0.00E+00	1.52E-02
Be-7	2.27E-01	6.45E-02	2.06E-01
K-40	<4.72E-01	0.00E+00	4.72E-01

Sample ID: 232461 **Sample Dates: 3/13/2012 - 3/20/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.72E-02	1.36E-03	2.93E-03
I-131	<6.60E-03	0.00E+00	6.60E-03
Cs-134	<5.91E-03	0.00E+00	5.91E-03
Cs-137	<9.01E-03	0.00E+00	9.01E-03
Be-7	1.27E-01	4.08E-02	6.96E-02
K-40	<1.35E-01	0.00E+00	1.35E-01

Sample ID: 233301 **Sample Dates: 3/20/2012 - 3/27/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.69E-02	1.39E-03	3.12E-03
I-131	<5.91E-03	0.00E+00	5.91E-03
Cs-134	<6.84E-03	0.00E+00	6.84E-03
Cs-137	<7.25E-03	0.00E+00	7.25E-03
Be-7	1.82E-01	3.40E-02	4.82E-02
K-40	3.31E-01	5.76E-02	8.48E-02

Sample ID: 233542 **Sample Dates: 3/27/2012 - 4/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.84E-02	1.40E-03	2.97E-03
I-131	<7.77E-03	0.00E+00	7.77E-03
Cs-134	<7.54E-03	0.00E+00	7.54E-03
Cs-137	<9.40E-03	0.00E+00	9.40E-03
Be-7	1.57E-01	4.63E-02	7.22E-02
K-40	<2.72E-01	0.00E+00	2.72E-01

Sample ID: 234460 **Sample Dates: 4/3/2012 - 4/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.71E-02	1.34E-03	2.83E-03
I-131	<3.94E-03	0.00E+00	3.94E-03
Cs-134	<5.16E-03	0.00E+00	5.16E-03
Cs-137	<5.56E-03	0.00E+00	5.56E-03
Be-7	1.78E-01	3.45E-02	5.79E-02
K-40	<1.92E-01	0.00E+00	1.92E-01

Sample ID: 234888 **Sample Dates: 4/10/2012 - 4/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.60E-02	1.36E-03	3.10E-03
I-131	<6.42E-03	0.00E+00	6.42E-03
Cs-134	<7.30E-03	0.00E+00	7.30E-03
Cs-137	<8.04E-03	0.00E+00	8.04E-03
Be-7	1.70E-01	3.80E-02	5.52E-02
K-40	3.02E-01	5.25E-02	2.47E-02

Sample ID: 235210 **Sample Dates: 4/17/2012 - 4/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.69E-02	1.36E-03	2.96E-03
I-131	<6.50E-03	0.00E+00	6.50E-03
Cs-134	<7.15E-03	0.00E+00	7.15E-03
Cs-137	<7.52E-03	0.00E+00	7.52E-03
Be-7	1.34E-01	2.51E-02	5.75E-02
K-40	<2.11E-01	0.00E+00	2.11E-01

Sample ID: 235395 **Sample Dates: 4/24/2012 - 5/1/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.46E-02	1.53E-03	2.89E-03
I-131	<9.17E-03	0.00E+00	9.17E-03
Cs-134	<8.58E-03	0.00E+00	8.58E-03
Cs-137	<1.14E-02	0.00E+00	1.14E-02
Be-7	1.69E-01	4.84E-02	8.57E-02
K-40	<2.59E-01	0.00E+00	2.59E-01

Sample ID: 235733 **Sample Dates: 5/1/2012 - 5/8/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.55E-02	1.32E-03	2.96E-03
I-131	<7.43E-03	0.00E+00	7.43E-03
Cs-134	<7.46E-03	0.00E+00	7.46E-03
Cs-137	<1.13E-02	0.00E+00	1.13E-02
Be-7	1.18E-01	2.47E-02	5.39E-02

Sample ID:	235733	Sample Dates: 5/1/2012 - 5/8/2012	Nuclide	Activity	1 Sigma Error	LLD
			K-40	<1.48E-01	0.00E+00	1.48E-01
Sample ID:	**235979**	**Sample Dates: 5/8/2012 - 5/15/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Beta	1.43E-02	1.34E-03	3.20E-03
			I-131	<1.01E-02	0.00E+00	1.01E-02
			Cs-134	<1.12E-02	0.00E+00	1.12E-02
			Cs-137	<1.48E-02	0.00E+00	1.48E-02
			Be-7	1.21E-01	5.09E-02	8.88E-02
			K-40	<3.26E-01	0.00E+00	3.26E-01
Sample ID:	236189	Sample Dates: 5/15/2012 - 5/22/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.66E-02	1.32E-03	2.83E-03
			I-131	<1.93E-02	0.00E+00	1.93E-02
			Cs-134	<1.66E-02	0.00E+00	1.66E-02
			Cs-137	<2.06E-02	0.00E+00	2.06E-02
			Be-7	1.89E-01	6.85E-02	1.52E-01
			K-40	<4.19E-01	0.00E+00	4.19E-01
Sample ID:	236502	Sample Dates: 5/22/2012 - 5/30/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.65E-02	1.24E-03	2.63E-03
			I-131	<7.40E-03	0.00E+00	7.40E-03
			Cs-134	<5.80E-03	0.00E+00	5.80E-03
			Cs-137	<1.06E-02	0.00E+00	1.06E-02
			Be-7	1.47E-01	3.11E-02	7.54E-02
			K-40	<4.09E-02	0.00E+00	4.09E-02
Sample ID:	236801	Sample Dates: 5/30/2012 - 6/5/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.02E-02	1.59E-03	3.46E-03
			I-131	<8.43E-03	0.00E+00	8.43E-03
			Cs-134	<1.14E-02	0.00E+00	1.14E-02
			Cs-137	<1.34E-02	0.00E+00	1.34E-02
			Be-7	1.52E-01	4.27E-02	6.62E-02
			K-40	<2.83E-01	0.00E+00	2.83E-01
Sample ID:	237127	Sample Dates: 6/5/2012 - 6/12/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.14E-02	1.25E-03	3.14E-03
			I-131	<6.68E-03	0.00E+00	6.68E-03
			Cs-134	<6.58E-03	0.00E+00	6.58E-03
			Cs-137	<9.98E-03	0.00E+00	9.98E-03
			Be-7	1.24E-01	2.39E-02	5.32E-02
			K-40	<2.16E-01	0.00E+00	2.16E-01
Sample ID:	237302	Sample Dates: 6/12/2012 - 6/19/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.48E-02	1.34E-03	3.14E-03
			I-131	<8.18E-03	0.00E+00	8.18E-03
			Cs-134	<9.86E-03	0.00E+00	9.86E-03
			Cs-137	<1.30E-02	0.00E+00	1.30E-02
			Be-7	1.83E-01	4.46E-02	9.07E-02
			K-40	<1.80E-01	0.00E+00	1.80E-01
Sample ID:	237978	Sample Dates: 6/19/2012 - 6/26/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.96E-02	1.43E-03	3.01E-03
			I-131	<7.63E-03	0.00E+00	7.63E-03
			Cs-134	<7.16E-03	0.00E+00	7.16E-03
			Cs-137	<9.07E-03	0.00E+00	9.07E-03
			Be-7	1.67E-01	3.16E-02	5.87E-02
			K-40	<1.81E-01	0.00E+00	1.81E-01
Sample ID:	238730	Sample Dates: 6/26/2012 - 7/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.70E-02	1.67E-03	3.39E-03
			I-131	<1.62E-02	0.00E+00	1.62E-02
			Cs-134	<2.32E-02	0.00E+00	2.32E-02
			Cs-137	<1.76E-02	0.00E+00	1.76E-02
			Be-7	1.77E-01	6.32E-02	1.68E-01
			K-40	<4.45E-01	0.00E+00	4.45E-01
Sample ID:	239107	Sample Dates: 7/3/2012 - 7/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.67E-02	1.59E-03	3.01E-03
			I-131	<7.69E-03	0.00E+00	7.69E-03
			Cs-134	<8.49E-03	0.00E+00	8.49E-03

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID: 239107 **Sample Dates: 7/3/2012 - 7/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
Cs-137	<6.50E-03	0.00E+00	6.50E-03
Be-7	2.10E-01	3.68E-02	7.75E-02
K-40	<3.14E-01	0.00E+00	3.14E-01

Sample ID: 239879 **Sample Dates: 7/10/2012 - 7/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	9.92E-03	1.23E-03	3.22E-03
I-131	<1.37E-02	0.00E+00	1.37E-02
Cs-134	<2.03E-02	0.00E+00	2.03E-02
Cs-137	<1.72E-02	0.00E+00	1.72E-02
Be-7	<2.09E-01	0.00E+00	2.09E-01
K-40	<5.17E-01	0.00E+00	5.17E-01

Sample ID: 240003 **Sample Dates: 7/17/2012 - 7/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.53E-02	1.30E-03	2.86E-03
I-131	<1.95E-02	0.00E+00	1.95E-02
Cs-134	<1.66E-02	0.00E+00	1.66E-02
Cs-137	<2.00E-02	0.00E+00	2.00E-02
Be-7	1.47E-01	5.57E-02	1.32E-01
K-40	<4.45E-01	0.00E+00	4.45E-01

Sample ID: 240325 **Sample Dates: 7/24/2012 - 7/31/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.19E-02	1.46E-03	2.87E-03
I-131	<5.50E-03	0.00E+00	5.50E-03
Cs-134	<7.52E-03	0.00E+00	7.52E-03
Cs-137	<8.06E-03	0.00E+00	8.06E-03
Be-7	1.82E-01	2.86E-02	5.06E-02
K-40	2.30E-01	5.80E-02	1.08E-01

Sample ID: 240960 **Sample Dates: 7/31/2012 - 8/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.19E-02	1.45E-03	2.78E-03
I-131	<1.91E-02	0.00E+00	1.91E-02
Cs-134	<1.14E-02	0.00E+00	1.14E-02
Cs-137	<1.79E-02	0.00E+00	1.79E-02
Be-7	1.58E-01	5.98E-02	1.50E-01
K-40	2.42E-01	8.54E-02	2.90E-01

Sample ID: 241231 **Sample Dates: 8/7/2012 - 8/14/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.24E-02	1.23E-03	2.90E-03
I-131	<7.23E-03	0.00E+00	7.23E-03
Cs-134	<7.94E-03	0.00E+00	7.94E-03
Cs-137	<7.45E-03	0.00E+00	7.45E-03
Be-7	1.42E-01	3.23E-02	6.97E-02
K-40	<1.87E-01	0.00E+00	1.87E-01

Sample ID: 241538 **Sample Dates: 8/14/2012 - 8/21/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.51E-02	1.56E-03	3.05E-03
I-131	<1.24E-02	0.00E+00	1.24E-02
Cs-134	<1.64E-02	0.00E+00	1.64E-02
Cs-137	<1.77E-02	0.00E+00	1.77E-02
Be-7	<1.91E-01	0.00E+00	1.91E-01
K-40	<4.92E-01	0.00E+00	4.92E-01

Sample ID: 242127 **Sample Dates: 8/21/2012 - 8/28/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.76E-02	1.62E-03	3.09E-03
I-131	<7.11E-03	0.00E+00	7.11E-03
Cs-134	<9.51E-03	0.00E+00	9.51E-03
Cs-137	<1.15E-02	0.00E+00	1.15E-02
Be-7	2.14E-01	2.89E-02	4.16E-02
K-40	<2.35E-01	0.00E+00	2.35E-01

Sample ID: 242456 **Sample Dates: 8/28/2012 - 9/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.22E-02	1.12E-03	2.59E-03
I-131	<5.73E-03	0.00E+00	5.73E-03
Cs-134	<6.64E-03	0.00E+00	6.64E-03
Cs-137	<8.34E-03	0.00E+00	8.34E-03
Be-7	1.22E-01	3.22E-02	4.88E-02
K-40	<2.22E-01	0.00E+00	2.22E-01

Sample ID: 242983 **Sample Dates: 9/5/2012 - 9/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.92E-02	1.54E-03	3.33E-03

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID: 242983 **Sample Dates: 9/5/2012 - 9/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.83E-03	0.00E+00	7.83E-03
Cs-134	<8.12E-03	0.00E+00	8.12E-03
Cs-137	<7.14E-03	0.00E+00	7.14E-03
Be-7	1.29E-01	3.69E-02	6.76E-02
K-40	<2.47E-01	0.00E+00	2.47E-01

Sample ID: 243741 **Sample Dates: 9/11/2012 - 9/18/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.28E-02	1.48E-03	2.90E-03
I-131	<5.85E-03	0.00E+00	5.85E-03
Cs-134	<6.00E-03	0.00E+00	6.00E-03
Cs-137	<1.08E-02	0.00E+00	1.08E-02
Be-7	1.24E-01	4.48E-02	7.63E-02
K-40	2.82E-01	5.54E-02	8.29E-02

Sample ID: 244146 **Sample Dates: 9/18/2012 - 9/25/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.28E-02	1.47E-03	2.83E-03
I-131	<1.84E-02	0.00E+00	1.84E-02
Cs-134	<1.94E-02	0.00E+00	1.94E-02
Cs-137	<2.31E-02	0.00E+00	2.31E-02
Be-7	1.34E-01	4.45E-02	1.30E-01
K-40	<4.02E-01	0.00E+00	4.02E-01

Sample ID: 245018 **Sample Dates: 9/25/2012 - 10/2/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.89E-02	1.63E-03	2.97E-03
I-131	<1.11E-02	0.00E+00	1.11E-02
Cs-134	<1.11E-02	0.00E+00	1.11E-02
Cs-137	<1.11E-02	0.00E+00	1.11E-02
Be-7	1.87E-01	4.11E-02	6.80E-02
K-40	<3.08E-01	0.00E+00	3.08E-01

Sample ID: 245838 **Sample Dates: 10/2/2012 - 10/9/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.59E-02	1.60E-03	3.19E-03
I-131	<5.72E-03	0.00E+00	5.72E-03
Cs-134	<7.44E-03	0.00E+00	7.44E-03
Cs-137	<7.03E-03	0.00E+00	7.03E-03
Be-7	1.37E-01	2.84E-02	4.94E-02
K-40	<1.29E-01	0.00E+00	1.29E-01

Sample ID: 246693 **Sample Dates: 10/9/2012 - 10/16/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.54E-02	1.61E-03	3.30E-03
I-131	<1.70E-02	0.00E+00	1.70E-02
Cs-134	<1.48E-02	0.00E+00	1.48E-02
Cs-137	<2.21E-02	0.00E+00	2.21E-02
Be-7	1.51E-01	6.51E-02	1.45E-01
K-40	<4.42E-01	0.00E+00	4.42E-01

Sample ID: 247101 **Sample Dates: 10/16/2012 - 10/23/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.75E-02	1.60E-03	2.97E-03
I-131	<2.26E-02	0.00E+00	2.26E-02
Cs-134	<1.76E-02	0.00E+00	1.76E-02
Cs-137	<1.82E-02	0.00E+00	1.82E-02
Be-7	1.23E-01	5.01E-02	1.51E-01
K-40	<4.43E-01	0.00E+00	4.43E-01

Sample ID: 247417 **Sample Dates: 10/23/2012 - 10/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.38E-02	1.54E-03	3.11E-03
I-131	<1.22E-02	0.00E+00	1.22E-02
Cs-134	<2.38E-02	0.00E+00	2.38E-02
Cs-137	<1.96E-02	0.00E+00	1.96E-02
Be-7	2.05E-01	6.43E-02	1.34E-01
K-40	<3.93E-01	0.00E+00	3.93E-01

Sample ID: 247755 **Sample Dates: 10/30/2012 - 11/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.38E-02	1.53E-03	3.04E-03
I-131	<1.61E-02	0.00E+00	1.61E-02
Cs-134	<1.98E-02	0.00E+00	1.98E-02
Cs-137	<1.73E-02	0.00E+00	1.73E-02
Be-7	1.35E-01	6.14E-02	1.30E-01
K-40	3.22E-01	1.21E-01	3.27E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	247950	Sample Dates: 11/6/2012 - 11/13/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.77E-02	1.61E-03	3.03E-03
			I-131	<1.52E-02	0.00E+00	1.52E-02
			Cs-134	<2.28E-02	0.00E+00	2.28E-02
			Cs-137	<1.94E-02	0.00E+00	1.94E-02
			Be-7	1.91E-01	6.10E-02	1.73E-01
			K-40	<4.16E-01	0.00E+00	4.16E-01
Sample ID:	248354	Sample Dates: 11/13/2012 - 11/20/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.68E-02	1.69E-03	3.62E-03
			I-131	<2.18E-02	0.00E+00	2.18E-02
			Cs-134	<1.98E-02	0.00E+00	1.98E-02
			Cs-137	<2.18E-02	0.00E+00	2.18E-02
			Be-7	1.99E-01	6.52E-02	1.08E-01
			K-40	<5.15E-01	0.00E+00	5.15E-01
Sample ID:	248633	Sample Dates: 11/20/2012 - 11/27/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.73E-02	1.62E-03	3.13E-03
			I-131	<2.16E-02	0.00E+00	2.16E-02
			Cs-134	<2.04E-02	0.00E+00	2.04E-02
			Cs-137	<2.24E-02	0.00E+00	2.24E-02
			Be-7	2.08E-01	5.68E-02	1.28E-01
			K-40	<4.67E-01	0.00E+00	4.67E-01
Sample ID:	249006	Sample Dates: 11/27/2012 - 12/4/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.85E-02	1.63E-03	3.05E-03
			I-131	<1.69E-02	0.00E+00	1.69E-02
			Cs-134	<1.77E-02	0.00E+00	1.77E-02
			Cs-137	<2.38E-02	0.00E+00	2.38E-02
			Be-7	1.84E-01	6.07E-02	1.74E-01
			K-40	<4.12E-01	0.00E+00	4.12E-01
Sample ID:	249245	Sample Dates: 12/4/2012 - 12/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.89E-02	1.49E-03	3.39E-03
			I-131	<1.82E-02	0.00E+00	1.82E-02
			Cs-134	<2.11E-02	0.00E+00	2.11E-02
			Cs-137	<2.36E-02	0.00E+00	2.36E-02
			Be-7	<2.22E-01	0.00E+00	2.22E-01
			K-40	<4.46E-01	0.00E+00	4.46E-01
Sample ID:	249443	Sample Dates: 12/11/2012 - 12/18/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.43E-02	1.55E-03	3.06E-03
			I-131	<1.45E-02	0.00E+00	1.45E-02
			Cs-134	<1.79E-02	0.00E+00	1.79E-02
			Cs-137	<2.13E-02	0.00E+00	2.13E-02
			Be-7	1.22E-01	3.52E-02	1.31E-01
			K-40	<4.44E-01	0.00E+00	4.44E-01
Sample ID:	249870	Sample Dates: 12/18/2012 - 12/26/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.93E-02	1.48E-03	2.48E-03
			I-131	<1.35E-02	0.00E+00	1.35E-02
			Cs-134	<1.62E-02	0.00E+00	1.62E-02
			Cs-137	<2.01E-02	0.00E+00	2.01E-02
			Be-7	1.42E-01	5.95E-02	1.27E-01
			K-40	<1.89E-01	0.00E+00	1.89E-01
Sample ID:	250177	Sample Dates: 12/26/2012 - 1/2/2013	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.83E-02	1.38E-03	2.92E-03
			I-131	<1.78E-02	0.00E+00	1.78E-02
			Cs-134	<1.46E-02	0.00E+00	1.46E-02
			Cs-137	<1.74E-02	0.00E+00	1.74E-02
			Be-7	<2.16E-01	0.00E+00	2.16E-01
			K-40	2.43E-01	1.06E-01	3.26E-01

Sample Point 205 [INDICATOR - SW @ 0.25 miles]

Sample ID:	227180	Sample Dates: 1/4/2012 - 1/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.03E-02	1.61E-03	3.54E-03
			I-131	<8.62E-03	0.00E+00	8.62E-03
			Cs-134	<9.38E-03	0.00E+00	9.38E-03
			Cs-137	<1.08E-02	0.00E+00	1.08E-02

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

Sample Point 205 [INDICATOR - SW @ 0.25 miles]

Sample ID:	227180	Sample Dates: 1/4/2012 - 1/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	1.73E-01	4.23E-02	6.78E-02
			K-40	2.82E-01	5.76E-02	1.28E-01
Sample ID:	227314	Sample Dates: 1/10/2012 - 1/17/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.76E-02	1.37E-03	2.89E-03
			I-131	<1.90E-02	0.00E+00	1.90E-02
			Cs-134	<2.20E-02	0.00E+00	2.20E-02
			Cs-137	<2.20E-02	0.00E+00	2.20E-02
			Be-7	<2.42E-01	0.00E+00	2.42E-01
			K-40	<3.98E-01	0.00E+00	3.98E-01
Sample ID:	227528	Sample Dates: 1/17/2012 - 1/24/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.84E-02	1.34E-03	2.67E-03
			I-131	<7.45E-03	0.00E+00	7.45E-03
			Cs-134	<8.43E-03	0.00E+00	8.43E-03
			Cs-137	<1.04E-02	0.00E+00	1.04E-02
			Be-7	6.41E-02	3.66E-02	7.13E-02
			K-40	<1.78E-01	0.00E+00	1.78E-01
Sample ID:	227850	Sample Dates: 1/24/2012 - 1/31/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.75E-02	1.40E-03	3.12E-03
			I-131	<8.59E-03	0.00E+00	8.59E-03
			Cs-134	<7.87E-03	0.00E+00	7.87E-03
			Cs-137	<9.55E-03	0.00E+00	9.55E-03
			Be-7	1.88E-01	3.89E-02	7.66E-02
			K-40	<2.76E-01	0.00E+00	2.76E-01
Sample ID:	228117	Sample Dates: 1/31/2012 - 2/7/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.87E-02	1.39E-03	2.92E-03
			I-131	<6.62E-03	0.00E+00	6.62E-03
			Cs-134	<7.35E-03	0.00E+00	7.35E-03
			Cs-137	<7.59E-03	0.00E+00	7.59E-03
			Be-7	1.46E-01	3.39E-02	4.71E-02
			K-40	<1.79E-01	0.00E+00	1.79E-01
Sample ID:	229428	Sample Dates: 2/7/2012 - 2/14/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.98E-02	1.41E-03	2.84E-03
			I-131	<7.57E-03	0.00E+00	7.57E-03
			Cs-134	<8.97E-03	0.00E+00	8.97E-03
			Cs-137	<9.99E-03	0.00E+00	9.99E-03
			Be-7	1.30E-01	4.46E-02	6.08E-02
			K-40	<2.32E-01	0.00E+00	2.32E-01
Sample ID:	230054	Sample Dates: 2/14/2012 - 2/21/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.63E-02	1.33E-03	2.89E-03
			I-131	<6.12E-03	0.00E+00	6.12E-03
			Cs-134	<1.05E-02	0.00E+00	1.05E-02
			Cs-137	<1.57E-02	0.00E+00	1.57E-02
			Be-7	8.53E-02	2.32E-02	7.81E-02
			K-40	<2.10E-01	0.00E+00	2.10E-01
Sample ID:	230729	Sample Dates: 2/21/2012 - 2/28/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.57E-02	1.36E-03	3.15E-03
			I-131	<1.41E-02	0.00E+00	1.41E-02
			Cs-134	<1.81E-02	0.00E+00	1.81E-02
			Cs-137	<1.57E-02	0.00E+00	1.57E-02
			Be-7	1.60E-01	4.91E-02	1.72E-01
			K-40	<2.43E-01	0.00E+00	2.43E-01
Sample ID:	230938	Sample Dates: 2/28/2012 - 3/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.72E-02	1.31E-03	2.64E-03
			I-131	<7.06E-03	0.00E+00	7.06E-03
			Cs-134	<8.73E-03	0.00E+00	8.73E-03
			Cs-137	<6.09E-03	0.00E+00	6.09E-03
			Be-7	2.02E-01	3.23E-02	4.64E-02
			K-40	<1.71E-01	0.00E+00	1.71E-01
Sample ID:	231648	Sample Dates: 3/6/2012 - 3/13/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.68E-02	1.33E-03	2.79E-03
			I-131	<7.83E-03	0.00E+00	7.83E-03

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

Sample Point 205 [INDICATOR - SW @ 0.25 miles]

Sample ID: 231648 **Sample Dates: 3/6/2012 - 3/13/2012**

Nuclide	Activity	1 Sigma Error	LLD
Cs-134	<6.89E-03	0.00E+00	6.89E-03
Cs-137	<1.30E-02	0.00E+00	1.30E-02
Be-7	2.17E-01	4.37E-02	7.35E-02
K-40	<1.93E-01	0.00E+00	1.93E-01

Sample ID: 232462 **Sample Dates: 3/13/2012 - 3/20/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.53E-02	1.31E-03	2.91E-03
I-131	<7.16E-03	0.00E+00	7.16E-03
Cs-134	<7.42E-03	0.00E+00	7.42E-03
Cs-137	<1.01E-02	0.00E+00	1.01E-02
Be-7	1.82E-01	2.99E-02	5.04E-02
K-40	<2.05E-01	0.00E+00	2.05E-01

Sample ID: 233302 **Sample Dates: 3/20/2012 - 3/27/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.52E-02	1.36E-03	3.16E-03
I-131	<7.58E-03	0.00E+00	7.58E-03
Cs-134	<4.80E-03	0.00E+00	4.80E-03
Cs-137	<8.33E-03	0.00E+00	8.33E-03
Be-7	1.07E-01	3.22E-02	4.09E-02
K-40	<2.80E-01	0.00E+00	2.80E-01

Sample ID: 233543 **Sample Dates: 3/27/2012 - 4/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.07E-02	1.44E-03	2.96E-03
I-131	<1.76E-02	0.00E+00	1.76E-02
Cs-134	<1.80E-02	0.00E+00	1.80E-02
Cs-137	<1.75E-02	0.00E+00	1.75E-02
Be-7	3.48E-01	5.96E-02	2.76E-02
K-40	1.68E-01	8.96E-02	3.08E-01

Sample ID: 234461 **Sample Dates: 4/3/2012 - 4/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.63E-02	1.38E-03	2.99E-03
I-131	<6.82E-03	0.00E+00	6.82E-03
Cs-134	<7.69E-03	0.00E+00	7.69E-03
Cs-137	<7.54E-03	0.00E+00	7.54E-03
Be-7	1.85E-01	3.02E-02	5.55E-02
K-40	<1.73E-01	0.00E+00	1.73E-01

Sample ID: 234889 **Sample Dates: 4/10/2012 - 4/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.69E-02	1.39E-03	3.09E-03
I-131	<5.90E-03	0.00E+00	5.90E-03
Cs-134	<7.86E-03	0.00E+00	7.86E-03
Cs-137	<8.21E-03	0.00E+00	8.21E-03
Be-7	2.21E-01	3.26E-02	5.75E-02
K-40	2.41E-01	5.91E-02	2.72E-02

Sample ID: 235211 **Sample Dates: 4/17/2012 - 4/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.51E-02	1.31E-03	2.97E-03
I-131	<5.86E-03	0.00E+00	5.86E-03
Cs-134	<9.18E-03	0.00E+00	9.18E-03
Cs-137	<8.97E-03	0.00E+00	8.97E-03
Be-7	1.18E-01	2.86E-02	6.69E-02
K-40	<1.49E-01	0.00E+00	1.49E-01

Sample ID: 235396 **Sample Dates: 4/24/2012 - 5/1/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.21E-02	1.47E-03	2.89E-03
I-131	<6.36E-03	0.00E+00	6.36E-03
Cs-134	<4.59E-03	0.00E+00	4.59E-03
Cs-137	<5.48E-03	0.00E+00	5.48E-03
Be-7	2.10E-01	3.93E-02	4.75E-02
K-40	<1.79E-01	0.00E+00	1.79E-01

Sample ID: 235734 **Sample Dates: 5/1/2012 - 5/8/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.60E-02	1.34E-03	2.96E-03
I-131	<1.29E-02	0.00E+00	1.29E-02
Cs-134	<2.08E-02	0.00E+00	2.08E-02
Cs-137	<1.97E-02	0.00E+00	1.97E-02
Be-7	8.89E-02	4.59E-02	1.68E-01
K-40	<4.15E-01	0.00E+00	4.15E-01

Sample ID: 235980 **Sample Dates: 5/8/2012 - 5/15/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.16E-02	1.27E-03	3.21E-03
I-131	<6.31E-03	0.00E+00	6.31E-03
Cs-134	<6.00E-03	0.00E+00	6.00E-03
Cs-137	<9.50E-03	0.00E+00	9.50E-03
Be-7	1.62E-01	3.11E-02	6.10E-02
K-40	<2.35E-01	0.00E+00	2.35E-01

Sample ID: 236190 **Sample Dates: 5/15/2012 - 5/22/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.76E-02	1.35E-03	2.83E-03
I-131	<1.67E-02	0.00E+00	1.67E-02
Cs-134	<1.78E-02	0.00E+00	1.78E-02
Cs-137	<2.33E-02	0.00E+00	2.33E-02
Be-7	2.34E-01	7.00E-02	1.23E-01
K-40	<3.20E-01	0.00E+00	3.20E-01

Sample ID: 236503 **Sample Dates: 5/22/2012 - 5/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.86E-02	1.28E-03	2.63E-03
I-131	<5.12E-03	0.00E+00	5.12E-03
Cs-134	<8.34E-03	0.00E+00	8.34E-03
Cs-137	<9.21E-03	0.00E+00	9.21E-03
Be-7	1.03E-01	2.76E-02	4.89E-02
K-40	1.02E-01	3.59E-02	3.43E-02

Sample ID: 236802 **Sample Dates: 5/30/2012 - 6/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.20E-02	1.64E-03	3.47E-03
I-131	<5.99E-03	0.00E+00	5.99E-03
Cs-134	<1.17E-02	0.00E+00	1.17E-02
Cs-137	<1.11E-02	0.00E+00	1.11E-02
Be-7	2.24E-01	4.49E-02	6.75E-02
K-40	<2.39E-01	0.00E+00	2.39E-01

Sample ID: 237128 **Sample Dates: 6/5/2012 - 6/12/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.24E-02	1.28E-03	3.15E-03
I-131	<6.08E-03	0.00E+00	6.08E-03
Cs-134	<8.77E-03	0.00E+00	8.77E-03
Cs-137	<9.36E-03	0.00E+00	9.36E-03
Be-7	1.30E-01	2.86E-02	5.11E-02
K-40	<2.27E-01	0.00E+00	2.27E-01

Sample ID: 237303 **Sample Dates: 6/12/2012 - 6/19/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.87E-02	1.44E-03	3.14E-03
I-131	<7.63E-03	0.00E+00	7.63E-03
Cs-134	<7.44E-03	0.00E+00	7.44E-03
Cs-137	<8.62E-03	0.00E+00	8.62E-03
Be-7	2.77E-01	3.33E-02	5.42E-02
K-40	2.12E-01	4.62E-02	9.69E-02

Sample ID: 237979 **Sample Dates: 6/19/2012 - 6/26/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.24E-02	1.49E-03	3.00E-03
I-131	<5.66E-03	0.00E+00	5.66E-03
Cs-134	<6.72E-03	0.00E+00	6.72E-03
Cs-137	<5.46E-03	0.00E+00	5.46E-03
Be-7	1.55E-01	3.18E-02	7.31E-02
K-40	<1.73E-01	0.00E+00	1.73E-01

Sample ID: 238731 **Sample Dates: 6/26/2012 - 7/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.47E-02	1.62E-03	3.40E-03
I-131	<7.68E-03	0.00E+00	7.68E-03
Cs-134	<1.01E-02	0.00E+00	1.01E-02
Cs-137	<1.23E-02	0.00E+00	1.23E-02
Be-7	1.78E-01	4.27E-02	6.50E-02
K-40	<2.04E-01	0.00E+00	2.04E-01

Sample ID: 239108 **Sample Dates: 7/3/2012 - 7/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.47E-02	1.54E-03	2.99E-03
I-131	<1.99E-02	0.00E+00	1.99E-02
Cs-134	<1.50E-02	0.00E+00	1.50E-02
Cs-137	<2.44E-02	0.00E+00	2.44E-02
Be-7	<1.93E-01	0.00E+00	1.93E-01

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

Sample Point 205 [INDICATOR - SW @ 0.25 miles]

Sample ID: 239108 **Sample Dates: 7/3/2012 - 7/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
K-40	<3.93E-01	0.00E+00	3.93E-01

Sample ID: 239880 **Sample Dates: 7/10/2012 - 7/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.11E-02	1.26E-03	3.22E-03
I-131	<2.07E-02	0.00E+00	2.07E-02
Cs-134	<1.38E-02	0.00E+00	1.38E-02
Cs-137	<2.11E-02	0.00E+00	2.11E-02
Be-7	1.17E-01	5.50E-02	1.52E-01
K-40	<4.44E-01	0.00E+00	4.44E-01

Sample ID: 240004 **Sample Dates: 7/17/2012 - 7/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.61E-02	1.33E-03	2.89E-03
I-131	<6.20E-03	0.00E+00	6.20E-03
Cs-134	<8.10E-03	0.00E+00	8.10E-03
Cs-137	<8.76E-03	0.00E+00	8.76E-03
Be-7	1.10E-01	2.74E-02	5.48E-02
K-40	<1.88E-01	0.00E+00	1.88E-01

Sample ID: 240326 **Sample Dates: 7/24/2012 - 7/31/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.29E-02	1.47E-03	2.86E-03
I-131	<7.53E-03	0.00E+00	7.53E-03
Cs-134	<8.05E-03	0.00E+00	8.05E-03
Cs-137	<1.36E-02	0.00E+00	1.36E-02
Be-7	1.84E-01	3.07E-02	4.55E-02
K-40	<2.22E-01	0.00E+00	2.22E-01

Sample ID: 240961 **Sample Dates: 7/31/2012 - 8/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.35E-02	1.48E-03	2.77E-03
I-131	<7.66E-03	0.00E+00	7.66E-03
Cs-134	<7.06E-03	0.00E+00	7.06E-03
Cs-137	<9.10E-03	0.00E+00	9.10E-03
Be-7	<3.78E-02	0.00E+00	3.78E-02
K-40	4.43E-01	7.73E-02	1.38E-01

Sample ID: 241232 **Sample Dates: 8/7/2012 - 8/14/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.67E-02	1.35E-03	2.95E-03
I-131	<7.68E-03	0.00E+00	7.68E-03
Cs-134	<7.50E-03	0.00E+00	7.50E-03
Cs-137	<1.08E-02	0.00E+00	1.08E-02
Be-7	1.38E-01	4.72E-02	5.59E-02
K-40	<2.65E-01	0.00E+00	2.65E-01

Sample ID: 241539 **Sample Dates: 8/14/2012 - 8/21/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.76E-02	1.62E-03	3.05E-03
I-131	<1.55E-02	0.00E+00	1.55E-02
Cs-134	<2.07E-02	0.00E+00	2.07E-02
Cs-137	<1.74E-02	0.00E+00	1.74E-02
Be-7	1.55E-01	6.16E-02	1.48E-01
K-40	<3.53E-01	0.00E+00	3.53E-01

Sample ID: 242128 **Sample Dates: 8/21/2012 - 8/28/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.62E-02	1.60E-03	3.10E-03
I-131	<7.51E-03	0.00E+00	7.51E-03
Cs-134	<3.90E-03	0.00E+00	3.90E-03
Cs-137	<9.11E-03	0.00E+00	9.11E-03
Be-7	2.61E-01	3.58E-02	5.58E-02
K-40	<1.68E-01	0.00E+00	1.68E-01

Sample ID: 242457 **Sample Dates: 8/28/2012 - 9/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.15E-02	1.09E-03	2.57E-03
I-131	<6.22E-03	0.00E+00	6.22E-03
Cs-134	<5.39E-03	0.00E+00	5.39E-03
Cs-137	<7.09E-03	0.00E+00	7.09E-03
Be-7	5.48E-02	2.98E-02	4.80E-02
K-40	<1.54E-01	0.00E+00	1.54E-01

Sample ID: 242984 **Sample Dates: 9/5/2012 - 9/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.34E-02	1.65E-03	3.36E-03
I-131	<2.14E-02	0.00E+00	2.14E-02
Cs-134	<2.28E-02	0.00E+00	2.28E-02

Sample ID:	242984	Sample Dates: 9/5/2012 - 9/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			Cs-137	<2.06E-02	0.00E+00	2.06E-02
			Be-7	1.62E-01	5.11E-02	2.05E-01
			K-40	<4.58E-01	0.00E+00	4.58E-01
Sample ID:	243742	Sample Dates: 9/11/2012 - 9/18/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.22E-02	1.47E-03	2.89E-03
			I-131	<7.45E-03	0.00E+00	7.45E-03
			Cs-134	<8.96E-03	0.00E+00	8.96E-03
			Cs-137	<9.71E-03	0.00E+00	9.71E-03
			Be-7	1.66E-01	3.98E-02	5.92E-02
			K-40	<2.03E-01	0.00E+00	2.03E-01
Sample ID:	244147	Sample Dates: 9/18/2012 - 9/25/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.25E-02	1.46E-03	2.84E-03
			I-131	<5.69E-03	0.00E+00	5.69E-03
			Cs-134	<7.44E-03	0.00E+00	7.44E-03
			Cs-137	<1.16E-02	0.00E+00	1.16E-02
			Be-7	1.63E-01	4.00E-02	6.42E-02
			K-40	<1.89E-01	0.00E+00	1.89E-01
Sample ID:	245019	Sample Dates: 9/25/2012 - 10/2/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	3.09E-02	1.66E-03	2.96E-03
			I-131	<6.57E-03	0.00E+00	6.57E-03
			Cs-134	<5.24E-03	0.00E+00	5.24E-03
			Cs-137	<9.04E-03	0.00E+00	9.04E-03
			Be-7	2.34E-01	4.20E-02	8.69E-02
			K-40	<2.70E-01	0.00E+00	2.70E-01
Sample ID:	245839	Sample Dates: 10/2/2012 - 10/9/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.44E-02	1.57E-03	3.19E-03
			I-131	<1.33E-02	0.00E+00	1.33E-02
			Cs-134	<1.93E-02	0.00E+00	1.93E-02
			Cs-137	<1.19E-02	0.00E+00	1.19E-02
			Be-7	<1.77E-01	0.00E+00	1.77E-01
			K-40	<2.74E-01	0.00E+00	2.74E-01
Sample ID:	246694	Sample Dates: 10/9/2012 - 10/16/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.82E-02	1.67E-03	3.30E-03
			I-131	<1.51E-02	0.00E+00	1.51E-02
			Cs-134	<1.94E-02	0.00E+00	1.94E-02
			Cs-137	<2.12E-02	0.00E+00	2.12E-02
			Be-7	<2.00E-01	0.00E+00	2.00E-01
			K-40	<5.13E-01	0.00E+00	5.13E-01
Sample ID:	247102	Sample Dates: 10/16/2012 - 10/23/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.87E-02	1.63E-03	2.98E-03
			I-131	<1.82E-02	0.00E+00	1.82E-02
			Cs-134	<1.76E-02	0.00E+00	1.76E-02
			Cs-137	<2.29E-02	0.00E+00	2.29E-02
			Be-7	<1.84E-01	0.00E+00	1.84E-01
			K-40	<4.86E-01	0.00E+00	4.86E-01
Sample ID:	247418	Sample Dates: 10/23/2012 - 10/30/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.33E-02	1.53E-03	3.11E-03
			I-131	<1.80E-02	0.00E+00	1.80E-02
			Cs-134	<1.27E-02	0.00E+00	1.27E-02
			Cs-137	<1.94E-02	0.00E+00	1.94E-02
			Be-7	<1.64E-01	0.00E+00	1.64E-01
			K-40	<2.74E-01	0.00E+00	2.74E-01
Sample ID:	247756	Sample Dates: 10/30/2012 - 11/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.28E-02	1.50E-03	3.03E-03
			I-131	<1.37E-02	0.00E+00	1.37E-02
			Cs-134	<1.55E-02	0.00E+00	1.55E-02
			Cs-137	<1.49E-02	0.00E+00	1.49E-02
			Be-7	2.93E-01	8.81E-02	1.40E-01
			K-40	<2.72E-01	0.00E+00	2.72E-01
Sample ID:	247951	Sample Dates: 11/6/2012 - 11/13/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	3.33E-02	1.72E-03	3.02E-03

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

Sample Point 205 [INDICATOR - SW @ 0.25 miles]

Sample ID:	247951	Sample Dates: 11/6/2012 - 11/13/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<2.01E-02	0.00E+00	2.01E-02
			Cs-134	<1.46E-02	0.00E+00	1.46E-02
			Cs-137	<2.71E-02	0.00E+00	2.71E-02
			Be-7	2.02E-01	5.19E-02	1.11E-01
			K-40	<3.85E-01	0.00E+00	3.85E-01
Sample ID:	248355	Sample Dates: 11/13/2012 - 11/20/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.83E-02	1.73E-03	3.65E-03
			I-131	<1.73E-02	0.00E+00	1.73E-02
			Cs-134	<1.41E-02	0.00E+00	1.41E-02
			Cs-137	<1.96E-02	0.00E+00	1.96E-02
			Be-7	1.33E-01	6.71E-02	1.60E-01
			K-40	<4.20E-01	0.00E+00	4.20E-01
Sample ID:	248634	Sample Dates: 11/20/2012 - 11/27/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	3.21E-02	1.71E-03	3.14E-03
			I-131	<1.71E-02	0.00E+00	1.71E-02
			Cs-134	<2.10E-02	0.00E+00	2.10E-02
			Cs-137	<1.74E-02	0.00E+00	1.74E-02
			Be-7	1.16E-01	4.65E-02	1.66E-01
			K-40	<4.81E-01	0.00E+00	4.81E-01
Sample ID:	249007	Sample Dates: 11/27/2012 - 12/4/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	3.50E-02	1.75E-03	3.03E-03
			I-131	<1.56E-02	0.00E+00	1.56E-02
			Cs-134	<1.90E-02	0.00E+00	1.90E-02
			Cs-137	<1.72E-02	0.00E+00	1.72E-02
			Be-7	2.01E-01	4.50E-02	1.49E-01
			K-40	<3.49E-01	0.00E+00	3.49E-01
Sample ID:	249246	Sample Dates: 12/4/2012 - 12/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.64E-02	1.43E-03	3.38E-03
			I-131	<1.78E-02	0.00E+00	1.78E-02
			Cs-134	<1.36E-02	0.00E+00	1.36E-02
			Cs-137	<1.19E-02	0.00E+00	1.19E-02
			Be-7	<2.12E-01	0.00E+00	2.12E-01
			K-40	<4.93E-01	0.00E+00	4.93E-01
Sample ID:	249444	Sample Dates: 12/11/2012 - 12/18/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.44E-02	1.55E-03	3.09E-03
			I-131	<1.48E-02	0.00E+00	1.48E-02
			Cs-134	<2.15E-02	0.00E+00	2.15E-02
			Cs-137	<2.25E-02	0.00E+00	2.25E-02
			Be-7	9.22E-02	4.16E-02	1.22E-01
			K-40	3.88E-01	1.08E-01	8.07E-02
Sample ID:	249871	Sample Dates: 12/18/2012 - 12/26/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.84E-02	1.46E-03	2.49E-03
			I-131	<1.46E-02	0.00E+00	1.46E-02
			Cs-134	<1.50E-02	0.00E+00	1.50E-02
			Cs-137	<2.12E-02	0.00E+00	2.12E-02
			Be-7	2.11E-01	5.54E-02	1.39E-01
			K-40	<3.38E-01	0.00E+00	3.38E-01
Sample ID:	250178	Sample Dates: 12/26/2012 - 1/2/2013	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.89E-02	1.39E-03	2.91E-03
			I-131	<1.80E-02	0.00E+00	1.80E-02
			Cs-134	<1.68E-02	0.00E+00	1.68E-02
			Cs-137	<2.33E-02	0.00E+00	2.33E-02
			Be-7	<1.75E-01	0.00E+00	1.75E-01
			K-40	<4.65E-01	0.00E+00	4.65E-01

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID:	227181	Sample Dates: 1/4/2012 - 1/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.02E-02	1.60E-03	3.51E-03
			I-131	<7.34E-03	0.00E+00	7.34E-03
			Cs-134	<1.02E-02	0.00E+00	1.02E-02
			Cs-137	<8.07E-03	0.00E+00	8.07E-03
			Be-7	2.01E-01	3.41E-02	6.22E-02

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

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID:	227181	Sample Dates: 1/4/2012 - 1/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			K-40	4.88E-01	7.19E-02	2.87E-02
Sample ID:	227315	Sample Dates: 1/10/2012 - 1/17/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.55E-02	1.32E-03	2.91E-03
			I-131	<5.64E-03	0.00E+00	5.64E-03
			Cs-134	<5.10E-03	0.00E+00	5.10E-03
			Cs-137	<9.34E-03	0.00E+00	9.34E-03
			Be-7	1.34E-01	3.09E-02	6.33E-02
			K-40	2.20E-01	5.86E-02	1.06E-01
Sample ID:	227529	Sample Dates: 1/17/2012 - 1/24/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.76E-02	1.32E-03	2.67E-03
			I-131	<7.42E-03	0.00E+00	7.42E-03
			Cs-134	<6.69E-03	0.00E+00	6.69E-03
			Cs-137	<8.33E-03	0.00E+00	8.33E-03
			Be-7	1.60E-01	2.38E-02	5.75E-02
			K-40	1.57E-01	4.05E-02	9.02E-02
Sample ID:	227851	Sample Dates: 1/24/2012 - 1/31/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.62E-02	1.37E-03	3.12E-03
			I-131	<6.78E-03	0.00E+00	6.78E-03
			Cs-134	<6.21E-03	0.00E+00	6.21E-03
			Cs-137	<8.94E-03	0.00E+00	8.94E-03
			Be-7	1.93E-01	2.51E-02	5.06E-02
			K-40	1.26E-01	6.73E-02	1.16E-01
Sample ID:	228118	Sample Dates: 1/31/2012 - 2/7/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.17E-02	1.45E-03	2.90E-03
			I-131	<6.61E-03	0.00E+00	6.61E-03
			Cs-134	<6.38E-03	0.00E+00	6.38E-03
			Cs-137	<7.20E-03	0.00E+00	7.20E-03
			Be-7	1.29E-01	2.96E-02	5.27E-02
			K-40	<1.85E-01	0.00E+00	1.85E-01
Sample ID:	229429	Sample Dates: 2/7/2012 - 2/14/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.82E-02	1.37E-03	2.85E-03
			I-131	<1.52E-02	0.00E+00	1.52E-02
			Cs-134	<1.70E-02	0.00E+00	1.70E-02
			Cs-137	<1.23E-02	0.00E+00	1.23E-02
			Be-7	1.12E-01	5.46E-02	1.54E-01
			K-40	<4.80E-01	0.00E+00	4.80E-01
Sample ID:	230055	Sample Dates: 2/14/2012 - 2/21/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.80E-02	1.37E-03	2.90E-03
			I-131	<7.18E-03	0.00E+00	7.18E-03
			Cs-134	<6.68E-03	0.00E+00	6.68E-03
			Cs-137	<8.64E-03	0.00E+00	8.64E-03
			Be-7	1.43E-01	3.26E-02	5.16E-02
			K-40	1.11E-01	3.35E-02	9.86E-02
Sample ID:	230730	Sample Dates: 2/21/2012 - 2/28/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.85E-02	1.43E-03	3.16E-03
			I-131	<1.33E-02	0.00E+00	1.33E-02
			Cs-134	<1.94E-02	0.00E+00	1.94E-02
			Cs-137	<2.35E-02	0.00E+00	2.35E-02
			Be-7	<2.23E-01	0.00E+00	2.23E-01
			K-40	<4.17E-01	0.00E+00	4.17E-01
Sample ID:	230939	Sample Dates: 2/28/2012 - 3/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.20E-02	1.16E-03	2.62E-03
			I-131	<4.81E-03	0.00E+00	4.81E-03
			Cs-134	<5.84E-03	0.00E+00	5.84E-03
			Cs-137	<8.43E-03	0.00E+00	8.43E-03
			Be-7	8.90E-02	3.18E-02	5.43E-02
			K-40	1.70E-01	5.38E-02	1.10E-01
Sample ID:	231649	Sample Dates: 3/6/2012 - 3/13/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.61E-02	1.31E-03	2.80E-03
			I-131	<6.28E-03	0.00E+00	6.28E-03
			Cs-134	<8.19E-03	0.00E+00	8.19E-03

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

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID:	231649	Sample Dates: 3/6/2012 - 3/13/2012	Nuclide	Activity	1 Sigma Error	LLD
			Cs-137	<7.45E-03	0.00E+00	7.45E-03
			Be-7	2.16E-01	3.86E-02	5.48E-02
			K-40	1.76E-01	5.33E-02	1.18E-01
Sample ID:	232463	Sample Dates: 3/13/2012 - 3/20/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.69E-02	1.35E-03	2.91E-03
			I-131	<6.80E-03	0.00E+00	6.80E-03
			Cs-134	<7.27E-03	0.00E+00	7.27E-03
			Cs-137	<8.50E-03	0.00E+00	8.50E-03
			Be-7	1.46E-01	2.97E-02	5.68E-02
			K-40	9.03E-02	3.91E-02	1.12E-01
Sample ID:	233303	Sample Dates: 3/20/2012 - 3/27/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.32E-02	1.30E-03	3.14E-03
			I-131	<4.95E-03	0.00E+00	4.95E-03
			Cs-134	<6.38E-03	0.00E+00	6.38E-03
			Cs-137	<6.10E-03	0.00E+00	6.10E-03
			Be-7	1.44E-01	3.98E-02	4.99E-02
			K-40	<1.77E-01	0.00E+00	1.77E-01
Sample ID:	233544	Sample Dates: 3/27/2012 - 4/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.06E-02	1.44E-03	2.95E-03
			I-131	<8.89E-03	0.00E+00	8.89E-03
			Cs-134	<8.31E-03	0.00E+00	8.31E-03
			Cs-137	<1.19E-02	0.00E+00	1.19E-02
			Be-7	2.02E-01	3.95E-02	6.09E-02
			K-40	<2.04E-01	0.00E+00	2.04E-01
Sample ID:	234462	Sample Dates: 4/3/2012 - 4/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.70E-02	1.35E-03	2.85E-03
			I-131	<9.33E-03	0.00E+00	9.33E-03
			Cs-134	<1.13E-02	0.00E+00	1.13E-02
			Cs-137	<1.24E-02	0.00E+00	1.24E-02
			Be-7	1.76E-01	3.74E-02	7.94E-02
			K-40	<1.58E-01	0.00E+00	1.58E-01
Sample ID:	234890	Sample Dates: 4/10/2012 - 4/17/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.85E-02	1.42E-03	3.09E-03
			I-131	<6.62E-03	0.00E+00	6.62E-03
			Cs-134	<6.18E-03	0.00E+00	6.18E-03
			Cs-137	<9.86E-03	0.00E+00	9.86E-03
			Be-7	1.92E-01	3.83E-02	7.75E-02
			K-40	<1.48E-01	0.00E+00	1.48E-01
Sample ID:	235212	Sample Dates: 4/17/2012 - 4/24/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.81E-02	1.39E-03	2.96E-03
			I-131	<5.41E-03	0.00E+00	5.41E-03
			Cs-134	<8.29E-03	0.00E+00	8.29E-03
			Cs-137	<9.38E-03	0.00E+00	9.38E-03
			Be-7	1.28E-01	2.74E-02	6.91E-02
			K-40	<1.91E-01	0.00E+00	1.91E-01
Sample ID:	235397	Sample Dates: 4/24/2012 - 5/1/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.49E-02	1.53E-03	2.88E-03
			I-131	<1.29E-02	0.00E+00	1.29E-02
			Cs-134	<1.32E-02	0.00E+00	1.32E-02
			Cs-137	<1.15E-02	0.00E+00	1.15E-02
			Be-7	2.24E-01	4.12E-02	1.02E-01
			K-40	2.66E-01	6.28E-02	4.00E-02
Sample ID:	235735	Sample Dates: 5/1/2012 - 5/8/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.74E-02	1.38E-03	2.98E-03
			I-131	<5.58E-03	0.00E+00	5.58E-03
			Cs-134	<6.22E-03	0.00E+00	6.22E-03
			Cs-137	<7.07E-03	0.00E+00	7.07E-03
			Be-7	1.70E-01	3.36E-02	4.78E-02
			K-40	3.22E-01	5.44E-02	6.55E-02
Sample ID:	235981	Sample Dates: 5/8/2012 - 5/15/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.22E-02	1.29E-03	3.21E-03

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

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID: 235981 Sample Dates: 5/8/2012 - 5/15/2012

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.31E-03	0.00E+00	6.31E-03
Cs-134	<8.85E-03	0.00E+00	8.85E-03
Cs-137	<1.27E-02	0.00E+00	1.27E-02
Be-7	1.96E-01	3.51E-02	4.75E-02
K-40	<1.74E-01	0.00E+00	1.74E-01

Sample ID: 236191 Sample Dates: 5/15/2012 - 5/22/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.70E-02	1.34E-03	2.83E-03
I-131	<7.36E-03	0.00E+00	7.36E-03
Cs-134	<8.10E-03	0.00E+00	8.10E-03
Cs-137	<7.90E-03	0.00E+00	7.90E-03
Be-7	1.80E-01	3.60E-02	6.01E-02
K-40	<1.82E-01	0.00E+00	1.82E-01

Sample ID: 236504 Sample Dates: 5/22/2012 - 5/30/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.90E-02	1.29E-03	2.62E-03
I-131	<5.03E-03	0.00E+00	5.03E-03
Cs-134	<9.06E-03	0.00E+00	9.06E-03
Cs-137	<8.58E-03	0.00E+00	8.58E-03
Be-7	1.81E-01	3.11E-02	5.01E-02
K-40	<1.58E-01	0.00E+00	1.58E-01

Sample ID: 236803 Sample Dates: 5/30/2012 - 6/5/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.96E-02	1.58E-03	3.47E-03
I-131	<7.89E-03	0.00E+00	7.89E-03
Cs-134	<9.16E-03	0.00E+00	9.16E-03
Cs-137	<8.45E-03	0.00E+00	8.45E-03
Be-7	1.55E-01	4.44E-02	7.21E-02
K-40	3.67E-01	7.14E-02	9.78E-02

Sample ID: 237129 Sample Dates: 6/5/2012 - 6/12/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.13E-02	1.25E-03	3.16E-03
I-131	<8.05E-03	0.00E+00	8.05E-03
Cs-134	<8.51E-03	0.00E+00	8.51E-03
Cs-137	<1.02E-02	0.00E+00	1.02E-02
Be-7	7.79E-02	3.44E-02	8.17E-02
K-40	<2.42E-01	0.00E+00	2.42E-01

Sample ID: 237304 Sample Dates: 6/12/2012 - 6/19/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.84E-02	1.43E-03	3.14E-03
I-131	<6.92E-03	0.00E+00	6.92E-03
Cs-134	<5.32E-03	0.00E+00	5.32E-03
Cs-137	<8.01E-03	0.00E+00	8.01E-03
Be-7	1.92E-01	3.44E-02	5.44E-02
K-40	1.85E-01	5.53E-02	1.35E-01

Sample ID: 237980 Sample Dates: 6/19/2012 - 6/26/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.24E-02	1.48E-03	2.98E-03
I-131	<8.02E-03	0.00E+00	8.02E-03
Cs-134	<1.00E-02	0.00E+00	1.00E-02
Cs-137	<1.30E-02	0.00E+00	1.30E-02
Be-7	1.80E-01	3.99E-02	7.74E-02
K-40	<2.45E-01	0.00E+00	2.45E-01

Sample ID: 238732 Sample Dates: 6/26/2012 - 7/3/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.89E-02	1.70E-03	3.40E-03
I-131	<8.50E-03	0.00E+00	8.50E-03
Cs-134	<7.96E-03	0.00E+00	7.96E-03
Cs-137	<1.05E-02	0.00E+00	1.05E-02
Be-7	1.80E-01	4.03E-02	8.43E-02
K-40	1.37E-01	7.44E-02	1.56E-01

Sample ID: 239109 Sample Dates: 7/3/2012 - 7/10/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.96E-02	1.66E-03	3.03E-03
I-131	<1.08E-02	0.00E+00	1.08E-02
Cs-134	<6.40E-03	0.00E+00	6.40E-03
Cs-137	<1.26E-02	0.00E+00	1.26E-02
Be-7	2.36E-01	4.71E-02	8.72E-02
K-40	<1.19E-01	0.00E+00	1.19E-01

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

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID: 239881 Sample Dates: 7/10/2012 - 7/17/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.09E-02	1.26E-03	3.22E-03
I-131	<1.65E-02	0.00E+00	1.65E-02
Cs-134	<1.79E-02	0.00E+00	1.79E-02
Cs-137	<2.31E-02	0.00E+00	2.31E-02
Be-7	<2.20E-01	0.00E+00	2.20E-01
K-40	<4.46E-01	0.00E+00	4.46E-01

Sample ID: 240005 Sample Dates: 7/17/2012 - 7/24/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.74E-02	1.33E-03	2.81E-03
I-131	<5.96E-03	0.00E+00	5.96E-03
Cs-134	<7.37E-03	0.00E+00	7.37E-03
Cs-137	<7.76E-03	0.00E+00	7.76E-03
Be-7	1.12E-01	3.56E-02	5.59E-02
K-40	1.44E-01	3.84E-02	1.11E-01

Sample ID: 240327 Sample Dates: 7/24/2012 - 7/31/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.21E-02	1.48E-03	2.94E-03
I-131	<6.01E-03	0.00E+00	6.01E-03
Cs-134	<5.13E-03	0.00E+00	5.13E-03
Cs-137	<8.94E-03	0.00E+00	8.94E-03
Be-7	1.52E-01	3.40E-02	5.60E-02
K-40	<1.88E-01	0.00E+00	1.88E-01

Sample ID: 240962 Sample Dates: 7/31/2012 - 8/7/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.16E-02	1.44E-03	2.77E-03
I-131	<1.89E-02	0.00E+00	1.89E-02
Cs-134	<2.06E-02	0.00E+00	2.06E-02
Cs-137	<1.73E-02	0.00E+00	1.73E-02
Be-7	1.40E-01	6.23E-02	1.23E-01
K-40	<5.44E-01	0.00E+00	5.44E-01

Sample ID: 241233 Sample Dates: 8/7/2012 - 8/14/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.75E-02	1.36E-03	2.90E-03
I-131	<8.62E-03	0.00E+00	8.62E-03
Cs-134	<9.34E-03	0.00E+00	9.34E-03
Cs-137	<1.05E-02	0.00E+00	1.05E-02
Be-7	9.30E-02	3.01E-02	7.36E-02
K-40	1.30E-01	5.09E-02	1.55E-01

Sample ID: 241540 Sample Dates: 8/14/2012 - 8/21/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.66E-02	1.59E-03	3.04E-03
I-131	<1.89E-02	0.00E+00	1.89E-02
Cs-134	<1.81E-02	0.00E+00	1.81E-02
Cs-137	<1.50E-02	0.00E+00	1.50E-02
Be-7	<2.60E-01	0.00E+00	2.60E-01
K-40	<3.85E-01	0.00E+00	3.85E-01

Sample ID: 242129 Sample Dates: 8/21/2012 - 8/28/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.63E-02	1.58E-03	3.06E-03
I-131	<7.89E-03	0.00E+00	7.89E-03
Cs-134	<1.15E-02	0.00E+00	1.15E-02
Cs-137	<1.15E-02	0.00E+00	1.15E-02
Be-7	1.60E-01	4.53E-02	8.57E-02
K-40	2.40E-01	6.64E-02	4.98E-02

Sample ID: 242458 Sample Dates: 8/28/2012 - 9/5/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.05E-02	1.08E-03	2.61E-03
I-131	<5.89E-03	0.00E+00	5.89E-03
Cs-134	<8.09E-03	0.00E+00	8.09E-03
Cs-137	<9.34E-03	0.00E+00	9.34E-03
Be-7	8.50E-02	2.76E-02	5.89E-02
K-40	<1.99E-01	0.00E+00	1.99E-01

Sample ID: 242985 Sample Dates: 9/5/2012 - 9/11/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.04E-02	1.58E-03	3.35E-03
I-131	<8.69E-03	0.00E+00	8.69E-03
Cs-134	<7.57E-03	0.00E+00	7.57E-03
Cs-137	<1.09E-02	0.00E+00	1.09E-02
Be-7	1.34E-01	4.06E-02	8.98E-02

Sample ID:	242985	Sample Dates: 9/5/2012 - 9/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			K-40	<2.72E-01	0.00E+00	2.72E-01
Sample ID:	**243743**	**Sample Dates: 9/11/2012 - 9/18/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Beta	2.25E-02	1.47E-03	2.89E-03
			I-131	<7.41E-03	0.00E+00	7.41E-03
			Cs-134	<6.65E-03	0.00E+00	6.65E-03
			Cs-137	<7.93E-03	0.00E+00	7.93E-03
			Be-7	9.65E-02	3.56E-02	5.77E-02
			K-40	1.73E-01	5.26E-02	2.96E-02
Sample ID:	**244148**	**Sample Dates: 9/18/2012 - 9/25/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Beta	2.28E-02	1.47E-03	2.82E-03
			I-131	<8.10E-03	0.00E+00	8.10E-03
			Cs-134	<9.39E-03	0.00E+00	9.39E-03
			Cs-137	<1.23E-02	0.00E+00	1.23E-02
			Be-7	8.33E-02	3.57E-02	7.57E-02
			K-40	<2.27E-01	0.00E+00	2.27E-01
Sample ID:	**245020**	**Sample Dates: 9/25/2012 - 10/2/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Beta	2.89E-02	1.63E-03	3.00E-03
			I-131	<5.50E-03	0.00E+00	5.50E-03
			Cs-134	<8.63E-03	0.00E+00	8.63E-03
			Cs-137	<8.79E-03	0.00E+00	8.79E-03
			Be-7	2.00E-01	3.49E-02	4.31E-02
			K-40	<2.07E-01	0.00E+00	2.07E-01
Sample ID:	**245840**	**Sample Dates: 10/2/2012 - 10/9/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Beta	2.72E-02	1.63E-03	3.20E-03
			I-131	<6.39E-03	0.00E+00	6.39E-03
			Cs-134	<7.58E-03	0.00E+00	7.58E-03
			Cs-137	<6.39E-03	0.00E+00	6.39E-03
			Be-7	1.86E-01	3.05E-02	1.36E-02
			K-40	<1.89E-01	0.00E+00	1.89E-01
Sample ID:	**246695**	*Sample Dates: 10/9/2012 - 10/16/2012*	*Nuclide*	*Activity*	*1 Sigma Error*	*LLD*
			Beta	2.55E-02	1.60E-03	3.29E-03
			I-131	<7.04E-03	0.00E+00	7.04E-03
			Cs-134	<7.38E-03	0.00E+00	7.38E-03
			Cs-137	<6.05E-03	0.00E+00	6.05E-03
			Be-7	1.73E-01	4.10E-02	5.76E-02
			K-40	<2.09E-01	0.00E+00	2.09E-01
Sample ID:	**247103**	**Sample Dates: 10/16/2012 - 10/23/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Beta	2.68E-02	1.60E-03	3.01E-03
			I-131	<2.21E-02	0.00E+00	2.21E-02
			Cs-134	<2.16E-02	0.00E+00	2.16E-02
			Cs-137	<1.45E-02	0.00E+00	1.45E-02
			Be-7	1.62E-01	6.68E-02	1.74E-01
			K-40	<5.20E-01	0.00E+00	5.20E-01
Sample ID:	**247419**	**Sample Dates: 10/23/2012 - 10/30/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Beta	2.43E-02	1.56E-03	3.11E-03
			I-131	<1.84E-02	0.00E+00	1.84E-02
			Cs-134	<1.28E-02	0.00E+00	1.28E-02
			Cs-137	<2.67E-02	0.00E+00	2.67E-02
			Be-7	1.49E-01	4.77E-02	1.12E-01
			K-40	<3.54E-01	0.00E+00	3.54E-01
Sample ID:	**247757**	**Sample Dates: 10/30/2012 - 11/6/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Beta	2.37E-02	1.52E-03	3.03E-03
			I-131	<2.20E-02	0.00E+00	2.20E-02
			Cs-134	<1.73E-02	0.00E+00	1.73E-02
			Cs-137	<2.11E-02	0.00E+00	2.11E-02
			Be-7	1.51E-01	5.75E-02	1.19E-01
			K-40	<5.08E-01	0.00E+00	5.08E-01
Sample ID:	**247952**	**Sample Dates: 11/6/2012 - 11/13/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Beta	2.78E-02	1.61E-03	3.01E-03
			I-131	<1.76E-02	0.00E+00	1.76E-02
			Cs-134	<2.30E-02	0.00E+00	2.30E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

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

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID: 247952 **Sample Dates: 11/6/2012 - 11/13/2012**

Nuclide	Activity	1 Sigma Error	LLD
Cs-137	<2.11E-02	0.00E+00	2.11E-02
Be-7	1.22E-01	5.51E-02	1.21E-01
K-40	<4.88E-01	0.00E+00	4.88E-01

Sample ID: 248356 **Sample Dates: 11/13/2012 - 11/20/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.57E-02	1.68E-03	3.66E-03
I-131	<1.60E-02	0.00E+00	1.60E-02
Cs-134	<1.67E-02	0.00E+00	1.67E-02
Cs-137	<2.50E-02	0.00E+00	2.50E-02
Be-7	1.43E-01	5.80E-02	1.61E-01
K-40	<4.97E-01	0.00E+00	4.97E-01

Sample ID: 248635 **Sample Dates: 11/20/2012 - 11/27/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.28E-02	1.52E-03	3.14E-03
I-131	<1.66E-02	0.00E+00	1.66E-02
Cs-134	<1.96E-02	0.00E+00	1.96E-02
Cs-137	<2.07E-02	0.00E+00	2.07E-02
Be-7	1.29E-01	7.11E-02	1.82E-01
K-40	2.95E-01	9.32E-02	3.29E-01

Sample ID: 249008 **Sample Dates: 11/27/2012 - 12/4/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.42E-02	1.53E-03	3.03E-03
I-131	<1.82E-02	0.00E+00	1.82E-02
Cs-134	<2.19E-02	0.00E+00	2.19E-02
Cs-137	<1.82E-02	0.00E+00	1.82E-02
Be-7	1.56E-01	4.83E-02	1.10E-01
K-40	<3.49E-01	0.00E+00	3.49E-01

Sample ID: 249247 **Sample Dates: 12/4/2012 - 12/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.71E-02	1.44E-03	3.37E-03
I-131	<1.39E-02	0.00E+00	1.39E-02
Cs-134	<1.29E-02	0.00E+00	1.29E-02
Cs-137	<2.01E-02	0.00E+00	2.01E-02
Be-7	8.68E-02	4.91E-02	1.60E-01
K-40	<4.68E-01	0.00E+00	4.68E-01

Sample ID: 249445 **Sample Dates: 12/11/2012 - 12/18/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.16E-02	1.50E-03	3.10E-03
I-131	<1.54E-02	0.00E+00	1.54E-02
Cs-134	<1.39E-02	0.00E+00	1.39E-02
Cs-137	<2.16E-02	0.00E+00	2.16E-02
Be-7	1.06E-01	5.84E-02	1.85E-01
K-40	<4.84E-01	0.00E+00	4.84E-01

Sample ID: 249872 **Sample Dates: 12/18/2012 - 12/26/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.79E-02	1.46E-03	2.49E-03
I-131	<1.32E-02	0.00E+00	1.32E-02
Cs-134	<1.98E-02	0.00E+00	1.98E-02
Cs-137	<1.92E-02	0.00E+00	1.92E-02
Be-7	9.28E-02	4.78E-02	1.32E-01
K-40	<3.54E-01	0.00E+00	3.54E-01

Sample ID: 250179 **Sample Dates: 12/26/2012 - 1/2/2013**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.73E-02	1.36E-03	2.93E-03
I-131	<1.43E-02	0.00E+00	1.43E-02
Cs-134	<2.47E-02	0.00E+00	2.47E-02
Cs-137	<2.02E-02	0.00E+00	2.02E-02
Be-7	7.13E-02	2.70E-02	1.60E-01
K-40	<4.42E-01	0.00E+00	4.42E-01

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID: 227182 **Sample Dates: 1/4/2012 - 1/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.14E-02	1.64E-03	3.54E-03
I-131	<1.05E-02	0.00E+00	1.05E-02
Cs-134	<9.17E-03	0.00E+00	9.17E-03
Cs-137	<1.30E-02	0.00E+00	1.30E-02
Be-7	1.13E-01	4.59E-02	7.30E-02
K-40	<2.12E-01	0.00E+00	2.12E-01

Sample ID: 227316 **Sample Dates: 1/10/2012 - 1/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.72E-02	1.35E-03	2.88E-03
I-131	<1.28E-02	0.00E+00	1.28E-02
Cs-134	<1.83E-02	0.00E+00	1.83E-02
Cs-137	<2.34E-02	0.00E+00	2.34E-02
Be-7	1.99E-01	6.49E-02	1.31E-01
K-40	<2.89E-01	0.00E+00	2.89E-01

Sample ID: 227530 **Sample Dates: 1/17/2012 - 1/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.62E-02	1.29E-03	2.68E-03
I-131	<6.16E-03	0.00E+00	6.16E-03
Cs-134	<7.24E-03	0.00E+00	7.24E-03
Cs-137	<9.47E-03	0.00E+00	9.47E-03
Be-7	7.96E-02	4.10E-02	8.14E-02
K-40	<1.90E-01	0.00E+00	1.90E-01

Sample ID: 227852 **Sample Dates: 1/24/2012 - 1/31/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.42E-02	1.32E-03	3.11E-03
I-131	<5.77E-03	0.00E+00	5.77E-03
Cs-134	<6.22E-03	0.00E+00	6.22E-03
Cs-137	<8.88E-03	0.00E+00	8.88E-03
Be-7	8.35E-02	2.78E-02	5.53E-02
K-40	2.29E-01	4.58E-02	8.42E-02

Sample ID: 228119 **Sample Dates: 1/31/2012 - 2/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.78E-02	1.37E-03	2.95E-03
I-131	<6.42E-03	0.00E+00	6.42E-03
Cs-134	<7.47E-03	0.00E+00	7.47E-03
Cs-137	<7.86E-03	0.00E+00	7.86E-03
Be-7	1.11E-01	2.78E-02	5.89E-02
K-40	1.62E-01	5.68E-02	1.18E-01

Sample ID: 229430 **Sample Dates: 2/7/2012 - 2/14/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.81E-02	1.36E-03	2.82E-03
I-131	<7.01E-03	0.00E+00	7.01E-03
Cs-134	<8.74E-03	0.00E+00	8.74E-03
Cs-137	<1.10E-02	0.00E+00	1.10E-02
Be-7	1.25E-01	3.00E-02	6.03E-02
K-40	1.61E-01	6.07E-02	1.06E-01

Sample ID: 230056 **Sample Dates: 2/14/2012 - 2/21/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.64E-02	1.33E-03	2.89E-03
I-131	<5.73E-03	0.00E+00	5.73E-03
Cs-134	<7.74E-03	0.00E+00	7.74E-03
Cs-137	<7.56E-03	0.00E+00	7.56E-03
Be-7	9.83E-02	3.36E-02	6.31E-02
K-40	8.04E-02	4.77E-02	1.23E-01

Sample ID: 230731 **Sample Dates: 2/21/2012 - 2/28/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.26E-02	1.28E-03	3.15E-03
I-131	<1.62E-02	0.00E+00	1.62E-02
Cs-134	<1.84E-02	0.00E+00	1.84E-02
Cs-137	<2.63E-02	0.00E+00	2.63E-02
Be-7	<2.16E-01	0.00E+00	2.16E-01
K-40	<5.57E-01	0.00E+00	5.57E-01

Sample ID: 230940 **Sample Dates: 2/28/2012 - 3/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.45E-02	1.24E-03	2.66E-03
I-131	<7.39E-03	0.00E+00	7.39E-03
Cs-134	<9.21E-03	0.00E+00	9.21E-03
Cs-137	<1.00E-02	0.00E+00	1.00E-02
Be-7	1.65E-01	2.75E-02	5.19E-02
K-40	2.08E-01	6.10E-02	1.24E-01

Sample ID: 231650 **Sample Dates: 3/6/2012 - 3/13/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.68E-02	1.32E-03	2.77E-03
I-131	<1.95E-02	0.00E+00	1.95E-02
Cs-134	<2.31E-02	0.00E+00	2.31E-02
Cs-137	<1.88E-02	0.00E+00	1.88E-02
Be-7	2.05E-01	8.89E-02	1.61E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	231650	Sample Dates: 3/6/2012 - 3/13/2012	Nuclide	Activity	1 Sigma Error	LLD
			K-40	<3.57E-01	0.00E+00	3.57E-01
Sample ID:	232464	Sample Dates: 3/13/2012 - 3/20/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.54E-02	1.32E-03	2.92E-03
			I-131	<1.00E-02	0.00E+00	1.00E-02
			Cs-134	<1.09E-02	0.00E+00	1.09E-02
			Cs-137	<9.46E-03	0.00E+00	9.46E-03
			Be-7	1.88E-01	3.73E-02	6.74E-02
			K-40	<1.72E-01	0.00E+00	1.72E-01
Sample ID:	233304	Sample Dates: 3/20/2012 - 3/27/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.48E-02	1.33E-03	3.12E-03
			I-131	<6.54E-03	0.00E+00	6.54E-03
			Cs-134	<7.07E-03	0.00E+00	7.07E-03
			Cs-137	<7.92E-03	0.00E+00	7.92E-03
			Be-7	1.59E-01	3.62E-02	6.06E-02
			K-40	<1.62E-01	0.00E+00	1.62E-01
Sample ID:	233545	Sample Dates: 3/27/2012 - 4/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.89E-02	1.41E-03	2.98E-03
			I-131	<1.34E-02	0.00E+00	1.34E-02
			Cs-134	<1.38E-02	0.00E+00	1.38E-02
			Cs-137	<1.12E-02	0.00E+00	1.12E-02
			Be-7	1.09E-01	5.65E-02	1.06E-01
			K-40	2.08E-01	5.55E-02	1.55E-01
Sample ID:	234463	Sample Dates: 4/3/2012 - 4/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.68E-02	1.33E-03	2.82E-03
			I-131	<5.56E-03	0.00E+00	5.56E-03
			Cs-134	<7.86E-03	0.00E+00	7.86E-03
			Cs-137	<8.47E-03	0.00E+00	8.47E-03
			Be-7	1.97E-01	3.44E-02	4.94E-02
			K-40	2.86E-01	5.13E-02	1.18E-01
Sample ID:	234891	Sample Dates: 4/10/2012 - 4/17/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.62E-02	1.37E-03	3.11E-03
			I-131	<7.00E-03	0.00E+00	7.00E-03
			Cs-134	<8.35E-03	0.00E+00	8.35E-03
			Cs-137	<8.93E-03	0.00E+00	8.93E-03
			Be-7	1.57E-01	3.59E-02	5.11E-02
			K-40	<2.05E-01	0.00E+00	2.05E-01
Sample ID:	235213	Sample Dates: 4/17/2012 - 4/24/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.59E-02	1.33E-03	2.95E-03
			I-131	<6.35E-03	0.00E+00	6.35E-03
			Cs-134	<1.32E-02	0.00E+00	1.32E-02
			Cs-137	<1.22E-02	0.00E+00	1.22E-02
			Be-7	1.25E-01	3.46E-02	6.85E-02
			K-40	<2.26E-01	0.00E+00	2.26E-01
Sample ID:	235398	Sample Dates: 4/24/2012 - 5/1/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.57E-02	1.55E-03	2.90E-03
			I-131	<6.52E-03	0.00E+00	6.52E-03
			Cs-134	<5.59E-03	0.00E+00	5.59E-03
			Cs-137	<8.61E-03	0.00E+00	8.61E-03
			Be-7	1.88E-01	2.74E-02	5.46E-02
			K-40	2.29E-01	5.76E-02	8.53E-02
Sample ID:	235736	Sample Dates: 5/1/2012 - 5/8/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.68E-02	1.35E-03	2.96E-03
			I-131	<6.48E-03	0.00E+00	6.48E-03
			Cs-134	<7.81E-03	0.00E+00	7.81E-03
			Cs-137	<7.41E-03	0.00E+00	7.41E-03
			Be-7	1.48E-01	3.27E-02	5.20E-02
			K-40	3.56E-01	5.71E-02	6.51E-02
Sample ID:	235982	Sample Dates: 5/8/2012 - 5/15/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.25E-02	1.29E-03	3.20E-03
			I-131	<6.50E-03	0.00E+00	6.50E-03
			Cs-134	<1.02E-02	0.00E+00	1.02E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID: 235982 **Sample Dates: 5/8/2012 - 5/15/2012**

Nuclide	Activity	1 Sigma Error	LLD
Cs-137	<1.15E-02	0.00E+00	1.15E-02
Be-7	1.17E-01	4.42E-02	7.85E-02
K-40	<2.70E-01	0.00E+00	2.70E-01

Sample ID: 236192 **Sample Dates: 5/15/2012 - 5/22/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.74E-02	1.34E-03	2.83E-03
I-131	<1.64E-02	0.00E+00	1.64E-02
Cs-134	<2.13E-02	0.00E+00	2.13E-02
Cs-137	<2.46E-02	0.00E+00	2.46E-02
Be-7	2.00E-01	5.98E-02	1.60E-01
K-40	<4.70E-01	0.00E+00	4.70E-01

Sample ID: 236505 **Sample Dates: 5/22/2012 - 5/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.72E-02	1.26E-03	2.63E-03
I-131	<6.27E-03	0.00E+00	6.27E-03
Cs-134	<7.36E-03	0.00E+00	7.36E-03
Cs-137	<1.32E-02	0.00E+00	1.32E-02
Be-7	1.38E-01	3.36E-02	5.94E-02
K-40	<1.68E-01	0.00E+00	1.68E-01

Sample ID: 236804 **Sample Dates: 5/30/2012 - 6/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.12E-02	1.62E-03	3.46E-03
I-131	<8.90E-03	0.00E+00	8.90E-03
Cs-134	<9.69E-03	0.00E+00	9.69E-03
Cs-137	<8.89E-03	0.00E+00	8.89E-03
Be-7	2.25E-01	3.69E-02	6.16E-02
K-40	<2.63E-01	0.00E+00	2.63E-01

Sample ID: 237130 **Sample Dates: 6/5/2012 - 6/12/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.21E-02	1.27E-03	3.14E-03
I-131	<1.56E-02	0.00E+00	1.56E-02
Cs-134	<1.95E-02	0.00E+00	1.95E-02
Cs-137	<2.74E-02	0.00E+00	2.74E-02
Be-7	<1.79E-01	0.00E+00	1.79E-01
K-40	<6.34E-01	0.00E+00	6.34E-01

Sample ID: 237305 **Sample Dates: 6/12/2012 - 6/19/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.55E-02	1.36E-03	3.14E-03
I-131	<1.98E-02	0.00E+00	1.98E-02
Cs-134	<1.99E-02	0.00E+00	1.99E-02
Cs-137	<2.46E-02	0.00E+00	2.46E-02
Be-7	2.90E-01	7.51E-02	1.68E-01
K-40	<3.20E-01	0.00E+00	3.20E-01

Sample ID: 237981 **Sample Dates: 6/19/2012 - 6/26/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.18E-02	1.49E-03	3.03E-03
I-131	<1.16E-02	0.00E+00	1.16E-02
Cs-134	<2.41E-02	0.00E+00	2.41E-02
Cs-137	<2.32E-02	0.00E+00	2.32E-02
Be-7	2.22E-01	6.72E-02	1.12E-01
K-40	<4.73E-01	0.00E+00	4.73E-01

Sample ID: 238733 **Sample Dates: 6/26/2012 - 7/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.38E-02	1.60E-03	3.39E-03
I-131	<6.65E-03	0.00E+00	6.65E-03
Cs-134	<6.80E-03	0.00E+00	6.80E-03
Cs-137	<1.06E-02	0.00E+00	1.06E-02
Be-7	2.59E-01	4.42E-02	5.11E-02
K-40	3.02E-01	5.25E-02	7.84E-02

Sample ID: 239110 **Sample Dates: 7/3/2012 - 7/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	3.01E-02	1.66E-03	3.00E-03
I-131	<5.86E-03	0.00E+00	5.86E-03
Cs-134	<6.95E-03	0.00E+00	6.95E-03
Cs-137	<7.38E-03	0.00E+00	7.38E-03
Be-7	1.37E-01	3.82E-02	5.91E-02
K-40	<1.72E-01	0.00E+00	1.72E-01

Sample ID: 239882 **Sample Dates: 7/10/2012 - 7/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.11E-02	1.26E-03	3.22E-03

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID: 239882 **Sample Dates: 7/10/2012 - 7/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.95E-02	0.00E+00	1.95E-02
Cs-134	<1.75E-02	0.00E+00	1.75E-02
Cs-137	<1.96E-02	0.00E+00	1.96E-02
Be-7	1.16E-01	6.06E-02	1.62E-01
K-40	<5.46E-01	0.00E+00	5.46E-01

Sample ID: 240006 **Sample Dates: 7/17/2012 - 7/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.49E-02	1.29E-03	2.88E-03
I-131	<6.73E-03	0.00E+00	6.73E-03
Cs-134	<7.55E-03	0.00E+00	7.55E-03
Cs-137	<1.06E-02	0.00E+00	1.06E-02
Be-7	1.52E-01	2.94E-02	4.74E-02
K-40	<1.35E-01	0.00E+00	1.35E-01

Sample ID: 240328 **Sample Dates: 7/24/2012 - 7/31/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.54E-02	1.29E-03	2.85E-03
I-131	<6.55E-03	0.00E+00	6.55E-03
Cs-134	<8.14E-03	0.00E+00	8.14E-03
Cs-137	<9.98E-03	0.00E+00	9.98E-03
Be-7	1.40E-01	2.72E-02	5.92E-02
K-40	<2.01E-01	0.00E+00	2.01E-01

Sample ID: 240963 **Sample Dates: 7/31/2012 - 8/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.10E-02	1.43E-03	2.79E-03
I-131	<1.68E-02	0.00E+00	1.68E-02
Cs-134	<1.69E-02	0.00E+00	1.69E-02
Cs-137	<1.75E-02	0.00E+00	1.75E-02
Be-7	1.58E-01	5.43E-02	9.63E-02
K-40	<3.63E-01	0.00E+00	3.63E-01

Sample ID: 241234 **Sample Dates: 8/7/2012 - 8/14/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.35E-02	1.26E-03	2.89E-03
I-131	<1.33E-02	0.00E+00	1.33E-02
Cs-134	<1.05E-02	0.00E+00	1.05E-02
Cs-137	<1.75E-02	0.00E+00	1.75E-02
Be-7	1.07E-01	4.32E-02	1.05E-01
K-40	<3.00E-01	0.00E+00	3.00E-01

Sample ID: 241541 **Sample Dates: 8/14/2012 - 8/21/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.87E-02	1.63E-03	3.05E-03
I-131	<1.80E-02	0.00E+00	1.80E-02
Cs-134	<1.64E-02	0.00E+00	1.64E-02
Cs-137	<1.81E-02	0.00E+00	1.81E-02
Be-7	2.10E-01	5.84E-02	1.57E-01
K-40	<3.16E-01	0.00E+00	3.16E-01

Sample ID: 242130 **Sample Dates: 8/21/2012 - 8/28/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.34E-02	1.53E-03	3.09E-03
I-131	<1.94E-02	0.00E+00	1.94E-02
Cs-134	<1.47E-02	0.00E+00	1.47E-02
Cs-137	<2.53E-02	0.00E+00	2.53E-02
Be-7	1.28E-01	5.32E-02	1.68E-01
K-40	<4.42E-01	0.00E+00	4.42E-01

Sample ID: 242459 **Sample Dates: 8/28/2012 - 9/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	9.63E-03	1.05E-03	2.60E-03
I-131	<5.09E-03	0.00E+00	5.09E-03
Cs-134	<8.57E-03	0.00E+00	8.57E-03
Cs-137	<9.14E-03	0.00E+00	9.14E-03
Be-7	7.30E-02	1.77E-02	3.79E-02
K-40	<2.00E-01	0.00E+00	2.00E-01

Sample ID: 242986 **Sample Dates: 9/5/2012 - 9/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.92E-02	1.54E-03	3.32E-03
I-131	<1.08E-02	0.00E+00	1.08E-02
Cs-134	<1.19E-02	0.00E+00	1.19E-02
Cs-137	<1.43E-02	0.00E+00	1.43E-02
Be-7	1.84E-01	5.47E-02	9.00E-02
K-40	<2.41E-01	0.00E+00	2.41E-01

Sample ID: 243744 **Sample Dates: 9/11/2012 - 9/18/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.23E-02	1.47E-03	2.90E-03
I-131	<6.65E-03	0.00E+00	6.65E-03
Cs-134	<7.15E-03	0.00E+00	7.15E-03
Cs-137	<9.38E-03	0.00E+00	9.38E-03
Be-7	1.71E-01	3.58E-02	5.69E-02
K-40	<2.21E-01	0.00E+00	2.21E-01

Sample ID: 244149 **Sample Dates: 9/18/2012 - 9/25/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.43E-02	1.51E-03	2.83E-03
I-131	<9.37E-03	0.00E+00	9.37E-03
Cs-134	<8.92E-03	0.00E+00	8.92E-03
Cs-137	<1.10E-02	0.00E+00	1.10E-02
Be-7	1.24E-01	4.08E-02	8.52E-02
K-40	<2.42E-01	0.00E+00	2.42E-01

Sample ID: 245021 **Sample Dates: 9/25/2012 - 10/2/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.79E-02	1.61E-03	2.99E-03
I-131	<5.55E-03	0.00E+00	5.55E-03
Cs-134	<9.13E-03	0.00E+00	9.13E-03
Cs-137	<6.87E-03	0.00E+00	6.87E-03
Be-7	1.53E-01	3.02E-02	4.25E-02
K-40	1.11E-01	3.52E-02	8.08E-02

Sample ID: 245841 **Sample Dates: 10/2/2012 - 10/9/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.37E-02	1.55E-03	3.17E-03
I-131	<6.98E-03	0.00E+00	6.98E-03
Cs-134	<6.26E-03	0.00E+00	6.26E-03
Cs-137	<1.07E-02	0.00E+00	1.07E-02
Be-7	1.53E-01	2.56E-02	5.15E-02
K-40	<1.32E-01	0.00E+00	1.32E-01

Sample ID: 246696 **Sample Dates: 10/9/2012 - 10/16/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.31E-02	1.56E-03	3.30E-03
I-131	<1.87E-02	0.00E+00	1.87E-02
Cs-134	<1.66E-02	0.00E+00	1.66E-02
Cs-137	<2.15E-02	0.00E+00	2.15E-02
Be-7	<1.99E-01	0.00E+00	1.99E-01
K-40	<3.86E-01	0.00E+00	3.86E-01

Sample ID: 247104 **Sample Dates: 10/16/2012 - 10/23/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.37E-02	1.52E-03	2.97E-03
I-131	<2.04E-02	0.00E+00	2.04E-02
Cs-134	<2.25E-02	0.00E+00	2.25E-02
Cs-137	<1.73E-02	0.00E+00	1.73E-02
Be-7	<1.67E-01	0.00E+00	1.67E-01
K-40	<4.10E-01	0.00E+00	4.10E-01

Sample ID: 247420 **Sample Dates: 10/23/2012 - 10/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.38E-02	1.54E-03	3.11E-03
I-131	<4.11E-03	0.00E+00	4.11E-03
Cs-134	<4.41E-03	0.00E+00	4.41E-03
Cs-137	<6.46E-03	0.00E+00	6.46E-03
Be-7	1.28E-01	2.57E-02	3.78E-02
K-40	<1.15E-01	0.00E+00	1.15E-01

Sample ID: 247758 **Sample Dates: 10/30/2012 - 11/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.91E-02	1.42E-03	3.05E-03
I-131	<1.95E-02	0.00E+00	1.95E-02
Cs-134	<2.13E-02	0.00E+00	2.13E-02
Cs-137	<2.12E-02	0.00E+00	2.12E-02
Be-7	2.67E-01	5.91E-02	1.44E-01
K-40	<5.06E-01	0.00E+00	5.06E-01

Sample ID: 247953 **Sample Dates: 11/6/2012 - 11/13/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.92E-02	1.64E-03	3.02E-03
I-131	<1.59E-02	0.00E+00	1.59E-02
Cs-134	<1.84E-02	0.00E+00	1.84E-02
Cs-137	<1.50E-02	0.00E+00	1.50E-02
Be-7	1.61E-01	7.69E-02	1.60E-01

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	247953	Sample Dates: 11/6/2012 - 11/13/2012	Nuclide	Activity	1 Sigma Error	LLD
			K-40	<4.50E-01	0.00E+00	4.50E-01
Sample ID:	248357	Sample Dates: 11/13/2012 - 11/20/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	3.00E-02	1.75E-03	3.62E-03
			I-131	<1.47E-02	0.00E+00	1.47E-02
			Cs-134	<2.07E-02	0.00E+00	2.07E-02
			Cs-137	<1.49E-02	0.00E+00	1.49E-02
			Be-7	1.02E-01	5.50E-02	1.32E-01
			K-40	<4.69E-01	0.00E+00	4.69E-01
Sample ID:	248636	Sample Dates: 11/20/2012 - 11/27/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	3.25E-02	1.72E-03	3.13E-03
			I-131	<1.81E-02	0.00E+00	1.81E-02
			Cs-134	<1.27E-02	0.00E+00	1.27E-02
			Cs-137	<1.94E-02	0.00E+00	1.94E-02
			Be-7	2.43E-01	4.96E-02	1.29E-01
			K-40	<3.53E-01	0.00E+00	3.53E-01
Sample ID:	249009	Sample Dates: 11/27/2012 - 12/4/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	3.39E-02	1.73E-03	3.06E-03
			I-131	<1.83E-02	0.00E+00	1.83E-02
			Cs-134	<2.54E-02	0.00E+00	2.54E-02
			Cs-137	<2.36E-02	0.00E+00	2.36E-02
			Be-7	1.73E-01	5.48E-02	1.74E-01
			K-40	<4.53E-01	0.00E+00	4.53E-01
Sample ID:	249248	Sample Dates: 12/4/2012 - 12/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.68E-02	1.44E-03	3.38E-03
			I-131	<1.27E-02	0.00E+00	1.27E-02
			Cs-134	<1.84E-02	0.00E+00	1.84E-02
			Cs-137	<1.99E-02	0.00E+00	1.99E-02
			Be-7	1.25E-01	4.48E-02	1.09E-01
			K-40	<5.36E-01	0.00E+00	5.36E-01
Sample ID:	249446	Sample Dates: 12/11/2012 - 12/18/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.13E-02	1.48E-03	3.06E-03
			I-131	<1.98E-02	0.00E+00	1.98E-02
			Cs-134	<1.86E-02	0.00E+00	1.86E-02
			Cs-137	<2.88E-02	0.00E+00	2.88E-02
			Be-7	1.02E-01	4.77E-02	1.32E-01
			K-40	<3.55E-01	0.00E+00	3.55E-01
Sample ID:	249873	Sample Dates: 12/18/2012 - 12/26/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.31E-02	1.36E-03	2.49E-03
			I-131	<1.33E-02	0.00E+00	1.33E-02
			Cs-134	<1.79E-02	0.00E+00	1.79E-02
			Cs-137	<1.52E-02	0.00E+00	1.52E-02
			Be-7	1.77E-01	3.96E-02	1.24E-01
			K-40	2.18E-01	9.30E-02	1.86E-01
Sample ID:	250180	Sample Dates: 12/26/2012 - 1/2/2013	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.75E-02	1.36E-03	2.93E-03
			I-131	<1.94E-02	0.00E+00	1.94E-02
			Cs-134	<1.56E-02	0.00E+00	1.56E-02
			Cs-137	<2.02E-02	0.00E+00	2.02E-02
			Be-7	1.16E-01	4.60E-02	1.22E-01
			K-40	<5.31E-01	0.00E+00	5.31E-01

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	227189	Sample Dates: 1/4/2012 - 1/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.00E-02	0.00E+00	1.00E-02
			Cs-134	<1.21E-02	0.00E+00	1.21E-02
			Cs-137	<1.29E-02	0.00E+00	1.29E-02
			Be-7	<9.16E-02	0.00E+00	9.16E-02
			K-40	4.48E-01	1.00E-01	1.62E-01
Sample ID:	227323	Sample Dates: 1/10/2012 - 1/17/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<9.42E-03	0.00E+00	9.42E-03

Sample ID:	227323	Sample Dates: 1/10/2012 - 1/17/2012	Nuclide	Activity	1 Sigma Error	LLD
			Cs-134	<1.10E-02	0.00E+00	1.10E-02
			Cs-137	<1.03E-02	0.00E+00	1.03E-02
			Be-7	<8.21E-02	0.00E+00	8.21E-02
			K-40	6.18E-01	9.99E-02	1.65E-01
Sample ID:	227537	Sample Dates: 1/17/2012 - 1/24/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<6.96E-03	0.00E+00	6.96E-03
			Cs-134	<8.71E-03	0.00E+00	8.71E-03
			Cs-137	<1.01E-02	0.00E+00	1.01E-02
			Be-7	<6.85E-02	0.00E+00	6.85E-02
			K-40	4.96E-01	7.65E-02	8.47E-02
Sample ID:	227859	Sample Dates: 1/24/2012 - 1/31/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<9.89E-03	0.00E+00	9.89E-03
			Cs-134	<1.06E-02	0.00E+00	1.06E-02
			Cs-137	<1.08E-02	0.00E+00	1.08E-02
			Be-7	<9.62E-02	0.00E+00	9.62E-02
			K-40	4.44E-01	9.70E-02	1.52E-01
Sample ID:	228126	Sample Dates: 1/31/2012 - 2/7/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<7.89E-03	0.00E+00	7.89E-03
			Cs-134	<1.70E-02	0.00E+00	1.70E-02
			Cs-137	<1.12E-02	0.00E+00	1.12E-02
			Be-7	<1.19E-01	0.00E+00	1.19E-01
			K-40	5.42E-01	1.11E-01	6.11E-02
Sample ID:	229437	Sample Dates: 2/7/2012 - 2/14/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<7.12E-03	0.00E+00	7.12E-03
			Cs-134	<8.12E-03	0.00E+00	8.12E-03
			Cs-137	<1.11E-02	0.00E+00	1.11E-02
			Be-7	<5.91E-02	0.00E+00	5.91E-02
			K-40	2.36E-01	8.99E-02	1.45E-01
Sample ID:	230063	Sample Dates: 2/14/2012 - 2/21/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.35E-02	0.00E+00	1.35E-02
			Cs-134	<1.17E-02	0.00E+00	1.17E-02
			Cs-137	<1.20E-02	0.00E+00	1.20E-02
			Be-7	<1.24E-01	0.00E+00	1.24E-01
			K-40	2.91E-01	1.10E-01	2.70E-01
Sample ID:	230738	Sample Dates: 2/21/2012 - 2/28/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<8.31E-03	0.00E+00	8.31E-03
			Cs-134	<1.17E-02	0.00E+00	1.17E-02
			Cs-137	<1.39E-02	0.00E+00	1.39E-02
			Be-7	<7.76E-02	0.00E+00	7.76E-02
			K-40	<3.65E-01	0.00E+00	3.65E-01
Sample ID:	230947	Sample Dates: 2/28/2012 - 3/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.05E-02	0.00E+00	1.05E-02
			Cs-134	<1.32E-02	0.00E+00	1.32E-02
			Cs-137	<1.54E-02	0.00E+00	1.54E-02
			Be-7	<1.45E-01	0.00E+00	1.45E-01
			K-40	3.24E-01	8.65E-02	2.21E-01
Sample ID:	231657	Sample Dates: 3/6/2012 - 3/13/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<8.05E-03	0.00E+00	8.05E-03
			Cs-134	<9.62E-03	0.00E+00	9.62E-03
			Cs-137	<1.08E-02	0.00E+00	1.08E-02
			Be-7	<1.01E-01	0.00E+00	1.01E-01
			K-40	3.38E-01	8.45E-02	1.56E-01
Sample ID:	232471	Sample Dates: 3/13/2012 - 3/20/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<5.75E-03	0.00E+00	5.75E-03
			Cs-134	<7.68E-03	0.00E+00	7.68E-03
			Cs-137	<1.06E-02	0.00E+00	1.06E-02
			Be-7	<7.99E-02	0.00E+00	7.99E-02
			K-40	5.38E-01	9.14E-02	1.13E-01
Sample ID:	233311	Sample Dates: 3/20/2012 - 3/27/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<7.97E-03	0.00E+00	7.97E-03

Sample ID:	233311	Sample Dates: 3/20/2012 - 3/27/2012	Nuclide	Activity	1 Sigma Error	LLD
			Cs-134	<1.17E-02	0.00E+00	1.17E-02
			Cs-137	<7.62E-03	0.00E+00	7.62E-03
			Be-7	<5.30E-02	0.00E+00	5.30E-02
			K-40	1.55E-01	8.67E-02	1.43E-01
Sample ID:	233552	Sample Dates: 3/27/2012 - 4/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<7.50E-03	0.00E+00	7.50E-03
			Cs-134	<7.41E-03	0.00E+00	7.41E-03
			Cs-137	<1.04E-02	0.00E+00	1.04E-02
			Be-7	<4.21E-02	0.00E+00	4.21E-02
			K-40	5.62E-01	8.11E-02	8.86E-02
Sample ID:	234470	Sample Dates: 4/3/2012 - 4/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<7.96E-03	0.00E+00	7.96E-03
			Cs-134	<8.19E-03	0.00E+00	8.19E-03
			Cs-137	<1.26E-02	0.00E+00	1.26E-02
			Be-7	<7.02E-02	0.00E+00	7.02E-02
			K-40	4.11E-01	1.13E-01	1.44E-01
Sample ID:	234898	Sample Dates: 4/10/2012 - 4/17/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<7.04E-03	0.00E+00	7.04E-03
			Cs-134	<9.52E-03	0.00E+00	9.52E-03
			Cs-137	<8.00E-03	0.00E+00	8.00E-03
			Be-7	<6.70E-02	0.00E+00	6.70E-02
			K-40	3.84E-01	7.58E-02	1.12E-01
Sample ID:	235220	Sample Dates: 4/17/2012 - 4/24/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.31E-02	0.00E+00	1.31E-02
			Cs-134	<1.26E-02	0.00E+00	1.26E-02
			Cs-137	<1.88E-02	0.00E+00	1.88E-02
			Be-7	<1.15E-01	0.00E+00	1.15E-01
			K-40	3.94E-01	9.57E-02	2.43E-01
Sample ID:	235405	Sample Dates: 4/24/2012 - 5/1/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<9.95E-03	0.00E+00	9.95E-03
			Cs-134	<8.85E-03	0.00E+00	8.85E-03
			Cs-137	<1.03E-02	0.00E+00	1.03E-02
			Be-7	<6.47E-02	0.00E+00	6.47E-02
			K-40	1.88E-01	6.46E-02	1.58E-01
Sample ID:	235743	Sample Dates: 5/1/2012 - 5/8/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.13E-02	0.00E+00	1.13E-02
			Cs-134	<1.36E-02	0.00E+00	1.36E-02
			Cs-137	<1.35E-02	0.00E+00	1.35E-02
			Be-7	<1.12E-01	0.00E+00	1.12E-01
			K-40	<4.96E-01	0.00E+00	4.96E-01
Sample ID:	235989	Sample Dates: 5/8/2012 - 5/15/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<8.59E-03	0.00E+00	8.59E-03
			Cs-134	<1.02E-02	0.00E+00	1.02E-02
			Cs-137	<8.17E-03	0.00E+00	8.17E-03
			Be-7	<7.97E-02	0.00E+00	7.97E-02
			K-40	5.80E-01	9.66E-02	1.37E-01
Sample ID:	236199	Sample Dates: 5/15/2012 - 5/22/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<9.36E-03	0.00E+00	9.36E-03
			Cs-134	<9.67E-03	0.00E+00	9.67E-03
			Cs-137	<9.65E-03	0.00E+00	9.65E-03
			Be-7	<8.26E-02	0.00E+00	8.26E-02
			K-40	3.60E-01	8.30E-02	1.34E-01
Sample ID:	236512	Sample Dates: 5/22/2012 - 5/30/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.04E-02	0.00E+00	1.04E-02
			Cs-134	<9.17E-03	0.00E+00	9.17E-03
			Cs-137	<1.56E-02	0.00E+00	1.56E-02
			Be-7	<4.18E-02	0.00E+00	4.18E-02
			K-40	<3.30E-01	0.00E+00	3.30E-01
Sample ID:	236811	Sample Dates: 5/30/2012 - 6/5/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.21E-02	0.00E+00	1.21E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID: 236811 **Sample Dates: 5/30/2012 - 6/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
Cs-134	<1.43E-02	0.00E+00	1.43E-02
Cs-137	<1.62E-02	0.00E+00	1.62E-02
Be-7	<9.42E-02	0.00E+00	9.42E-02
K-40	5.44E-01	9.19E-02	2.04E-01

Sample ID: 237137 **Sample Dates: 6/5/2012 - 6/12/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.16E-02	0.00E+00	1.16E-02
Cs-134	<1.46E-02	0.00E+00	1.46E-02
Cs-137	<1.92E-02	0.00E+00	1.92E-02
Be-7	<7.73E-02	0.00E+00	7.73E-02
K-40	3.22E-01	8.61E-02	6.22E-02

Sample ID: 237312 **Sample Dates: 6/12/2012 - 6/19/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.48E-03	0.00E+00	7.48E-03
Cs-134	<1.01E-02	0.00E+00	1.01E-02
Cs-137	<1.27E-02	0.00E+00	1.27E-02
Be-7	<6.72E-02	0.00E+00	6.72E-02
K-40	3.34E-01	8.11E-02	1.44E-01

Sample ID: 237988 **Sample Dates: 6/19/2012 - 6/26/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.37E-02	0.00E+00	1.37E-02
Cs-134	<1.41E-02	0.00E+00	1.41E-02
Cs-137	<1.63E-02	0.00E+00	1.63E-02
Be-7	<6.63E-02	0.00E+00	6.63E-02
K-40	3.90E-01	9.47E-02	6.21E-02

Sample ID: 238740 **Sample Dates: 6/26/2012 - 7/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.29E-02	0.00E+00	1.29E-02
Cs-134	<1.37E-02	0.00E+00	1.37E-02
Cs-137	<1.94E-02	0.00E+00	1.94E-02
Be-7	<8.34E-02	0.00E+00	8.34E-02
K-40	3.00E-01	8.31E-02	1.74E-01

Sample ID: 239117 **Sample Dates: 7/3/2012 - 7/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.45E-03	0.00E+00	8.45E-03
Cs-134	<9.48E-03	0.00E+00	9.48E-03
Cs-137	<1.16E-02	0.00E+00	1.16E-02
Be-7	<8.54E-02	0.00E+00	8.54E-02
K-40	<4.18E-01	0.00E+00	4.18E-01

Sample ID: 239889 **Sample Dates: 7/10/2012 - 7/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.94E-03	0.00E+00	7.94E-03
Cs-134	<8.46E-03	0.00E+00	8.46E-03
Cs-137	<8.53E-03	0.00E+00	8.53E-03
Be-7	<5.63E-02	0.00E+00	5.63E-02
K-40	<4.34E-01	0.00E+00	4.34E-01

Sample ID: 240013 **Sample Dates: 7/17/2012 - 7/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.36E-02	0.00E+00	1.36E-02
Cs-134	<1.42E-02	0.00E+00	1.42E-02
Cs-137	<1.40E-02	0.00E+00	1.40E-02
Be-7	<1.36E-01	0.00E+00	1.36E-01
K-40	3.83E-01	1.29E-01	2.86E-01

Sample ID: 240335 **Sample Dates: 7/24/2012 - 7/31/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.59E-03	0.00E+00	9.59E-03
Cs-134	<1.16E-02	0.00E+00	1.16E-02
Cs-137	<1.13E-02	0.00E+00	1.13E-02
Be-7	<8.74E-02	0.00E+00	8.74E-02
K-40	3.71E-01	1.14E-01	2.34E-01

Sample ID: 240970 **Sample Dates: 7/31/2012 - 8/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.54E-03	0.00E+00	6.54E-03
Cs-134	<8.79E-03	0.00E+00	8.79E-03
Cs-137	<1.03E-02	0.00E+00	1.03E-02
Be-7	<8.82E-02	0.00E+00	8.82E-02
K-40	5.14E-01	7.84E-02	8.60E-02

Sample ID: 241241 **Sample Dates: 8/7/2012 - 8/14/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.23E-02	0.00E+00	1.23E-02

Sample ID: 241241 **Sample Dates: 8/7/2012 - 8/14/2012**

Nuclide	Activity	1 Sigma Error	LLD
Cs-134	<7.19E-03	0.00E+00	7.19E-03
Cs-137	<1.46E-02	0.00E+00	1.46E-02
Be-7	<1.32E-01	0.00E+00	1.32E-01
K-40	3.24E-01	8.65E-02	1.66E-01

Sample ID: 241548 **Sample Dates: 8/14/2012 - 8/21/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.25E-03	0.00E+00	8.25E-03
Cs-134	<5.25E-03	0.00E+00	5.25E-03
Cs-137	<1.21E-02	0.00E+00	1.21E-02
Be-7	<5.95E-02	0.00E+00	5.95E-02
K-40	5.88E-01	8.49E-02	8.87E-02

Sample ID: 242137 **Sample Dates: 8/21/2012 - 8/28/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.12E-03	0.00E+00	6.12E-03
Cs-134	<7.99E-03	0.00E+00	7.99E-03
Cs-137	<9.76E-03	0.00E+00	9.76E-03
Be-7	<4.50E-02	0.00E+00	4.50E-02
K-40	3.42E-01	8.21E-02	1.28E-01

Sample ID: 242466 **Sample Dates: 8/28/2012 - 9/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.00E-02	0.00E+00	1.00E-02
Cs-134	<1.46E-02	0.00E+00	1.46E-02
Cs-137	<1.17E-02	0.00E+00	1.17E-02
Be-7	<1.02E-01	0.00E+00	1.02E-01
K-40	4.19E-01	9.14E-02	1.82E-01

Sample ID: 242993 **Sample Dates: 9/5/2012 - 9/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.73E-03	0.00E+00	9.73E-03
Cs-134	<1.33E-02	0.00E+00	1.33E-02
Cs-137	<1.13E-02	0.00E+00	1.13E-02
Be-7	<6.86E-02	0.00E+00	6.86E-02
K-40	4.99E-01	1.12E-01	2.14E-01

Sample ID: 243751 **Sample Dates: 9/11/2012 - 9/18/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.38E-03	0.00E+00	7.38E-03
Cs-134	<9.42E-03	0.00E+00	9.42E-03
Cs-137	<7.52E-03	0.00E+00	7.52E-03
Be-7	<4.61E-02	0.00E+00	4.61E-02
K-40	4.20E-01	9.38E-02	1.50E-01

Sample ID: 244156 **Sample Dates: 9/18/2012 - 9/25/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.15E-02	0.00E+00	1.15E-02
Cs-134	<1.17E-02	0.00E+00	1.17E-02
Cs-137	<1.55E-02	0.00E+00	1.55E-02
Be-7	<8.99E-02	0.00E+00	8.99E-02
K-40	5.50E-01	1.15E-01	6.46E-02

Sample ID: 245027 **Sample Dates: 9/25/2012 - 10/2/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.86E-03	0.00E+00	7.86E-03
Cs-134	<9.77E-03	0.00E+00	9.77E-03
Cs-137	<1.26E-02	0.00E+00	1.26E-02
Be-7	<7.54E-02	0.00E+00	7.54E-02
K-40	6.38E-01	1.06E-01	9.79E-02

Sample ID: 245847 **Sample Dates: 10/2/2012 - 10/9/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.40E-02	0.00E+00	1.40E-02
Cs-134	<1.59E-02	0.00E+00	1.59E-02
Cs-137	<1.54E-02	0.00E+00	1.54E-02
Be-7	<1.36E-01	0.00E+00	1.36E-01
K-40	2.91E-01	1.34E-01	2.14E-01

Sample ID: 246702 **Sample Dates: 10/9/2012 - 10/16/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.19E-02	0.00E+00	1.19E-02
Cs-134	<1.54E-02	0.00E+00	1.54E-02
Cs-137	<1.71E-02	0.00E+00	1.71E-02
Be-7	<1.27E-01	0.00E+00	1.27E-01
K-40	3.46E-01	8.94E-02	2.43E-01

Sample ID: 247110 **Sample Dates: 10/16/2012 - 10/23/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.01E-02	0.00E+00	1.01E-02

Sample ID: 247110 **Sample Dates: 10/16/2012 - 10/23/2012**

Nuclide	Activity	1 Sigma Error	LLD
Cs-134	<8.03E-03	0.00E+00	8.03E-03
Cs-137	<7.10E-03	0.00E+00	7.10E-03
Be-7	<5.91E-02	0.00E+00	5.91E-02
K-40	2.33E-01	9.32E-02	1.81E-01

Sample ID: 247426 **Sample Dates: 10/23/2012 - 10/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.17E-02	0.00E+00	1.17E-02
Cs-134	<1.76E-02	0.00E+00	1.76E-02
Cs-137	<1.62E-02	0.00E+00	1.62E-02
Be-7	<1.45E-01	0.00E+00	1.45E-01
K-40	<4.36E-01	0.00E+00	4.36E-01

Sample ID: 247764 **Sample Dates: 10/30/2012 - 11/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.55E-03	0.00E+00	6.55E-03
Cs-134	<9.19E-03	0.00E+00	9.19E-03
Cs-137	<9.48E-03	0.00E+00	9.48E-03
Be-7	<7.91E-02	0.00E+00	7.91E-02
K-40	2.93E-01	7.84E-02	1.52E-01

Sample ID: 247959 **Sample Dates: 11/6/2012 - 11/13/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<5.62E-03	0.00E+00	5.62E-03
Cs-134	<1.04E-02	0.00E+00	1.04E-02
Cs-137	<7.54E-03	0.00E+00	7.54E-03
Be-7	<8.23E-02	0.00E+00	8.23E-02
K-40	2.94E-01	7.86E-02	5.68E-02

Sample ID: 248363 **Sample Dates: 11/13/2012 - 11/20/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.19E-02	0.00E+00	1.19E-02
Cs-134	<9.21E-03	0.00E+00	9.21E-03
Cs-137	<1.76E-02	0.00E+00	1.76E-02
Be-7	<8.77E-02	0.00E+00	8.77E-02
K-40	3.79E-01	1.10E-01	3.68E-02

Sample ID: 248642 **Sample Dates: 11/20/2012 - 11/27/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.02E-03	0.00E+00	8.02E-03
Cs-134	<1.09E-02	0.00E+00	1.09E-02
Cs-137	<2.00E-02	0.00E+00	2.00E-02
Be-7	<1.06E-01	0.00E+00	1.06E-01
K-40	<4.70E-01	0.00E+00	4.70E-01

Sample ID: 249015 **Sample Dates: 11/27/2012 - 12/4/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.12E-03	0.00E+00	8.12E-03
Cs-134	<7.88E-03	0.00E+00	7.88E-03
Cs-137	<7.65E-03	0.00E+00	7.65E-03
Be-7	<6.30E-02	0.00E+00	6.30E-02
K-40	<4.13E-01	0.00E+00	4.13E-01

Sample ID: 249254 **Sample Dates: 12/4/2012 - 12/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.88E-03	0.00E+00	8.88E-03
Cs-134	<1.18E-02	0.00E+00	1.18E-02
Cs-137	<9.42E-03	0.00E+00	9.42E-03
Be-7	<5.91E-02	0.00E+00	5.91E-02
K-40	5.01E-01	8.24E-02	1.30E-01

Sample ID: 249452 **Sample Dates: 12/11/2012 - 12/18/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.21E-03	0.00E+00	8.21E-03
Cs-134	<9.63E-03	0.00E+00	9.63E-03
Cs-137	<8.66E-03	0.00E+00	8.66E-03
Be-7	<7.50E-02	0.00E+00	7.50E-02
K-40	1.60E-01	1.00E-01	2.28E-01

Sample ID: 249879 **Sample Dates: 12/18/2012 - 12/26/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.10E-02	0.00E+00	1.10E-02
Cs-134	<9.76E-03	0.00E+00	9.76E-03
Cs-137	<1.68E-02	0.00E+00	1.68E-02
Be-7	<7.50E-02	0.00E+00	7.50E-02
K-40	4.57E-01	1.16E-01	1.89E-01

Sample ID: 250186 **Sample Dates: 12/26/2012 - 1/2/2013**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.78E-03	0.00E+00	6.78E-03

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	250186	Sample Dates: 12/26/2012 - 1/2/2013	Nuclide	Activity	1 Sigma Error	LLD
			Cs-134	<1.05E-02	0.00E+00	1.05E-02
			Cs-137	<1.23E-02	0.00E+00	1.23E-02
			Be-7	<6.69E-02	0.00E+00	6.69E-02
			K-40	3.56E-01	8.63E-02	1.76E-01

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	227190	Sample Dates: 1/4/2012 - 1/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.73E-02	0.00E+00	1.73E-02
			Cs-134	<1.39E-02	0.00E+00	1.39E-02
			Cs-137	<2.06E-02	0.00E+00	2.06E-02
			Be-7	<1.12E-01	0.00E+00	1.12E-01
			K-40	<4.78E-01	0.00E+00	4.78E-01
Sample ID:	227324	Sample Dates: 1/10/2012 - 1/17/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<7.95E-03	0.00E+00	7.95E-03
			Cs-134	<7.14E-03	0.00E+00	7.14E-03
			Cs-137	<1.27E-02	0.00E+00	1.27E-02
			Be-7	<7.15E-02	0.00E+00	7.15E-02
			K-40	5.68E-01	8.21E-02	1.10E-01
Sample ID:	227538	Sample Dates: 1/17/2012 - 1/24/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<8.64E-03	0.00E+00	8.64E-03
			Cs-134	<1.09E-02	0.00E+00	1.09E-02
			Cs-137	<1.16E-02	0.00E+00	1.16E-02
			Be-7	<8.13E-02	0.00E+00	8.13E-02
			K-40	4.65E-01	7.75E-02	1.34E-01
Sample ID:	227860	Sample Dates: 1/24/2012 - 1/31/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.12E-02	0.00E+00	1.12E-02
			Cs-134	<1.81E-02	0.00E+00	1.81E-02
			Cs-137	<1.23E-02	0.00E+00	1.23E-02
			Be-7	<1.17E-01	0.00E+00	1.17E-01
			K-40	1.97E-01	9.86E-02	2.42E-01
Sample ID:	228127	Sample Dates: 1/31/2012 - 2/7/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.34E-02	0.00E+00	1.34E-02
			Cs-134	<5.72E-03	0.00E+00	5.72E-03
			Cs-137	<1.90E-02	0.00E+00	1.90E-02
			Be-7	<9.39E-02	0.00E+00	9.39E-02
			K-40	2.48E-01	9.79E-02	2.41E-01
Sample ID:	229438	Sample Dates: 2/7/2012 - 2/14/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<9.63E-03	0.00E+00	9.63E-03
			Cs-134	<8.97E-03	0.00E+00	8.97E-03
			Cs-137	<1.07E-02	0.00E+00	1.07E-02
			Be-7	<7.35E-02	0.00E+00	7.35E-02
			K-40	4.16E-01	7.46E-02	1.16E-01
Sample ID:	230064	Sample Dates: 2/14/2012 - 2/21/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.44E-02	0.00E+00	1.44E-02
			Cs-134	<1.27E-02	0.00E+00	1.27E-02
			Cs-137	<1.53E-02	0.00E+00	1.53E-02
			Be-7	<8.41E-02	0.00E+00	8.41E-02
			K-40	5.54E-01	1.32E-01	1.76E-01
Sample ID:	230739	Sample Dates: 2/21/2012 - 2/28/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<7.11E-03	0.00E+00	7.11E-03
			Cs-134	<1.10E-02	0.00E+00	1.10E-02
			Cs-137	<8.28E-03	0.00E+00	8.28E-03
			Be-7	<5.87E-02	0.00E+00	5.87E-02
			K-40	5.75E-01	8.57E-02	3.45E-02
Sample ID:	230948	Sample Dates: 2/28/2012 - 3/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.06E-02	0.00E+00	1.06E-02
			Cs-134	<1.61E-02	0.00E+00	1.61E-02
			Cs-137	<1.40E-02	0.00E+00	1.40E-02
			Be-7	<1.17E-01	0.00E+00	1.17E-01
			K-40	4.51E-01	1.21E-01	1.76E-01

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID: 231658 **Sample Dates: 3/6/2012 - 3/13/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.83E-03	0.00E+00	8.83E-03
Cs-134	<1.06E-02	0.00E+00	1.06E-02
Cs-137	<1.22E-02	0.00E+00	1.22E-02
Be-7	<7.06E-02	0.00E+00	7.06E-02
K-40	3.68E-01	8.60E-02	1.16E-01

Sample ID: 232472 **Sample Dates: 3/13/2012 - 3/20/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.40E-03	0.00E+00	9.40E-03
Cs-134	<1.14E-02	0.00E+00	1.14E-02
Cs-137	<9.64E-03	0.00E+00	9.64E-03
Be-7	<6.00E-02	0.00E+00	6.00E-02
K-40	3.11E-01	7.77E-02	1.43E-01

Sample ID: 233312 **Sample Dates: 3/20/2012 - 3/27/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.43E-02	0.00E+00	1.43E-02
Cs-134	<1.64E-02	0.00E+00	1.64E-02
Cs-137	<1.34E-02	0.00E+00	1.34E-02
Be-7	<1.02E-01	0.00E+00	1.02E-01
K-40	3.92E-01	9.50E-02	1.73E-01

Sample ID: 233553 **Sample Dates: 3/27/2012 - 4/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.09E-03	0.00E+00	8.09E-03
Cs-134	<1.44E-02	0.00E+00	1.44E-02
Cs-137	<1.08E-02	0.00E+00	1.08E-02
Be-7	<7.63E-02	0.00E+00	7.63E-02
K-40	4.81E-01	1.06E-01	1.75E-01

Sample ID: 234471 **Sample Dates: 4/3/2012 - 4/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.84E-03	0.00E+00	8.84E-03
Cs-134	<1.01E-02	0.00E+00	1.01E-02
Cs-137	<1.09E-02	0.00E+00	1.09E-02
Be-7	<5.47E-02	0.00E+00	5.47E-02
K-40	<3.55E-01	0.00E+00	3.55E-01

Sample ID: 234899 **Sample Dates: 4/10/2012 - 4/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.07E-02	0.00E+00	1.07E-02
Cs-134	<9.88E-03	0.00E+00	9.88E-03
Cs-137	<1.23E-02	0.00E+00	1.23E-02
Be-7	<7.70E-02	0.00E+00	7.70E-02
K-40	4.56E-01	9.40E-02	1.51E-01

Sample ID: 235221 **Sample Dates: 4/17/2012 - 4/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.23E-03	0.00E+00	8.23E-03
Cs-134	<9.27E-03	0.00E+00	9.27E-03
Cs-137	<1.01E-02	0.00E+00	1.01E-02
Be-7	<7.29E-02	0.00E+00	7.29E-02
K-40	5.57E-01	8.12E-02	8.60E-02

Sample ID: 235406 **Sample Dates: 4/24/2012 - 5/1/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.74E-03	0.00E+00	9.74E-03
Cs-134	<9.75E-03	0.00E+00	9.75E-03
Cs-137	<1.27E-02	0.00E+00	1.27E-02
Be-7	<7.31E-02	0.00E+00	7.31E-02
K-40	4.59E-01	1.18E-01	1.63E-01

Sample ID: 235744 **Sample Dates: 5/1/2012 - 5/8/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.20E-03	0.00E+00	9.20E-03
Cs-134	<1.51E-02	0.00E+00	1.51E-02
Cs-137	<1.52E-02	0.00E+00	1.52E-02
Be-7	<1.21E-01	0.00E+00	1.21E-01
K-40	<4.06E-01	0.00E+00	4.06E-01

Sample ID: 235990 **Sample Dates: 5/8/2012 - 5/15/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.14E-03	0.00E+00	9.14E-03
Cs-134	<9.60E-03	0.00E+00	9.60E-03
Cs-137	<9.76E-03	0.00E+00	9.76E-03
Be-7	<7.02E-02	0.00E+00	7.02E-02
K-40	4.33E-01	9.76E-02	1.88E-01

Sample ID: 236200 **Sample Dates: 5/15/2012 - 5/22/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.02E-02	0.00E+00	1.02E-02
Cs-134	<7.62E-03	0.00E+00	7.62E-03
Cs-137	<1.07E-02	0.00E+00	1.07E-02
Be-7	<6.48E-02	0.00E+00	6.48E-02
K-40	4.51E-01	8.11E-02	8.68E-02

Sample ID: 236513 **Sample Dates: 5/22/2012 - 5/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.49E-03	0.00E+00	6.49E-03
Cs-134	<8.03E-03	0.00E+00	8.03E-03
Cs-137	<9.20E-03	0.00E+00	9.20E-03
Be-7	<5.47E-02	0.00E+00	5.47E-02
K-40	1.49E-01	7.12E-02	8.52E-02

Sample ID: 236812 **Sample Dates: 5/30/2012 - 6/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.06E-02	0.00E+00	1.06E-02
Cs-134	<1.21E-02	0.00E+00	1.21E-02
Cs-137	<1.39E-02	0.00E+00	1.39E-02
Be-7	<8.40E-02	0.00E+00	8.40E-02
K-40	5.61E-02	9.14E-02	1.00E-01

Sample ID: 237138 **Sample Dates: 6/5/2012 - 6/12/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.10E-02	0.00E+00	1.10E-02
Cs-134	<1.69E-02	0.00E+00	1.69E-02
Cs-137	<1.32E-02	0.00E+00	1.32E-02
Be-7	<1.11E-01	0.00E+00	1.11E-01
K-40	4.13E-01	9.74E-02	6.21E-02

Sample ID: 237313 **Sample Dates: 6/12/2012 - 6/19/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.47E-02	0.00E+00	1.47E-02
Cs-134	<1.08E-02	0.00E+00	1.08E-02
Cs-137	<1.75E-02	0.00E+00	1.75E-02
Be-7	<9.12E-02	0.00E+00	9.12E-02
K-40	<3.67E-01	0.00E+00	3.67E-01

Sample ID: 237989 **Sample Dates: 6/19/2012 - 6/26/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.92E-03	0.00E+00	9.92E-03
Cs-134	<1.23E-02	0.00E+00	1.23E-02
Cs-137	<2.03E-02	0.00E+00	2.03E-02
Be-7	<1.18E-01	0.00E+00	1.18E-01
K-40	3.88E-01	9.42E-02	1.76E-01

Sample ID: 238741 **Sample Dates: 6/26/2012 - 7/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<4.57E-03	0.00E+00	4.57E-03
Cs-134	<8.62E-03	0.00E+00	8.62E-03
Cs-137	<1.64E-02	0.00E+00	1.64E-02
Be-7	<5.62E-02	0.00E+00	5.62E-02
K-40	3.28E-01	7.96E-02	1.40E-01

Sample ID: 239118 **Sample Dates: 7/3/2012 - 7/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.03E-02	0.00E+00	1.03E-02
Cs-134	<1.14E-02	0.00E+00	1.14E-02
Cs-137	<9.25E-03	0.00E+00	9.25E-03
Be-7	<8.25E-02	0.00E+00	8.25E-02
K-40	2.56E-01	1.19E-01	2.10E-01

Sample ID: 239890 **Sample Dates: 7/10/2012 - 7/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.89E-03	0.00E+00	6.89E-03
Cs-134	<8.30E-03	0.00E+00	8.30E-03
Cs-137	<1.41E-02	0.00E+00	1.41E-02
Be-7	<7.34E-02	0.00E+00	7.34E-02
K-40	4.66E-01	7.88E-02	1.23E-01

Sample ID: 240014 **Sample Dates: 7/17/2012 - 7/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.60E-03	0.00E+00	8.60E-03
Cs-134	<1.25E-02	0.00E+00	1.25E-02
Cs-137	<1.18E-02	0.00E+00	1.18E-02
Be-7	<1.12E-01	0.00E+00	1.12E-01
K-40	4.56E-01	1.02E-01	6.16E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	240336	Sample Dates: 7/24/2012 - 7/31/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.36E-02	0.00E+00	1.36E-02
			Cs-134	<1.37E-02	0.00E+00	1.37E-02
			Cs-137	<1.63E-02	0.00E+00	1.63E-02
			Be-7	<1.07E-01	0.00E+00	1.07E-01
			K-40	<3.65E-01	0.00E+00	3.65E-01
Sample ID:	240971	Sample Dates: 7/31/2012 - 8/7/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<6.79E-03	0.00E+00	6.79E-03
			Cs-134	<8.41E-03	0.00E+00	8.41E-03
			Cs-137	<8.07E-03	0.00E+00	8.07E-03
			Be-7	<6.57E-02	0.00E+00	6.57E-02
			K-40	4.58E-01	7.85E-02	3.64E-02
Sample ID:	241242	Sample Dates: 8/7/2012 - 8/14/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<6.81E-03	0.00E+00	6.81E-03
			Cs-134	<1.24E-02	0.00E+00	1.24E-02
			Cs-137	<1.90E-02	0.00E+00	1.90E-02
			Be-7	<7.50E-02	0.00E+00	7.50E-02
			K-40	4.64E-01	1.31E-01	1.71E-01
Sample ID:	241549	Sample Dates: 8/14/2012 - 8/21/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<9.69E-03	0.00E+00	9.69E-03
			Cs-134	<1.20E-02	0.00E+00	1.20E-02
			Cs-137	<1.54E-02	0.00E+00	1.54E-02
			Be-7	<8.88E-02	0.00E+00	8.88E-02
			K-40	3.80E-01	9.75E-02	1.40E-01
Sample ID:	242138	Sample Dates: 8/21/2012 - 8/28/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.11E-02	0.00E+00	1.11E-02
			Cs-134	<1.17E-02	0.00E+00	1.17E-02
			Cs-137	<1.46E-02	0.00E+00	1.46E-02
			Be-7	<8.02E-02	0.00E+00	8.02E-02
			K-40	<3.90E-01	0.00E+00	3.90E-01
Sample ID:	242467	Sample Dates: 8/28/2012 - 9/5/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.10E-02	0.00E+00	1.10E-02
			Cs-134	<1.17E-02	0.00E+00	1.17E-02
			Cs-137	<1.57E-02	0.00E+00	1.57E-02
			Be-7	<9.70E-02	0.00E+00	9.70E-02
			K-40	3.64E-01	8.57E-02	1.46E-01
Sample ID:	242994	Sample Dates: 9/5/2012 - 9/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.66E-02	0.00E+00	1.66E-02
			Cs-134	<1.33E-02	0.00E+00	1.33E-02
			Cs-137	<1.66E-02	0.00E+00	1.66E-02
			Be-7	<1.09E-01	0.00E+00	1.09E-01
			K-40	4.01E-01	1.28E-01	2.47E-01
Sample ID:	243752	Sample Dates: 9/11/2012 - 9/18/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.05E-02	0.00E+00	1.05E-02
			Cs-134	<1.16E-02	0.00E+00	1.16E-02
			Cs-137	<9.58E-03	0.00E+00	9.58E-03
			Be-7	<9.47E-02	0.00E+00	9.47E-02
			K-40	3.61E-01	9.33E-02	6.51E-02
Sample ID:	244157	Sample Dates: 9/18/2012 - 9/25/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<9.90E-03	0.00E+00	9.90E-03
			Cs-134	<1.38E-02	0.00E+00	1.38E-02
			Cs-137	<1.58E-02	0.00E+00	1.58E-02
			Be-7	<1.19E-01	0.00E+00	1.19E-01
			K-40	3.71E-01	9.27E-02	6.26E-02
Sample ID:	245028	Sample Dates: 9/25/2012 - 10/2/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.04E-02	0.00E+00	1.04E-02
			Cs-134	<6.29E-03	0.00E+00	6.29E-03
			Cs-137	<7.82E-03	0.00E+00	7.82E-03
			Be-7	<8.19E-02	0.00E+00	8.19E-02
			K-40	<4.67E-01	0.00E+00	4.67E-01

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	245848	Sample Dates: 10/2/2012 - 10/9/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<6.67E-03	0.00E+00	6.67E-03
			Cs-134	<6.61E-03	0.00E+00	6.61E-03
			Cs-137	<8.04E-03	0.00E+00	8.04E-03
			Be-7	<6.59E-02	0.00E+00	6.59E-02
			K-40	3.60E-01	8.72E-02	1.51E-01
Sample ID:	246703	Sample Dates: 10/9/2012 - 10/16/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<5.68E-03	0.00E+00	5.68E-03
			Cs-134	<8.00E-03	0.00E+00	8.00E-03
			Cs-137	<9.53E-03	0.00E+00	9.53E-03
			Be-7	<7.35E-02	0.00E+00	7.35E-02
			K-40	<3.66E-01	0.00E+00	3.66E-01
Sample ID:	247111	Sample Dates: 10/16/2012 - 10/23/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.35E-02	0.00E+00	1.35E-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	<8.79E-02	0.00E+00	8.79E-02
			K-40	<4.04E-01	0.00E+00	4.04E-01
Sample ID:	247427	Sample Dates: 10/23/2012 - 10/30/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<3.78E-03	0.00E+00	3.78E-03
			Cs-134	<7.61E-03	0.00E+00	7.61E-03
			Cs-137	<7.72E-03	0.00E+00	7.72E-03
			Be-7	<3.62E-02	0.00E+00	3.62E-02
			K-40	3.74E-01	7.13E-02	1.36E-01
Sample ID:	247765	Sample Dates: 10/30/2012 - 11/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<6.51E-03	0.00E+00	6.51E-03
			Cs-134	<1.31E-02	0.00E+00	1.31E-02
			Cs-137	<1.43E-02	0.00E+00	1.43E-02
			Be-7	<8.01E-02	0.00E+00	8.01E-02
			K-40	3.35E-01	1.10E-01	1.88E-01
Sample ID:	247960	Sample Dates: 11/6/2012 - 11/13/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.77E-03	0.00E+00	1.77E-03
			Cs-134	<8.45E-03	0.00E+00	8.45E-03
			Cs-137	<1.24E-02	0.00E+00	1.24E-02
			Be-7	<7.32E-02	0.00E+00	7.32E-02
			K-40	3.59E-01	8.71E-02	1.54E-01
Sample ID:	248364	Sample Dates: 11/13/2012 - 11/20/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.16E-02	0.00E+00	1.16E-02
			Cs-134	<1.52E-02	0.00E+00	1.52E-02
			Cs-137	<1.80E-02	0.00E+00	1.80E-02
			Be-7	<8.18E-02	0.00E+00	8.18E-02
			K-40	<3.30E-01	0.00E+00	3.30E-01
Sample ID:	248643	Sample Dates: 11/20/2012 - 11/27/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<5.50E-03	0.00E+00	5.50E-03
			Cs-134	<7.96E-03	0.00E+00	7.96E-03
			Cs-137	<1.34E-02	0.00E+00	1.34E-02
			Be-7	<6.28E-02	0.00E+00	6.28E-02
			K-40	3.79E-01	8.93E-02	5.69E-02
Sample ID:	249016	Sample Dates: 11/27/2012 - 12/4/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<6.50E-03	0.00E+00	6.50E-03
			Cs-134	<1.01E-02	0.00E+00	1.01E-02
			Cs-137	<1.19E-02	0.00E+00	1.19E-02
			Be-7	<8.19E-02	0.00E+00	8.19E-02
			K-40	2.09E-01	9.80E-02	2.28E-01
Sample ID:	249255	Sample Dates: 12/4/2012 - 12/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.11E-02	0.00E+00	1.11E-02
			Cs-134	<1.20E-02	0.00E+00	1.20E-02
			Cs-137	<1.93E-02	0.00E+00	1.93E-02
			Be-7	<2.08E-02	0.00E+00	2.08E-02
			K-40	3.54E-01	8.84E-02	1.60E-01

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	249453	Sample Dates: 12/11/2012 - 12/18/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<7.23E-03	0.00E+00	7.23E-03
			Cs-134	<6.34E-03	0.00E+00	6.34E-03
			Cs-137	<1.11E-02	0.00E+00	1.11E-02
			Be-7	<9.37E-02	0.00E+00	9.37E-02
			K-40	3.39E-01	8.46E-02	5.72E-02
Sample ID:	249880	Sample Dates: 12/18/2012 - 12/26/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<8.19E-03	0.00E+00	8.19E-03
			Cs-134	<8.52E-03	0.00E+00	8.52E-03
			Cs-137	<1.02E-02	0.00E+00	1.02E-02
			Be-7	<7.02E-02	0.00E+00	7.02E-02
			K-40	<3.22E-01	0.00E+00	3.22E-01
Sample ID:	250187	Sample Dates: 12/26/2012 - 1/2/2013	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<8.85E-03	0.00E+00	8.85E-03
			Cs-134	<1.61E-02	0.00E+00	1.61E-02
			Cs-137	<1.48E-02	0.00E+00	1.48E-02
			Be-7	<9.41E-02	0.00E+00	9.41E-02
			K-40	2.24E-01	6.76E-02	5.51E-02

Sample Point 205 [INDICATOR - SW @ 0.25 miles]

Sample ID:	227191	Sample Dates: 1/4/2012 - 1/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.31E-02	0.00E+00	1.31E-02
			Cs-134	<1.29E-02	0.00E+00	1.29E-02
			Cs-137	<1.87E-02	0.00E+00	1.87E-02
			Be-7	<1.55E-01	0.00E+00	1.55E-01
			K-40	2.25E-01	1.04E-01	2.23E-01
Sample ID:	227325	Sample Dates: 1/10/2012 - 1/17/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.31E-02	0.00E+00	1.31E-02
			Cs-134	<1.38E-02	0.00E+00	1.38E-02
			Cs-137	<1.82E-02	0.00E+00	1.82E-02
			Be-7	<1.11E-01	0.00E+00	1.11E-01
			K-40	3.80E-01	1.07E-01	1.67E-01
Sample ID:	227539	Sample Dates: 1/17/2012 - 1/24/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<8.89E-03	0.00E+00	8.89E-03
			Cs-134	<1.10E-02	0.00E+00	1.10E-02
			Cs-137	<1.56E-02	0.00E+00	1.56E-02
			Be-7	<7.09E-02	0.00E+00	7.09E-02
			K-40	<3.26E-01	0.00E+00	3.26E-01
Sample ID:	227861	Sample Dates: 1/24/2012 - 1/31/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.16E-02	0.00E+00	1.16E-02
			Cs-134	<1.62E-02	0.00E+00	1.62E-02
			Cs-137	<1.90E-02	0.00E+00	1.90E-02
			Be-7	<1.10E-01	0.00E+00	1.10E-01
			K-40	3.26E-01	8.70E-02	1.67E-01
Sample ID:	228128	Sample Dates: 1/31/2012 - 2/7/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<8.42E-03	0.00E+00	8.42E-03
			Cs-134	<9.45E-03	0.00E+00	9.45E-03
			Cs-137	<1.34E-02	0.00E+00	1.34E-02
			Be-7	<8.15E-02	0.00E+00	8.15E-02
			K-40	3.62E-01	9.04E-02	6.11E-02
Sample ID:	229439	Sample Dates: 2/7/2012 - 2/14/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<8.19E-03	0.00E+00	8.19E-03
			Cs-134	<9.46E-03	0.00E+00	9.46E-03
			Cs-137	<1.12E-02	0.00E+00	1.12E-02
			Be-7	<6.94E-02	0.00E+00	6.94E-02
			K-40	<4.05E-01	0.00E+00	4.05E-01
Sample ID:	230065	Sample Dates: 2/14/2012 - 2/21/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<8.54E-03	0.00E+00	8.54E-03
			Cs-134	<8.38E-03	0.00E+00	8.38E-03
			Cs-137	<1.12E-02	0.00E+00	1.12E-02
			Be-7	<8.62E-02	0.00E+00	8.62E-02
			K-40	4.46E-01	9.30E-02	1.42E-01

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

Sample Point 205 [INDICATOR - SW @ 0.25 miles]

Sample ID: 230740 **Sample Dates: 2/21/2012 - 2/28/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.67E-03	0.00E+00	7.67E-03
Cs-134	<1.15E-02	0.00E+00	1.15E-02
Cs-137	<9.79E-03	0.00E+00	9.79E-03
Be-7	<6.67E-02	0.00E+00	6.67E-02
K-40	2.13E-01	8.40E-02	1.98E-01

Sample ID: 230949 **Sample Dates: 2/28/2012 - 3/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.58E-03	0.00E+00	8.58E-03
Cs-134	<1.30E-02	0.00E+00	1.30E-02
Cs-137	<1.20E-02	0.00E+00	1.20E-02
Be-7	<9.44E-02	0.00E+00	9.44E-02
K-40	4.16E-01	9.79E-02	1.75E-01

Sample ID: 231659 **Sample Dates: 3/6/2012 - 3/13/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.47E-03	0.00E+00	6.47E-03
Cs-134	<7.49E-03	0.00E+00	7.49E-03
Cs-137	<9.12E-03	0.00E+00	9.12E-03
Be-7	<6.26E-02	0.00E+00	6.26E-02
K-40	2.65E-01	6.97E-02	1.26E-01

Sample ID: 232473 **Sample Dates: 3/13/2012 - 3/20/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.08E-02	0.00E+00	1.08E-02
Cs-134	<1.06E-02	0.00E+00	1.06E-02
Cs-137	<1.69E-02	0.00E+00	1.69E-02
Be-7	<5.58E-02	0.00E+00	5.58E-02
K-40	4.80E-01	1.05E-01	6.17E-02

Sample ID: 233313 **Sample Dates: 3/20/2012 - 3/27/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.16E-03	0.00E+00	8.16E-03
Cs-134	<8.85E-03	0.00E+00	8.85E-03
Cs-137	<1.30E-02	0.00E+00	1.30E-02
Be-7	<9.51E-02	0.00E+00	9.51E-02
K-40	5.11E-01	1.06E-01	1.88E-01

Sample ID: 233554 **Sample Dates: 3/27/2012 - 4/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.06E-02	0.00E+00	1.06E-02
Cs-134	<1.26E-02	0.00E+00	1.26E-02
Cs-137	<1.52E-02	0.00E+00	1.52E-02
Be-7	<9.52E-02	0.00E+00	9.52E-02
K-40	<4.44E-01	0.00E+00	4.44E-01

Sample ID: 234472 **Sample Dates: 4/3/2012 - 4/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.51E-03	0.00E+00	7.51E-03
Cs-134	<9.99E-03	0.00E+00	9.99E-03
Cs-137	<8.85E-03	0.00E+00	8.85E-03
Be-7	<7.33E-02	0.00E+00	7.33E-02
K-40	3.42E-01	8.65E-02	3.69E-02

Sample ID: 234900 **Sample Dates: 4/10/2012 - 4/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.69E-03	0.00E+00	9.69E-03
Cs-134	<1.30E-02	0.00E+00	1.30E-02
Cs-137	<1.07E-02	0.00E+00	1.07E-02
Be-7	<1.03E-01	0.00E+00	1.03E-01
K-40	3.36E-01	8.40E-02	2.26E-01

Sample ID: 235222 **Sample Dates: 4/17/2012 - 4/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.68E-03	0.00E+00	7.68E-03
Cs-134	<1.14E-02	0.00E+00	1.14E-02
Cs-137	<9.29E-03	0.00E+00	9.29E-03
Be-7	<5.72E-02	0.00E+00	5.72E-02
K-40	3.95E-01	8.83E-02	1.59E-01

Sample ID: 235407 **Sample Dates: 4/24/2012 - 5/1/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.03E-02	0.00E+00	1.03E-02
Cs-134	<8.05E-03	0.00E+00	8.05E-03
Cs-137	<6.21E-03	0.00E+00	6.21E-03
Be-7	<8.19E-02	0.00E+00	8.19E-02
K-40	3.86E-01	8.63E-02	1.80E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

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

Sample Point 205 [INDICATOR - SW @ 0.25 miles]

Sample ID: 235745 **Sample Dates: 5/1/2012 - 5/8/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.68E-03	0.00E+00	6.68E-03
Cs-134	<1.15E-02	0.00E+00	1.15E-02
Cs-137	<1.31E-02	0.00E+00	1.31E-02
Be-7	<6.18E-02	0.00E+00	6.18E-02
K-40	3.20E-01	6.53E-02	9.66E-02

Sample ID: 235991 **Sample Dates: 5/8/2012 - 5/15/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.55E-03	0.00E+00	9.55E-03
Cs-134	<8.97E-03	0.00E+00	8.97E-03
Cs-137	<8.38E-03	0.00E+00	8.38E-03
Be-7	<6.99E-02	0.00E+00	6.99E-02
K-40	4.94E-01	8.13E-02	1.44E-01

Sample ID: 236201 **Sample Dates: 5/15/2012 - 5/22/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.19E-02	0.00E+00	1.19E-02
Cs-134	<1.33E-02	0.00E+00	1.33E-02
Cs-137	<1.43E-02	0.00E+00	1.43E-02
Be-7	<8.69E-02	0.00E+00	8.69E-02
K-40	1.86E-01	1.01E-01	2.34E-01

Sample ID: 236514 **Sample Dates: 5/22/2012 - 5/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.57E-03	0.00E+00	9.57E-03
Cs-134	<9.10E-03	0.00E+00	9.10E-03
Cs-137	<1.22E-02	0.00E+00	1.22E-02
Be-7	<8.39E-02	0.00E+00	8.39E-02
K-40	3.32E-01	7.83E-02	1.72E-01

Sample ID: 236813 **Sample Dates: 5/30/2012 - 6/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.04E-02	0.00E+00	1.04E-02
Cs-134	<1.49E-02	0.00E+00	1.49E-02
Cs-137	<1.29E-02	0.00E+00	1.29E-02
Be-7	<8.79E-02	0.00E+00	8.79E-02
K-40	6.22E-01	1.10E-01	2.05E-01

Sample ID: 237139 **Sample Dates: 6/5/2012 - 6/12/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.04E-03	0.00E+00	7.04E-03
Cs-134	<9.59E-03	0.00E+00	9.59E-03
Cs-137	<1.61E-02	0.00E+00	1.61E-02
Be-7	<9.82E-02	0.00E+00	9.82E-02
K-40	3.44E-01	8.89E-02	1.62E-01

Sample ID: 237314 **Sample Dates: 6/12/2012 - 6/19/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.00E-03	0.00E+00	7.00E-03
Cs-134	<1.19E-02	0.00E+00	1.19E-02
Cs-137	<1.84E-02	0.00E+00	1.84E-02
Be-7	<1.14E-01	0.00E+00	1.14E-01
K-40	4.58E-01	1.02E-01	1.67E-01

Sample ID: 237990 **Sample Dates: 6/19/2012 - 6/26/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.24E-03	0.00E+00	6.24E-03
Cs-134	<1.04E-02	0.00E+00	1.04E-02
Cs-137	<1.46E-02	0.00E+00	1.46E-02
Be-7	<7.30E-02	0.00E+00	7.30E-02
K-40	<4.00E-01	0.00E+00	4.00E-01

Sample ID: 238742 **Sample Dates: 6/26/2012 - 7/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.17E-02	0.00E+00	1.17E-02
Cs-134	<1.17E-02	0.00E+00	1.17E-02
Cs-137	<1.52E-02	0.00E+00	1.52E-02
Be-7	<8.70E-02	0.00E+00	8.70E-02
K-40	3.80E-01	8.95E-02	5.70E-02

Sample ID: 239119 **Sample Dates: 7/3/2012 - 7/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.25E-02	0.00E+00	1.25E-02
Cs-134	<1.53E-02	0.00E+00	1.53E-02
Cs-137	<1.97E-02	0.00E+00	1.97E-02
Be-7	5.37E-02	3.62E-02	8.39E-02
K-40	4.90E-01	1.07E-01	1.67E-01

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

Sample Point 205 [INDICATOR - SW @ 0.25 miles]

Sample ID: 239891 **Sample Dates: 7/10/2012 - 7/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.16E-02	0.00E+00	1.16E-02
Cs-134	<1.05E-02	0.00E+00	1.05E-02
Cs-137	<1.16E-02	0.00E+00	1.16E-02
Be-7	<9.61E-02	0.00E+00	9.61E-02
K-40	4.61E-01	1.03E-01	2.57E-01

Sample ID: 240015 **Sample Dates: 7/17/2012 - 7/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.30E-03	0.00E+00	7.30E-03
Cs-134	<9.30E-03	0.00E+00	9.30E-03
Cs-137	<1.63E-02	0.00E+00	1.63E-02
Be-7	<9.22E-02	0.00E+00	9.22E-02
K-40	<3.96E-01	0.00E+00	3.96E-01

Sample ID: 240337 **Sample Dates: 7/24/2012 - 7/31/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.28E-02	0.00E+00	1.28E-02
Cs-134	<1.14E-02	0.00E+00	1.14E-02
Cs-137	<9.09E-03	0.00E+00	9.09E-03
Be-7	<8.18E-02	0.00E+00	8.18E-02
K-40	1.84E-01	8.88E-02	6.19E-02

Sample ID: 240972 **Sample Dates: 7/31/2012 - 8/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.12E-02	0.00E+00	1.12E-02
Cs-134	<1.25E-02	0.00E+00	1.25E-02
Cs-137	<3.34E-03	0.00E+00	3.34E-03
Be-7	<9.97E-02	0.00E+00	9.97E-02
K-40	5.55E-01	1.13E-01	6.25E-02

Sample ID: 241243 **Sample Dates: 8/7/2012 - 8/14/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.08E-02	0.00E+00	1.08E-02
Cs-134	<9.92E-03	0.00E+00	9.92E-03
Cs-137	<1.62E-02	0.00E+00	1.62E-02
Be-7	<6.68E-02	0.00E+00	6.68E-02
K-40	2.28E-01	6.88E-02	5.61E-02

Sample ID: 241550 **Sample Dates: 8/14/2012 - 8/21/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.93E-03	0.00E+00	9.93E-03
Cs-134	<7.75E-03	0.00E+00	7.75E-03
Cs-137	<1.33E-02	0.00E+00	1.33E-02
Be-7	<7.84E-02	0.00E+00	7.84E-02
K-40	5.30E-01	1.05E-01	1.05E-01

Sample ID: 242139 **Sample Dates: 8/21/2012 - 8/28/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.80E-03	0.00E+00	9.80E-03
Cs-134	<1.29E-02	0.00E+00	1.29E-02
Cs-137	<1.09E-02	0.00E+00	1.09E-02
Be-7	<9.53E-02	0.00E+00	9.53E-02
K-40	<4.03E-01	0.00E+00	4.03E-01

Sample ID: 242468 **Sample Dates: 8/28/2012 - 9/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.04E-03	0.00E+00	8.04E-03
Cs-134	<1.02E-02	0.00E+00	1.02E-02
Cs-137	<8.58E-03	0.00E+00	8.58E-03
Be-7	<8.30E-02	0.00E+00	8.30E-02
K-40	5.84E-01	9.19E-02	1.05E-01

Sample ID: 242995 **Sample Dates: 9/5/2012 - 9/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.67E-03	0.00E+00	6.67E-03
Cs-134	<7.50E-03	0.00E+00	7.50E-03
Cs-137	<1.31E-02	0.00E+00	1.31E-02
Be-7	<8.05E-02	0.00E+00	8.05E-02
K-40	2.75E-01	8.30E-02	2.13E-01

Sample ID: 243753 **Sample Dates: 9/11/2012 - 9/18/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.42E-02	0.00E+00	1.42E-02
Cs-134	<1.18E-02	0.00E+00	1.18E-02
Cs-137	<1.87E-02	0.00E+00	1.87E-02
Be-7	<1.25E-01	0.00E+00	1.25E-01
K-40	<4.29E-01	0.00E+00	4.29E-01

Sample ID: 244158 **Sample Dates: 9/18/2012 - 9/25/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.02E-03	0.00E+00	7.02E-03
Cs-134	<9.10E-03	0.00E+00	9.10E-03
Cs-137	<1.35E-02	0.00E+00	1.35E-02
Be-7	<4.65E-02	0.00E+00	4.65E-02
K-40	3.60E-01	8.72E-02	5.72E-02

Sample ID: 245029 **Sample Dates: 9/25/2012 - 10/2/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.20E-03	0.00E+00	9.20E-03
Cs-134	<1.08E-02	0.00E+00	1.08E-02
Cs-137	<9.70E-03	0.00E+00	9.70E-03
Be-7	<6.65E-02	0.00E+00	6.65E-02
K-40	2.33E-01	8.39E-02	1.26E-01

Sample ID: 245849 **Sample Dates: 10/2/2012 - 10/9/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.13E-02	0.00E+00	1.13E-02
Cs-134	<1.38E-02	0.00E+00	1.38E-02
Cs-137	<2.46E-02	0.00E+00	2.46E-02
Be-7	<1.31E-01	0.00E+00	1.31E-01
K-40	3.86E-01	1.22E-01	2.03E-01

Sample ID: 246704 **Sample Dates: 10/9/2012 - 10/16/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.83E-03	0.00E+00	7.83E-03
Cs-134	<8.30E-03	0.00E+00	8.30E-03
Cs-137	<1.24E-02	0.00E+00	1.24E-02
Be-7	<5.86E-02	0.00E+00	5.86E-02
K-40	2.74E-01	7.60E-02	1.79E-01

Sample ID: 247112 **Sample Dates: 10/16/2012 - 10/23/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.21E-02	0.00E+00	1.21E-02
Cs-134	<1.23E-02	0.00E+00	1.23E-02
Cs-137	<1.13E-02	0.00E+00	1.13E-02
Be-7	<1.07E-01	0.00E+00	1.07E-01
K-40	2.74E-01	1.02E-01	1.88E-01

Sample ID: 247428 **Sample Dates: 10/23/2012 - 10/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<5.30E-03	0.00E+00	5.30E-03
Cs-134	<8.88E-03	0.00E+00	8.88E-03
Cs-137	<9.56E-03	0.00E+00	9.56E-03
Be-7	<7.59E-02	0.00E+00	7.59E-02
K-40	2.11E-01	8.73E-02	1.92E-01

Sample ID: 247766 **Sample Dates: 10/30/2012 - 11/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.03E-03	0.00E+00	9.03E-03
Cs-134	<1.01E-02	0.00E+00	1.01E-02
Cs-137	<1.55E-02	0.00E+00	1.55E-02
Be-7	<1.02E-01	0.00E+00	1.02E-01
K-40	4.12E-01	7.66E-02	1.89E-01

Sample ID: 247961 **Sample Dates: 11/6/2012 - 11/13/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.45E-03	0.00E+00	6.45E-03
Cs-134	<8.82E-03	0.00E+00	8.82E-03
Cs-137	<6.36E-03	0.00E+00	6.36E-03
Be-7	<6.45E-02	0.00E+00	6.45E-02
K-40	<3.76E-01	0.00E+00	3.76E-01

Sample ID: 248365 **Sample Dates: 11/13/2012 - 11/20/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.70E-03	0.00E+00	7.70E-03
Cs-134	<9.83E-03	0.00E+00	9.83E-03
Cs-137	<9.49E-03	0.00E+00	9.49E-03
Be-7	<7.49E-02	0.00E+00	7.49E-02
K-40	4.20E-01	7.66E-02	1.01E-01

Sample ID: 248644 **Sample Dates: 11/20/2012 - 11/27/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.32E-03	0.00E+00	9.32E-03
Cs-134	<1.04E-02	0.00E+00	1.04E-02
Cs-137	<1.30E-02	0.00E+00	1.30E-02
Be-7	<5.11E-02	0.00E+00	5.11E-02
K-40	3.47E-01	8.42E-02	1.47E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

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

Sample Point 205 [INDICATOR - SW @ 0.25 miles]

Sample ID: 249017 **Sample Dates: 11/27/2012 - 12/4/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.69E-03	0.00E+00	7.69E-03
Cs-134	<1.12E-02	0.00E+00	1.12E-02
Cs-137	<9.41E-03	0.00E+00	9.41E-03
Be-7	<6.69E-02	0.00E+00	6.69E-02
K-40	2.91E-01	7.78E-02	5.62E-02

Sample ID: 249256 **Sample Dates: 12/4/2012 - 12/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.36E-03	0.00E+00	7.36E-03
Cs-134	<1.01E-02	0.00E+00	1.01E-02
Cs-137	<1.40E-02	0.00E+00	1.40E-02
Be-7	<6.81E-02	0.00E+00	6.81E-02
K-40	3.61E-01	7.08E-02	1.00E-01

Sample ID: 249454 **Sample Dates: 12/11/2012 - 12/18/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.02E-03	0.00E+00	7.02E-03
Cs-134	<9.36E-03	0.00E+00	9.36E-03
Cs-137	<1.47E-02	0.00E+00	1.47E-02
Be-7	<6.77E-02	0.00E+00	6.77E-02
K-40	<4.21E-01	0.00E+00	4.21E-01

Sample ID: 249881 **Sample Dates: 12/18/2012 - 12/26/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.41E-03	0.00E+00	7.41E-03
Cs-134	<9.93E-03	0.00E+00	9.93E-03
Cs-137	<9.76E-03	0.00E+00	9.76E-03
Be-7	<7.46E-02	0.00E+00	7.46E-02
K-40	3.50E-01	6.62E-02	1.17E-01

Sample ID: 250188 **Sample Dates: 12/26/2012 - 1/2/2013**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.13E-03	0.00E+00	7.13E-03
Cs-134	<9.87E-03	0.00E+00	9.87E-03
Cs-137	<8.82E-03	0.00E+00	8.82E-03
Be-7	<5.94E-02	0.00E+00	5.94E-02
K-40	4.96E-01	8.26E-02	1.00E-01

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID: 227192 **Sample Dates: 1/4/2012 - 1/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.75E-02	0.00E+00	1.75E-02
Cs-134	<1.60E-02	0.00E+00	1.60E-02
Cs-137	<3.92E-03	0.00E+00	3.92E-03
Be-7	<1.34E-01	0.00E+00	1.34E-01
K-40	2.89E-01	1.18E-01	2.42E-01

Sample ID: 227326 **Sample Dates: 1/10/2012 - 1/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.10E-02	0.00E+00	1.10E-02
Cs-134	<8.46E-03	0.00E+00	8.46E-03
Cs-137	<1.39E-02	0.00E+00	1.39E-02
Be-7	<6.37E-02	0.00E+00	6.37E-02
K-40	1.46E-01	6.67E-02	1.36E-01

Sample ID: 227540 **Sample Dates: 1/17/2012 - 1/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.04E-03	0.00E+00	8.04E-03
Cs-134	<1.01E-02	0.00E+00	1.01E-02
Cs-137	<1.34E-02	0.00E+00	1.34E-02
Be-7	<7.71E-02	0.00E+00	7.71E-02
K-40	2.88E-01	1.07E-01	1.22E-01

Sample ID: 227862 **Sample Dates: 1/24/2012 - 1/31/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.83E-03	0.00E+00	6.83E-03
Cs-134	<7.40E-03	0.00E+00	7.40E-03
Cs-137	<1.04E-02	0.00E+00	1.04E-02
Be-7	<6.90E-02	0.00E+00	6.90E-02
K-40	4.92E-01	1.02E-01	1.29E-01

Sample ID: 228129 **Sample Dates: 1/31/2012 - 2/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.16E-02	0.00E+00	1.16E-02
Cs-134	<1.28E-02	0.00E+00	1.28E-02
Cs-137	<1.68E-02	0.00E+00	1.68E-02
Be-7	<1.34E-01	0.00E+00	1.34E-01
K-40	3.90E-01	1.38E-01	2.64E-01

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

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID: 229440 **Sample Dates: 2/7/2012 - 2/14/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.01E-02	0.00E+00	1.01E-02
Cs-134	<1.57E-02	0.00E+00	1.57E-02
Cs-137	<1.50E-02	0.00E+00	1.50E-02
Be-7	<5.68E-02	0.00E+00	5.68E-02
K-40	4.18E-01	9.86E-02	2.15E-01

Sample ID: 230066 **Sample Dates: 2/14/2012 - 2/21/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.28E-03	0.00E+00	6.28E-03
Cs-134	<7.46E-03	0.00E+00	7.46E-03
Cs-137	<1.06E-02	0.00E+00	1.06E-02
Be-7	<6.11E-02	0.00E+00	6.11E-02
K-40	5.89E-01	8.88E-02	9.64E-02

Sample ID: 230741 **Sample Dates: 2/21/2012 - 2/28/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.01E-03	0.00E+00	7.01E-03
Cs-134	<8.21E-03	0.00E+00	8.21E-03
Cs-137	<1.10E-02	0.00E+00	1.10E-02
Be-7	<6.79E-02	0.00E+00	6.79E-02
K-40	4.74E-01	8.36E-02	1.12E-01

Sample ID: 230950 **Sample Dates: 2/28/2012 - 3/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.56E-02	0.00E+00	1.56E-02
Cs-134	<7.70E-03	0.00E+00	7.70E-03
Cs-137	<1.70E-02	0.00E+00	1.70E-02
Be-7	<1.08E-01	0.00E+00	1.08E-01
K-40	5.06E-01	1.08E-01	6.22E-02

Sample ID: 231660 **Sample Dates: 3/6/2012 - 3/13/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.79E-03	0.00E+00	7.79E-03
Cs-134	<8.01E-03	0.00E+00	8.01E-03
Cs-137	<1.19E-02	0.00E+00	1.19E-02
Be-7	<7.68E-02	0.00E+00	7.68E-02
K-40	6.19E-01	8.59E-02	1.08E-01

Sample ID: 232474 **Sample Dates: 3/13/2012 - 3/20/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.81E-03	0.00E+00	7.81E-03
Cs-134	<9.97E-03	0.00E+00	9.97E-03
Cs-137	<1.19E-02	0.00E+00	1.19E-02
Be-7	<7.09E-02	0.00E+00	7.09E-02
K-40	3.20E-01	9.73E-02	1.22E-01

Sample ID: 233314 **Sample Dates: 3/20/2012 - 3/27/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.39E-03	0.00E+00	9.39E-03
Cs-134	<1.03E-02	0.00E+00	1.03E-02
Cs-137	<1.16E-02	0.00E+00	1.16E-02
Be-7	<6.74E-02	0.00E+00	6.74E-02
K-40	<4.72E-01	0.00E+00	4.72E-01

Sample ID: 233555 **Sample Dates: 3/27/2012 - 4/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.25E-03	0.00E+00	9.25E-03
Cs-134	<7.77E-03	0.00E+00	7.77E-03
Cs-137	<8.23E-03	0.00E+00	8.23E-03
Be-7	<8.46E-02	0.00E+00	8.46E-02
K-40	1.91E-01	6.03E-02	1.60E-01

Sample ID: 234473 **Sample Dates: 4/3/2012 - 4/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.06E-03	0.00E+00	9.06E-03
Cs-134	<1.06E-02	0.00E+00	1.06E-02
Cs-137	<1.41E-02	0.00E+00	1.41E-02
Be-7	<7.38E-02	0.00E+00	7.38E-02
K-40	6.62E-01	8.92E-02	3.25E-02

Sample ID: 234901 **Sample Dates: 4/10/2012 - 4/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.22E-03	0.00E+00	8.22E-03
Cs-134	<9.77E-03	0.00E+00	9.77E-03
Cs-137	<1.12E-02	0.00E+00	1.12E-02
Be-7	<6.01E-02	0.00E+00	6.01E-02
K-40	2.82E-01	8.52E-02	1.93E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

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

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID: 235223 **Sample Dates: 4/17/2012 - 4/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.54E-03	0.00E+00	9.54E-03
Cs-134	<1.31E-02	0.00E+00	1.31E-02
Cs-137	<1.66E-02	0.00E+00	1.66E-02
Be-7	<8.84E-02	0.00E+00	8.84E-02
K-40	3.90E-01	1.15E-01	2.47E-01

Sample ID: 235408 **Sample Dates: 4/24/2012 - 5/1/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.15E-03	0.00E+00	6.15E-03
Cs-134	<1.10E-02	0.00E+00	1.10E-02
Cs-137	<1.40E-02	0.00E+00	1.40E-02
Be-7	<8.14E-02	0.00E+00	8.14E-02
K-40	4.64E-01	7.85E-02	3.59E-02

Sample ID: 235746 **Sample Dates: 5/1/2012 - 5/8/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.47E-03	0.00E+00	9.47E-03
Cs-134	<1.07E-02	0.00E+00	1.07E-02
Cs-137	<1.65E-02	0.00E+00	1.65E-02
Be-7	<9.27E-02	0.00E+00	9.27E-02
K-40	3.70E-01	8.48E-02	5.26E-02

Sample ID: 235992 **Sample Dates: 5/8/2012 - 5/15/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.95E-03	0.00E+00	8.95E-03
Cs-134	<1.18E-02	0.00E+00	1.18E-02
Cs-137	<1.57E-02	0.00E+00	1.57E-02
Be-7	<6.17E-02	0.00E+00	6.17E-02
K-40	4.46E-01	9.30E-02	5.24E-02

Sample ID: 236202 **Sample Dates: 5/15/2012 - 5/22/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.74E-03	0.00E+00	8.74E-03
Cs-134	<1.15E-02	0.00E+00	1.15E-02
Cs-137	<1.46E-02	0.00E+00	1.46E-02
Be-7	<7.76E-02	0.00E+00	7.76E-02
K-40	1.67E-01	9.12E-02	1.21E-01

Sample ID: 236515 **Sample Dates: 5/22/2012 - 5/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.00E-03	0.00E+00	8.00E-03
Cs-134	<9.28E-03	0.00E+00	9.28E-03
Cs-137	<1.14E-02	0.00E+00	1.14E-02
Be-7	<4.25E-02	0.00E+00	4.25E-02
K-40	1.78E-01	7.58E-02	1.31E-01

Sample ID: 236814 **Sample Dates: 5/30/2012 - 6/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.04E-02	0.00E+00	1.04E-02
Cs-134	<1.03E-02	0.00E+00	1.03E-02
Cs-137	<8.88E-03	0.00E+00	8.88E-03
Be-7	<6.01E-02	0.00E+00	6.01E-02
K-40	3.84E-01	9.32E-02	1.93E-01

Sample ID: 237140 **Sample Dates: 6/5/2012 - 6/12/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.04E-02	0.00E+00	1.04E-02
Cs-134	<9.43E-03	0.00E+00	9.43E-03
Cs-137	<1.80E-02	0.00E+00	1.80E-02
Be-7	<8.13E-02	0.00E+00	8.13E-02
K-40	<3.37E-01	0.00E+00	3.37E-01

Sample ID: 237315 **Sample Dates: 6/12/2012 - 6/19/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.45E-03	0.00E+00	7.45E-03
Cs-134	<8.90E-03	0.00E+00	8.90E-03
Cs-137	<8.73E-03	0.00E+00	8.73E-03
Be-7	<6.72E-02	0.00E+00	6.72E-02
K-40	2.56E-01	7.28E-02	8.32E-02

Sample ID: 237991 **Sample Dates: 6/19/2012 - 6/26/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.05E-02	0.00E+00	1.05E-02
Cs-134	<7.52E-03	0.00E+00	7.52E-03
Cs-137	<1.34E-02	0.00E+00	1.34E-02
Be-7	<8.15E-02	0.00E+00	8.15E-02
K-40	5.01E-01	8.12E-02	1.23E-01

Sample ID: 238743 **Sample Dates: 6/26/2012 - 7/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.64E-03	0.00E+00	8.64E-03
Cs-134	<1.06E-02	0.00E+00	1.06E-02
Cs-137	<1.27E-02	0.00E+00	1.27E-02
Be-7	<7.38E-02	0.00E+00	7.38E-02
K-40	4.26E-01	7.41E-02	9.22E-02

Sample ID: 239120 **Sample Dates: 7/3/2012 - 7/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.55E-03	0.00E+00	6.55E-03
Cs-134	<1.05E-02	0.00E+00	1.05E-02
Cs-137	<1.48E-02	0.00E+00	1.48E-02
Be-7	<7.48E-02	0.00E+00	7.48E-02
K-40	5.40E-01	8.54E-02	1.23E-01

Sample ID: 239892 **Sample Dates: 7/10/2012 - 7/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.20E-03	0.00E+00	8.20E-03
Cs-134	<1.22E-02	0.00E+00	1.22E-02
Cs-137	<1.21E-02	0.00E+00	1.21E-02
Be-7	<6.81E-02	0.00E+00	6.81E-02
K-40	4.19E-01	8.65E-02	3.49E-02

Sample ID: 240016 **Sample Dates: 7/17/2012 - 7/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.81E-03	0.00E+00	6.81E-03
Cs-134	<1.28E-02	0.00E+00	1.28E-02
Cs-137	<1.04E-02	0.00E+00	1.04E-02
Be-7	<5.62E-02	0.00E+00	5.62E-02
K-40	5.50E-01	1.12E-01	1.36E-01

Sample ID: 240338 **Sample Dates: 7/24/2012 - 7/31/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.47E-02	0.00E+00	1.47E-02
Cs-134	<1.32E-02	0.00E+00	1.32E-02
Cs-137	<1.81E-02	0.00E+00	1.81E-02
Be-7	<8.59E-02	0.00E+00	8.59E-02
K-40	3.37E-01	1.38E-01	3.38E-01

Sample ID: 240973 **Sample Dates: 7/31/2012 - 8/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.02E-02	0.00E+00	1.02E-02
Cs-134	<8.44E-03	0.00E+00	8.44E-03
Cs-137	<1.51E-02	0.00E+00	1.51E-02
Be-7	<7.37E-02	0.00E+00	7.37E-02
K-40	<3.32E-01	0.00E+00	3.32E-01

Sample ID: 241244 **Sample Dates: 8/7/2012 - 8/14/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.79E-03	0.00E+00	6.79E-03
Cs-134	<1.17E-02	0.00E+00	1.17E-02
Cs-137	<1.16E-02	0.00E+00	1.16E-02
Be-7	<6.75E-02	0.00E+00	6.75E-02
K-40	<4.02E-01	0.00E+00	4.02E-01

Sample ID: 241551 **Sample Dates: 8/14/2012 - 8/21/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.69E-03	0.00E+00	6.69E-03
Cs-134	<9.24E-03	0.00E+00	9.24E-03
Cs-137	<1.10E-02	0.00E+00	1.10E-02
Be-7	<6.33E-02	0.00E+00	6.33E-02
K-40	3.72E-01	7.16E-02	3.73E-02

Sample ID: 242140 **Sample Dates: 8/21/2012 - 8/28/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<4.87E-03	0.00E+00	4.87E-03
Cs-134	<1.08E-02	0.00E+00	1.08E-02
Cs-137	<1.93E-02	0.00E+00	1.93E-02
Be-7	<1.13E-01	0.00E+00	1.13E-01
K-40	<4.48E-01	0.00E+00	4.48E-01

Sample ID: 242469 **Sample Dates: 8/28/2012 - 9/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.17E-02	0.00E+00	1.17E-02
Cs-134	<1.61E-02	0.00E+00	1.61E-02
Cs-137	<1.32E-02	0.00E+00	1.32E-02
Be-7	<9.10E-02	0.00E+00	9.10E-02
K-40	3.41E-01	9.98E-02	2.40E-01

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

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID: 242996 **Sample Dates: 9/5/2012 - 9/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.55E-02	0.00E+00	1.55E-02
Cs-134	<1.64E-02	0.00E+00	1.64E-02
Cs-137	<2.09E-02	0.00E+00	2.09E-02
Be-7	<9.84E-02	0.00E+00	9.84E-02
K-40	2.00E-01	1.10E-01	1.98E-01

Sample ID: 243754 **Sample Dates: 9/11/2012 - 9/18/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.08E-03	0.00E+00	8.08E-03
Cs-134	<6.26E-03	0.00E+00	6.26E-03
Cs-137	<7.50E-03	0.00E+00	7.50E-03
Be-7	<7.48E-02	0.00E+00	7.48E-02
K-40	1.88E-01	6.27E-02	1.89E-01

Sample ID: 244159 **Sample Dates: 9/18/2012 - 9/25/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.40E-03	0.00E+00	9.40E-03
Cs-134	<9.15E-03	0.00E+00	9.15E-03
Cs-137	<1.47E-02	0.00E+00	1.47E-02
Be-7	<8.84E-02	0.00E+00	8.84E-02
K-40	3.34E-01	9.44E-02	1.21E-01

Sample ID: 245030 **Sample Dates: 9/25/2012 - 10/2/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.14E-02	0.00E+00	1.14E-02
Cs-134	<1.27E-02	0.00E+00	1.27E-02
Cs-137	<1.50E-02	0.00E+00	1.50E-02
Be-7	<7.16E-02	0.00E+00	7.16E-02
K-40	4.90E-01	8.41E-02	1.34E-01

Sample ID: 245850 **Sample Dates: 10/2/2012 - 10/9/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.30E-02	0.00E+00	1.30E-02
Cs-134	<1.29E-02	0.00E+00	1.29E-02
Cs-137	<1.63E-02	0.00E+00	1.63E-02
Be-7	<1.16E-01	0.00E+00	1.16E-01
K-40	2.47E-01	1.00E-01	2.06E-01

Sample ID: 246705 **Sample Dates: 10/9/2012 - 10/16/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.20E-02	0.00E+00	1.20E-02
Cs-134	<1.57E-02	0.00E+00	1.57E-02
Cs-137	<1.58E-02	0.00E+00	1.58E-02
Be-7	<1.26E-01	0.00E+00	1.26E-01
K-40	4.61E-01	1.41E-01	2.09E-01

Sample ID: 247113 **Sample Dates: 10/16/2012 - 10/23/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.05E-02	0.00E+00	1.05E-02
Cs-134	<1.08E-02	0.00E+00	1.08E-02
Cs-137	<1.56E-02	0.00E+00	1.56E-02
Be-7	<9.10E-02	0.00E+00	9.10E-02
K-40	3.77E-01	7.39E-02	3.92E-02

Sample ID: 247429 **Sample Dates: 10/23/2012 - 10/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.30E-02	0.00E+00	1.30E-02
Cs-134	<1.59E-02	0.00E+00	1.59E-02
Cs-137	<1.77E-02	0.00E+00	1.77E-02
Be-7	<1.18E-01	0.00E+00	1.18E-01
K-40	5.34E-01	1.11E-01	2.57E-01

Sample ID: 247767 **Sample Dates: 10/30/2012 - 11/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.03E-03	0.00E+00	9.03E-03
Cs-134	<1.08E-02	0.00E+00	1.08E-02
Cs-137	<1.33E-02	0.00E+00	1.33E-02
Be-7	<7.92E-02	0.00E+00	7.92E-02
K-40	3.29E-01	7.63E-02	1.24E-01

Sample ID: 247962 **Sample Dates: 11/6/2012 - 11/13/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.12E-03	0.00E+00	7.12E-03
Cs-134	<1.14E-02	0.00E+00	1.14E-02
Cs-137	<1.21E-02	0.00E+00	1.21E-02
Be-7	<5.82E-02	0.00E+00	5.82E-02
K-40	<4.06E-01	0.00E+00	4.06E-01

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

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID:	248366	Sample Dates: 11/13/2012 - 11/20/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<8.35E-03	0.00E+00	8.35E-03
			Cs-134	<6.97E-03	0.00E+00	6.97E-03
			Cs-137	<1.61E-02	0.00E+00	1.61E-02
			Be-7	<5.92E-02	0.00E+00	5.92E-02
			K-40	6.23E-01	9.50E-02	1.04E-01
Sample ID:	248645	Sample Dates: 11/20/2012 - 11/27/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<8.44E-03	0.00E+00	8.44E-03
			Cs-134	<9.61E-03	0.00E+00	9.61E-03
			Cs-137	<8.63E-03	0.00E+00	8.63E-03
			Be-7	<4.04E-02	0.00E+00	4.04E-02
			K-40	3.46E-01	6.92E-02	1.01E-01
Sample ID:	249018	Sample Dates: 11/27/2012 - 12/4/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.35E-02	0.00E+00	1.35E-02
			Cs-134	<1.56E-02	0.00E+00	1.56E-02
			Cs-137	<1.76E-02	0.00E+00	1.76E-02
			Be-7	<1.18E-01	0.00E+00	1.18E-01
			K-40	<4.59E-01	0.00E+00	4.59E-01
Sample ID:	249257	Sample Dates: 12/4/2012 - 12/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<9.67E-03	0.00E+00	9.67E-03
			Cs-134	<8.78E-03	0.00E+00	8.78E-03
			Cs-137	<1.20E-02	0.00E+00	1.20E-02
			Be-7	<7.55E-02	0.00E+00	7.55E-02
			K-40	3.68E-01	9.21E-02	1.04E-01
Sample ID:	249455	Sample Dates: 12/11/2012 - 12/18/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<5.81E-03	0.00E+00	5.81E-03
			Cs-134	<1.07E-02	0.00E+00	1.07E-02
			Cs-137	<1.14E-02	0.00E+00	1.14E-02
			Be-7	<8.20E-02	0.00E+00	8.20E-02
			K-40	3.86E-01	9.09E-02	1.54E-01
Sample ID:	249882	Sample Dates: 12/18/2012 - 12/26/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<6.84E-03	0.00E+00	6.84E-03
			Cs-134	<1.07E-02	0.00E+00	1.07E-02
			Cs-137	<6.58E-03	0.00E+00	6.58E-03
			Be-7	<6.59E-02	0.00E+00	6.59E-02
			K-40	2.45E-01	6.68E-02	1.26E-01
Sample ID:	250189	Sample Dates: 12/26/2012 - 1/2/2013	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.06E-02	0.00E+00	1.06E-02
			Cs-134	<9.45E-03	0.00E+00	9.45E-03
			Cs-137	<1.82E-02	0.00E+00	1.82E-02
			Be-7	<6.90E-02	0.00E+00	6.90E-02
			K-40	2.85E-01	7.90E-02	1.62E-01

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	227193	Sample Dates: 1/4/2012 - 1/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<9.78E-03	0.00E+00	9.78E-03
			Cs-134	<1.29E-02	0.00E+00	1.29E-02
			Cs-137	<1.46E-02	0.00E+00	1.46E-02
			Be-7	<1.01E-01	0.00E+00	1.01E-01
			K-40	9.28E-02	9.30E-02	1.09E-01
Sample ID:	227327	Sample Dates: 1/10/2012 - 1/17/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<8.31E-03	0.00E+00	8.31E-03
			Cs-134	<7.63E-03	0.00E+00	7.63E-03
			Cs-137	<9.02E-03	0.00E+00	9.02E-03
			Be-7	<8.38E-02	0.00E+00	8.38E-02
			K-40	2.93E-01	8.13E-02	1.44E-01
Sample ID:	227541	Sample Dates: 1/17/2012 - 1/24/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<5.80E-03	0.00E+00	5.80E-03
			Cs-134	<8.32E-03	0.00E+00	8.32E-03
			Cs-137	<1.09E-02	0.00E+00	1.09E-02
			Be-7	<7.00E-02	0.00E+00	7.00E-02
			K-40	3.87E-01	7.18E-02	3.60E-02

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID: 227863 Sample Dates: 1/24/2012 - 1/31/2012

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.03E-02	0.00E+00	1.03E-02
Cs-134	<1.05E-02	0.00E+00	1.05E-02
Cs-137	<1.36E-02	0.00E+00	1.36E-02
Be-7	<1.04E-01	0.00E+00	1.04E-01
K-40	4.22E-01	9.43E-02	1.76E-01

Sample ID: 228130 Sample Dates: 1/31/2012 - 2/7/2012

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.68E-03	0.00E+00	7.68E-03
Cs-134	<9.69E-03	0.00E+00	9.69E-03
Cs-137	<1.84E-02	0.00E+00	1.84E-02
Be-7	<7.12E-02	0.00E+00	7.12E-02
K-40	5.02E-01	1.07E-01	6.17E-02

Sample ID: 229441 Sample Dates: 2/7/2012 - 2/14/2012

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.50E-02	0.00E+00	1.50E-02
Cs-134	<1.60E-02	0.00E+00	1.60E-02
Cs-137	<1.66E-02	0.00E+00	1.66E-02
Be-7	<1.39E-01	0.00E+00	1.39E-01
K-40	4.63E-01	1.23E-01	6.27E-02

Sample ID: 230067 Sample Dates: 2/14/2012 - 2/21/2012

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.09E-03	0.00E+00	8.09E-03
Cs-134	<9.64E-03	0.00E+00	9.64E-03
Cs-137	<1.29E-02	0.00E+00	1.29E-02
Be-7	<5.86E-02	0.00E+00	5.86E-02
K-40	4.25E-01	7.39E-02	3.48E-02

Sample ID: 230742 Sample Dates: 2/21/2012 - 2/28/2012

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.19E-02	0.00E+00	1.19E-02
Cs-134	<9.11E-03	0.00E+00	9.11E-03
Cs-137	<1.07E-02	0.00E+00	1.07E-02
Be-7	<8.32E-02	0.00E+00	8.32E-02
K-40	2.52E-01	7.27E-02	5.67E-02

Sample ID: 230951 Sample Dates: 2/28/2012 - 3/6/2012

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.36E-02	0.00E+00	1.36E-02
Cs-134	<1.89E-02	0.00E+00	1.89E-02
Cs-137	<1.00E-02	0.00E+00	1.00E-02
Be-7	<1.32E-01	0.00E+00	1.32E-01
K-40	<5.35E-01	0.00E+00	5.35E-01

Sample ID: 231661 Sample Dates: 3/6/2012 - 3/13/2012

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.45E-03	0.00E+00	7.45E-03
Cs-134	<1.07E-02	0.00E+00	1.07E-02
Cs-137	<1.35E-02	0.00E+00	1.35E-02
Be-7	<5.04E-02	0.00E+00	5.04E-02
K-40	5.32E-01	8.42E-02	1.17E-01

Sample ID: 232475 Sample Dates: 3/13/2012 - 3/20/2012

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.59E-03	0.00E+00	6.59E-03
Cs-134	<9.54E-03	0.00E+00	9.54E-03
Cs-137	<1.02E-02	0.00E+00	1.02E-02
Be-7	<6.58E-02	0.00E+00	6.58E-02
K-40	3.83E-01	7.96E-02	1.24E-01

Sample ID: 233315 Sample Dates: 3/20/2012 - 3/27/2012

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.34E-03	0.00E+00	6.34E-03
Cs-134	<1.06E-02	0.00E+00	1.06E-02
Cs-137	<1.20E-02	0.00E+00	1.20E-02
Be-7	<8.25E-02	0.00E+00	8.25E-02
K-40	3.43E-01	8.33E-02	1.45E-01

Sample ID: 233556 Sample Dates: 3/27/2012 - 4/3/2012

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.49E-03	0.00E+00	8.49E-03
Cs-134	<7.61E-03	0.00E+00	7.61E-03
Cs-137	<1.25E-02	0.00E+00	1.25E-02
Be-7	<7.45E-02	0.00E+00	7.45E-02
K-40	2.60E-01	9.07E-02	1.42E-01

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID: 234474 **Sample Dates: 4/3/2012 - 4/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.90E-03	0.00E+00	8.90E-03
Cs-134	<1.06E-02	0.00E+00	1.06E-02
Cs-137	<9.45E-03	0.00E+00	9.45E-03
Be-7	<6.78E-02	0.00E+00	6.78E-02
K-40	5.72E-01	8.25E-02	1.53E-01

Sample ID: 234902 **Sample Dates: 4/10/2012 - 4/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.41E-03	0.00E+00	7.41E-03
Cs-134	<1.00E-02	0.00E+00	1.00E-02
Cs-137	<1.25E-02	0.00E+00	1.25E-02
Be-7	<1.00E-01	0.00E+00	1.00E-01
K-40	<4.14E-01	0.00E+00	4.14E-01

Sample ID: 235224 **Sample Dates: 4/17/2012 - 4/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.29E-02	0.00E+00	1.29E-02
Cs-134	<1.13E-02	0.00E+00	1.13E-02
Cs-137	<8.64E-03	0.00E+00	8.64E-03
Be-7	<6.44E-02	0.00E+00	6.44E-02
K-40	4.06E-01	8.86E-02	5.22E-02

Sample ID: 235409 **Sample Dates: 4/24/2012 - 5/1/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.02E-03	0.00E+00	9.02E-03
Cs-134	<7.06E-03	0.00E+00	7.06E-03
Cs-137	<1.14E-02	0.00E+00	1.14E-02
Be-7	<7.87E-02	0.00E+00	7.87E-02
K-40	3.40E-01	7.30E-02	1.70E-01

Sample ID: 235747 **Sample Dates: 5/1/2012 - 5/8/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.15E-03	0.00E+00	2.15E-03
Cs-134	<9.54E-03	0.00E+00	9.54E-03
Cs-137	<8.87E-03	0.00E+00	8.87E-03
Be-7	<6.77E-02	0.00E+00	6.77E-02
K-40	3.88E-01	9.42E-02	6.17E-02

Sample ID: 235993 **Sample Dates: 5/8/2012 - 5/15/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.81E-03	0.00E+00	8.81E-03
Cs-134	<1.34E-02	0.00E+00	1.34E-02
Cs-137	<1.78E-02	0.00E+00	1.78E-02
Be-7	<8.68E-02	0.00E+00	8.68E-02
K-40	4.58E-01	1.02E-01	6.18E-02

Sample ID: 236203 **Sample Dates: 5/15/2012 - 5/22/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.77E-03	0.00E+00	7.77E-03
Cs-134	<8.22E-03	0.00E+00	8.22E-03
Cs-137	<1.03E-02	0.00E+00	1.03E-02
Be-7	<3.81E-02	0.00E+00	3.81E-02
K-40	7.42E-01	9.35E-02	3.18E-02

Sample ID: 236516 **Sample Dates: 5/22/2012 - 5/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.93E-03	0.00E+00	7.93E-03
Cs-134	<7.91E-03	0.00E+00	7.91E-03
Cs-137	<7.56E-03	0.00E+00	7.56E-03
Be-7	<5.49E-02	0.00E+00	5.49E-02
K-40	4.53E-01	7.51E-02	1.11E-01

Sample ID: 236815 **Sample Dates: 5/30/2012 - 6/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.55E-02	0.00E+00	1.55E-02
Cs-134	<1.16E-02	0.00E+00	1.16E-02
Cs-137	<1.36E-02	0.00E+00	1.36E-02
Be-7	<1.26E-01	0.00E+00	1.26E-01
K-40	2.77E-01	1.16E-01	3.89E-01

Sample ID: 237141 **Sample Dates: 6/5/2012 - 6/12/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.07E-02	0.00E+00	1.07E-02
Cs-134	<1.65E-02	0.00E+00	1.65E-02
Cs-137	<1.52E-02	0.00E+00	1.52E-02
Be-7	<1.02E-01	0.00E+00	1.02E-01
K-40	<3.97E-01	0.00E+00	3.97E-01

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID: 237316 **Sample Dates: 6/12/2012 - 6/19/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.92E-03	0.00E+00	8.92E-03
Cs-134	<7.11E-03	0.00E+00	7.11E-03
Cs-137	<1.56E-02	0.00E+00	1.56E-02
Be-7	<6.94E-02	0.00E+00	6.94E-02
K-40	3.22E-01	6.45E-02	3.49E-02

Sample ID: 237992 **Sample Dates: 6/19/2012 - 6/26/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.82E-03	0.00E+00	8.82E-03
Cs-134	<1.11E-02	0.00E+00	1.11E-02
Cs-137	<1.10E-02	0.00E+00	1.10E-02
Be-7	<6.65E-02	0.00E+00	6.65E-02
K-40	3.18E-01	1.00E-01	1.77E-01

Sample ID: 238744 **Sample Dates: 6/26/2012 - 7/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.47E-03	0.00E+00	9.47E-03
Cs-134	<8.22E-03	0.00E+00	8.22E-03
Cs-137	<9.97E-03	0.00E+00	9.97E-03
Be-7	<8.36E-02	0.00E+00	8.36E-02
K-40	6.97E-01	1.00E-01	1.42E-01

Sample ID: 239121 **Sample Dates: 7/3/2012 - 7/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<4.89E-03	0.00E+00	4.89E-03
Cs-134	<6.47E-03	0.00E+00	6.47E-03
Cs-137	<9.44E-03	0.00E+00	9.44E-03
Be-7	<4.25E-02	0.00E+00	4.25E-02
K-40	<2.32E-01	0.00E+00	2.32E-01

Sample ID: 239893 **Sample Dates: 7/10/2012 - 7/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.18E-03	0.00E+00	8.18E-03
Cs-134	<8.44E-03	0.00E+00	8.44E-03
Cs-137	<1.20E-02	0.00E+00	1.20E-02
Be-7	<5.08E-02	0.00E+00	5.08E-02
K-40	5.89E-01	8.33E-02	8.54E-02

Sample ID: 240017 **Sample Dates: 7/17/2012 - 7/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.46E-02	0.00E+00	1.46E-02
Cs-134	<1.02E-02	0.00E+00	1.02E-02
Cs-137	<1.26E-02	0.00E+00	1.26E-02
Be-7	<1.19E-01	0.00E+00	1.19E-01
K-40	5.11E-01	1.09E-01	6.28E-02

Sample ID: 240339 **Sample Dates: 7/24/2012 - 7/31/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.21E-02	0.00E+00	1.21E-02
Cs-134	<1.39E-02	0.00E+00	1.39E-02
Cs-137	<1.68E-02	0.00E+00	1.68E-02
Be-7	<1.00E-01	0.00E+00	1.00E-01
K-40	4.11E-01	9.69E-02	1.64E-01

Sample ID: 240974 **Sample Dates: 7/31/2012 - 8/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.18E-02	0.00E+00	1.18E-02
Cs-134	<1.51E-02	0.00E+00	1.51E-02
Cs-137	<1.79E-02	0.00E+00	1.79E-02
Be-7	<1.01E-01	0.00E+00	1.01E-01
K-40	<4.19E-01	0.00E+00	4.19E-01

Sample ID: 241245 **Sample Dates: 8/7/2012 - 8/14/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.82E-03	0.00E+00	6.82E-03
Cs-134	<9.28E-03	0.00E+00	9.28E-03
Cs-137	<7.92E-03	0.00E+00	7.92E-03
Be-7	<7.03E-02	0.00E+00	7.03E-02
K-40	4.55E-01	7.92E-02	3.73E-02

Sample ID: 241552 **Sample Dates: 8/14/2012 - 8/21/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.07E-03	0.00E+00	7.07E-03
Cs-134	<9.78E-03	0.00E+00	9.78E-03
Cs-137	<1.16E-02	0.00E+00	1.16E-02
Be-7	<1.08E-01	0.00E+00	1.08E-01
K-40	3.48E-01	8.44E-02	2.23E-01

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID: 242141 **Sample Dates: 8/21/2012 - 8/28/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.50E-02	0.00E+00	1.50E-02
Cs-134	<1.13E-02	0.00E+00	1.13E-02
Cs-137	<1.77E-02	0.00E+00	1.77E-02
Be-7	<1.18E-01	0.00E+00	1.18E-01
K-40	4.17E-01	9.83E-02	2.70E-01

Sample ID: 242470 **Sample Dates: 8/28/2012 - 9/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.10E-02	0.00E+00	1.10E-02
Cs-134	<1.43E-02	0.00E+00	1.43E-02
Cs-137	<1.25E-02	0.00E+00	1.25E-02
Be-7	<1.15E-01	0.00E+00	1.15E-01
K-40	3.38E-01	9.92E-02	5.47E-02

Sample ID: 242997 **Sample Dates: 9/5/2012 - 9/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.01E-02	0.00E+00	1.01E-02
Cs-134	<3.67E-03	0.00E+00	3.67E-03
Cs-137	<1.12E-02	0.00E+00	1.12E-02
Be-7	<7.59E-02	0.00E+00	7.59E-02
K-40	<4.64E-01	0.00E+00	4.64E-01

Sample ID: 243755 **Sample Dates: 9/11/2012 - 9/18/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<6.06E-03	0.00E+00	6.06E-03
Cs-134	<1.18E-02	0.00E+00	1.18E-02
Cs-137	<1.50E-02	0.00E+00	1.50E-02
Be-7	<1.17E-01	0.00E+00	1.17E-01
K-40	<3.85E-01	0.00E+00	3.85E-01

Sample ID: 244160 **Sample Dates: 9/18/2012 - 9/25/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<7.16E-03	0.00E+00	7.16E-03
Cs-134	<1.06E-02	0.00E+00	1.06E-02
Cs-137	<1.45E-02	0.00E+00	1.45E-02
Be-7	<5.61E-02	0.00E+00	5.61E-02
K-40	3.47E-01	1.05E-01	2.37E-01

Sample ID: 245031 **Sample Dates: 9/25/2012 - 10/2/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.94E-03	0.00E+00	9.94E-03
Cs-134	<9.82E-03	0.00E+00	9.82E-03
Cs-137	<1.42E-02	0.00E+00	1.42E-02
Be-7	<8.26E-02	0.00E+00	8.26E-02
K-40	<4.00E-01	0.00E+00	4.00E-01

Sample ID: 245851 **Sample Dates: 10/2/2012 - 10/9/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<4.77E-03	0.00E+00	4.77E-03
Cs-134	<8.17E-03	0.00E+00	8.17E-03
Cs-137	<1.36E-02	0.00E+00	1.36E-02
Be-7	<7.49E-02	0.00E+00	7.49E-02
K-40	3.78E-01	8.92E-02	5.68E-02

Sample ID: 246706 **Sample Dates: 10/9/2012 - 10/16/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<9.51E-03	0.00E+00	9.51E-03
Cs-134	<1.08E-02	0.00E+00	1.08E-02
Cs-137	<1.67E-02	0.00E+00	1.67E-02
Be-7	<7.99E-02	0.00E+00	7.99E-02
K-40	3.58E-01	8.70E-02	5.70E-02

Sample ID: 247114 **Sample Dates: 10/16/2012 - 10/23/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<8.54E-03	0.00E+00	8.54E-03
Cs-134	<8.87E-03	0.00E+00	8.87E-03
Cs-137	<1.24E-02	0.00E+00	1.24E-02
Be-7	<5.55E-02	0.00E+00	5.55E-02
K-40	4.22E-01	9.43E-02	2.25E-01

Sample ID: 247430 **Sample Dates: 10/23/2012 - 10/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.05E-02	0.00E+00	1.05E-02
Cs-134	<1.14E-02	0.00E+00	1.14E-02
Cs-137	<1.17E-02	0.00E+00	1.17E-02
Be-7	<1.25E-01	0.00E+00	1.25E-01
K-40	3.72E-01	9.30E-02	6.28E-02

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	247768	Sample Dates: 10/30/2012 - 11/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<9.72E-03	0.00E+00	9.72E-03
			Cs-134	<1.30E-02	0.00E+00	1.30E-02
			Cs-137	<1.12E-02	0.00E+00	1.12E-02
			Be-7	<6.33E-02	0.00E+00	6.33E-02
			K-40	3.72E-01	9.03E-02	1.86E-01
Sample ID:	247963	Sample Dates: 11/6/2012 - 11/13/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<4.84E-03	0.00E+00	4.84E-03
			Cs-134	<9.61E-03	0.00E+00	9.61E-03
			Cs-137	<7.12E-03	0.00E+00	7.12E-03
			Be-7	<5.86E-02	0.00E+00	5.86E-02
			K-40	2.95E-01	7.88E-02	5.69E-02
Sample ID:	248367	Sample Dates: 11/13/2012 - 11/20/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<8.12E-03	0.00E+00	8.12E-03
			Cs-134	<1.18E-02	0.00E+00	1.18E-02
			Cs-137	<1.33E-02	0.00E+00	1.33E-02
			Be-7	<7.84E-02	0.00E+00	7.84E-02
			K-40	6.36E-01	9.28E-02	1.22E-01
Sample ID:	248646	Sample Dates: 11/20/2012 - 11/27/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.12E-02	0.00E+00	1.12E-02
			Cs-134	<2.75E-03	0.00E+00	2.75E-03
			Cs-137	<1.90E-02	0.00E+00	1.90E-02
			Be-7	<6.74E-02	0.00E+00	6.74E-02
			K-40	<3.89E-01	0.00E+00	3.89E-01
Sample ID:	249019	Sample Dates: 11/27/2012 - 12/4/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<5.91E-03	0.00E+00	5.91E-03
			Cs-134	<9.20E-03	0.00E+00	9.20E-03
			Cs-137	<9.50E-03	0.00E+00	9.50E-03
			Be-7	<7.21E-02	0.00E+00	7.21E-02
			K-40	2.85E-01	1.11E-01	2.68E-01
Sample ID:	249258	Sample Dates: 12/4/2012 - 12/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<8.56E-03	0.00E+00	8.56E-03
			Cs-134	<6.88E-03	0.00E+00	6.88E-03
			Cs-137	<1.11E-02	0.00E+00	1.11E-02
			Be-7	<9.30E-02	0.00E+00	9.30E-02
			K-40	<4.20E-01	0.00E+00	4.20E-01
Sample ID:	249456	Sample Dates: 12/11/2012 - 12/18/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.44E-02	0.00E+00	1.44E-02
			Cs-134	<1.42E-02	0.00E+00	1.42E-02
			Cs-137	<1.33E-02	0.00E+00	1.33E-02
			Be-7	<1.07E-01	0.00E+00	1.07E-01
			K-40	<4.87E-01	0.00E+00	4.87E-01
Sample ID:	249883	Sample Dates: 12/18/2012 - 12/26/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<7.20E-03	0.00E+00	7.20E-03
			Cs-134	<1.17E-02	0.00E+00	1.17E-02
			Cs-137	<1.02E-02	0.00E+00	1.02E-02
			Be-7	<5.34E-02	0.00E+00	5.34E-02
			K-40	<3.34E-01	0.00E+00	3.34E-01
Sample ID:	250190	Sample Dates: 12/26/2012 - 1/2/2013	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<8.58E-03	0.00E+00	8.58E-03
			Cs-134	<7.97E-03	0.00E+00	7.97E-03
			Cs-137	<1.11E-02	0.00E+00	1.11E-02
			Be-7	<6.30E-02	0.00E+00	6.30E-02
			K-40	2.74E-01	9.72E-02	2.65E-01

Media Type: CROPS Concentration (Activity): pCi/kg

Sample Point 260 [INDICATOR - SSE @ 2 miles]

Sample ID:	227159	Sample Dates: 1/4/2012 - 1/4/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.39E+01	0.00E+00	1.39E+01
			Cs-134	<1.26E+01	0.00E+00	1.26E+01
			Cs-137	<1.82E+01	0.00E+00	1.82E+01
			Be-7	3.63E+02	6.93E+01	1.37E+02

Media Type: CROPS Concentration (Activity): pCi/kg

Sample Point 260 [INDICATOR - SSE @ 2 miles]

Sample ID:	227159	Sample Dates: 1/4/2012 - 1/4/2012	Nuclide	Activity	1 Sigma Error	LLD
			K-40	3.60E+03	2.18E+02	1.62E+02
Sample ID:	234418	Sample Dates: 4/3/2012 - 4/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.69E+01	0.00E+00	1.69E+01
			Cs-134	<1.77E+01	0.00E+00	1.77E+01
			Cs-137	<2.19E+01	0.00E+00	2.19E+01
			Be-7	3.11E+02	8.17E+01	1.47E+02
			K-40	5.62E+03	2.92E+02	2.00E+02
Sample ID:	236840	Sample Dates: 6/5/2012 - 6/5/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.48E+01	0.00E+00	1.48E+01
			Cs-134	<1.65E+01	0.00E+00	1.65E+01
			Cs-137	<2.12E+01	0.00E+00	2.12E+01
			Be-7	<1.34E+02	0.00E+00	1.34E+02
			K-40	2.64E+03	1.74E+02	1.32E+02
Sample ID:	238928	Sample Dates: 7/3/2012 - 7/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.39E+01	0.00E+00	1.39E+01
			Cs-134	<8.57E+00	0.00E+00	8.57E+00
			Cs-137	<9.51E+00	0.00E+00	9.51E+00
			Be-7	<6.78E+01	0.00E+00	6.78E+01
			K-40	2.12E+03	1.42E+02	1.04E+02
Sample ID:	240939	Sample Dates: 8/7/2012 - 8/7/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.07E+01	0.00E+00	1.07E+01
			Cs-134	<1.11E+01	0.00E+00	1.11E+01
			Cs-137	<1.41E+01	0.00E+00	1.41E+01
			Be-7	<1.27E+02	0.00E+00	1.27E+02
			K-40	2.70E+03	1.58E+02	6.65E+01
Sample ID:	242476	Sample Dates: 9/5/2012 - 9/5/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.52E+01	0.00E+00	1.52E+01
			Cs-134	<1.72E+01	0.00E+00	1.72E+01
			Cs-137	<1.81E+01	0.00E+00	1.81E+01
			Be-7	1.19E+02	4.92E+01	1.31E+02
			K-40	2.65E+03	2.38E+02	1.71E+02
Sample ID:	245195	Sample Dates: 10/2/2012 - 10/2/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.16E+01	0.00E+00	1.16E+01
			Cs-134	<1.22E+01	0.00E+00	1.22E+01
			Cs-137	<1.67E+01	0.00E+00	1.67E+01
			Be-7	1.80E+02	4.58E+01	9.63E+01
			K-40	2.98E+03	1.86E+02	1.41E+02
Sample ID:	247671	Sample Dates: 11/6/2012 - 11/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.82E+01	0.00E+00	1.82E+01
			Cs-134	<1.59E+01	0.00E+00	1.59E+01
			Cs-137	<2.64E+01	0.00E+00	2.64E+01
			Be-7	1.18E+02	6.19E+01	1.27E+02
			K-40	3.53E+03	2.90E+02	2.71E+02
Sample ID:	248987	Sample Dates: 12/4/2012 - 12/4/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.96E+01	0.00E+00	1.96E+01
			Cs-134	<2.27E+01	0.00E+00	2.27E+01
			Cs-137	<2.55E+01	0.00E+00	2.55E+01
			Be-7	1.36E+02	8.76E+01	1.74E+02
			K-40	4.96E+03	2.86E+02	1.94E+02

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

Sample Point 214 [INDICATOR - SSE @ 7.3 miles]

Sample ID:	227361	Sample Dates: 12/13/2011 - 1/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.86E+00	4.03E-01	1.21E+00
			Mn-54	<4.39E+00	0.00E+00	4.39E+00
			Co-58	<4.07E+00	0.00E+00	4.07E+00
			Fe-59	<8.57E+00	0.00E+00	8.57E+00
			Co-60	<6.22E+00	0.00E+00	6.22E+00
			Zn-65	<1.02E+01	0.00E+00	1.02E+01
			Zr-95	<9.28E+00	0.00E+00	9.28E+00
			Nb-95	<5.62E+00	0.00E+00	5.62E+00

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

Sample Point 214 [INDICATOR - SSE @ 7.3 miles]

Sample ID: 227361 Sample Dates: 12/13/2011 - 1/10/2012

Nuclide	Activity	1 Sigma Error	LLD
I-131	<5.31E+00	0.00E+00	5.31E+00
Cs-134	<4.22E+00	0.00E+00	4.22E+00
Cs-137	<5.08E+00	0.00E+00	5.08E+00
BaLa-140	<5.23E+00	0.00E+00	5.23E+00
Be-7	<3.55E+01	0.00E+00	3.55E+01
K-40	9.00E+01	1.88E+01	5.14E+01

Sample ID: 229905 Sample Dates: 1/10/2012 - 2/7/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.88E+00	4.03E-01	1.23E+00
Mn-54	<7.04E+00	0.00E+00	7.04E+00
Co-58	<6.34E+00	0.00E+00	6.34E+00
Fe-59	<1.66E+01	0.00E+00	1.66E+01
Co-60	<9.73E+00	0.00E+00	9.73E+00
Zn-65	<1.63E+01	0.00E+00	1.63E+01
Zr-95	<1.24E+01	0.00E+00	1.24E+01
Nb-95	<5.83E+00	0.00E+00	5.83E+00
I-131	<6.52E+00	0.00E+00	6.52E+00
Cs-134	<5.61E+00	0.00E+00	5.61E+00
Cs-137	<7.03E+00	0.00E+00	7.03E+00
BaLa-140	<1.20E+01	0.00E+00	1.20E+01
Be-7	<3.30E+01	0.00E+00	3.30E+01
K-40	<1.19E+02	0.00E+00	1.19E+02

Sample ID: 231423 Sample Dates: 12/13/2011 - 3/6/2012

Nuclide	Activity	1 Sigma Error	LLD
H3DW	1.60E+03	7.41E+01	1.65E+02

Sample ID: 231692 Sample Dates: 2/7/2012 - 3/6/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.62E+00	3.85E-01	1.08E+00
Mn-54	<9.96E+00	0.00E+00	9.96E+00
Co-58	<4.80E+00	0.00E+00	4.80E+00
Fe-59	<1.49E+01	0.00E+00	1.49E+01
Co-60	<8.38E+00	0.00E+00	8.38E+00
Zn-65	<1.52E+01	0.00E+00	1.52E+01
Zr-95	<1.14E+01	0.00E+00	1.14E+01
Nb-95	<7.39E+00	0.00E+00	7.39E+00
I-131	<6.00E+00	0.00E+00	6.00E+00
Cs-134	<7.47E+00	0.00E+00	7.47E+00
Cs-137	<1.00E+01	0.00E+00	1.00E+01
BaLa-140	<1.44E+01	0.00E+00	1.44E+01
Be-7	<6.07E+01	0.00E+00	6.07E+01
K-40	1.23E+02	3.98E+01	7.56E+01

Sample ID: 234611 Sample Dates: 3/6/2012 - 4/3/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	<1.54E-01	0.00E+00	1.28E+00
Mn-54	<6.75E+00	0.00E+00	6.75E+00
Co-58	<7.11E+00	0.00E+00	7.11E+00
Fe-59	<1.06E+01	0.00E+00	1.06E+01
Co-60	<1.17E+01	0.00E+00	1.17E+01
Zn-65	<1.19E+01	0.00E+00	1.19E+01
Zr-95	<1.09E+01	0.00E+00	1.09E+01
Nb-95	<9.29E+00	0.00E+00	9.29E+00
I-131	<7.02E+00	0.00E+00	7.02E+00
Cs-134	<5.47E+00	0.00E+00	5.47E+00
Cs-137	<8.64E+00	0.00E+00	8.64E+00
BaLa-140	<6.89E+00	0.00E+00	6.89E+00
Be-7	<5.29E+01	0.00E+00	5.29E+01
K-40	<1.25E+02	0.00E+00	1.25E+02

Sample ID: 235845 Sample Dates: 4/3/2012 - 5/1/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.53E+00	4.41E-01	1.41E+00
Mn-54	<4.93E+00	0.00E+00	4.93E+00
Co-58	<7.29E+00	0.00E+00	7.29E+00
Fe-59	<1.59E+01	0.00E+00	1.59E+01
Co-60	<7.86E+00	0.00E+00	7.86E+00
Zn-65	<1.60E+01	0.00E+00	1.60E+01
Zr-95	<1.14E+01	0.00E+00	1.14E+01
Nb-95	<7.37E+00	0.00E+00	7.37E+00
I-131	<7.01E+00	0.00E+00	7.01E+00
Cs-134	<7.83E+00	0.00E+00	7.83E+00

Sample ID: 235845 **Sample Dates: 4/3/2012 - 5/1/2012**

Nuclide	Activity	1 Sigma Error	LLD
Cs-137	<1.03E+01	0.00E+00	1.03E+01
BaLa-140	<9.65E+00	0.00E+00	9.65E+00
Be-7	<5.06E+01	0.00E+00	5.06E+01
K-40	<1.76E+02	0.00E+00	1.76E+02

Sample ID: 236898 **Sample Dates: 5/1/2012 - 5/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.61E+00	4.39E-01	1.37E+00
Mn-54	<7.49E+00	0.00E+00	7.49E+00
Co-58	<6.86E+00	0.00E+00	6.86E+00
Fe-59	<1.75E+01	0.00E+00	1.75E+01
Co-60	<1.15E+01	0.00E+00	1.15E+01
Zn-65	<1.28E+01	0.00E+00	1.28E+01
Zr-95	<1.15E+01	0.00E+00	1.15E+01
Nb-95	<7.43E+00	0.00E+00	7.43E+00
I-131	<6.60E+00	0.00E+00	6.60E+00
Cs-134	<6.86E+00	0.00E+00	6.86E+00
Cs-137	<8.07E+00	0.00E+00	8.07E+00
BaLa-140	<1.44E+01	0.00E+00	1.44E+01
Be-7	<5.72E+01	0.00E+00	5.72E+01
K-40	1.39E+02	3.38E+01	2.21E+01

Sample ID: 236950 **Sample Dates: 3/6/2012 - 5/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
H3DW	8.50E+02	6.67E+01	1.75E+02

Sample ID: 238798 **Sample Dates: 5/30/2012 - 6/26/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.72E+00	4.34E-01	1.35E+00
Mn-54	<8.30E+00	0.00E+00	8.30E+00
Co-58	<5.72E+00	0.00E+00	5.72E+00
Fe-59	<1.56E+01	0.00E+00	1.56E+01
Co-60	<1.28E+01	0.00E+00	1.28E+01
Zn-65	<1.39E+01	0.00E+00	1.39E+01
Zr-95	<1.25E+01	0.00E+00	1.25E+01
Nb-95	<7.40E+00	0.00E+00	7.40E+00
I-131	<6.69E+00	0.00E+00	6.69E+00
Cs-134	<7.60E+00	0.00E+00	7.60E+00
Cs-137	<6.31E+00	0.00E+00	6.31E+00
BaLa-140	<1.18E+01	0.00E+00	1.18E+01
Be-7	<4.07E+01	0.00E+00	4.07E+01
K-40	<1.10E+02	0.00E+00	1.10E+02

Sample ID: 240646 **Sample Dates: 6/26/2012 - 7/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.63E+00	4.16E-01	1.30E+00
Mn-54	<6.34E+00	0.00E+00	6.34E+00
Co-58	<7.15E+00	0.00E+00	7.15E+00
Fe-59	<1.23E+01	0.00E+00	1.23E+01
Co-60	<1.11E+01	0.00E+00	1.11E+01
Zn-65	<1.80E+01	0.00E+00	1.80E+01
Zr-95	<1.10E+01	0.00E+00	1.10E+01
Nb-95	<7.57E+00	0.00E+00	7.57E+00
I-131	<6.33E+00	0.00E+00	6.33E+00
Cs-134	<6.15E+00	0.00E+00	6.15E+00
Cs-137	<7.45E+00	0.00E+00	7.45E+00
BaLa-140	<6.89E+00	0.00E+00	6.89E+00
Be-7	<6.61E+01	0.00E+00	6.61E+01
K-40	<1.31E+02	0.00E+00	1.31E+02

Sample ID: 242224 **Sample Dates: 7/24/2012 - 8/21/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.18E+00	4.11E-01	1.24E+00
Mn-54	<7.93E+00	0.00E+00	7.93E+00
Co-58	<6.01E+00	0.00E+00	6.01E+00
Fe-59	<1.77E+01	0.00E+00	1.77E+01
Co-60	<1.07E+01	0.00E+00	1.07E+01
Zn-65	<1.84E+01	0.00E+00	1.84E+01
Zr-95	<8.77E+00	0.00E+00	8.77E+00
Nb-95	<6.39E+00	0.00E+00	6.39E+00
I-131	<6.84E+00	0.00E+00	6.84E+00
Cs-134	<7.15E+00	0.00E+00	7.15E+00
Cs-137	<8.60E+00	0.00E+00	8.60E+00
BaLa-140	<7.56E+00	0.00E+00	7.56E+00

Sample ID:	242224	Sample Dates: 7/24/2012 - 8/21/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<5.24E+01	0.00E+00	5.24E+01
			K-40	<1.51E+02	0.00E+00	1.51E+02
Sample ID:	**242526**	**Sample Dates: 5/30/2012 - 8/21/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			H3DW	6.62E+02	6.45E+01	1.78E+02
Sample ID:	**244375**	**Sample Dates: 8/21/2012 - 9/18/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Beta	2.54E+00	3.95E-01	1.14E+00
			Mn-54	<6.85E+00	0.00E+00	6.85E+00
			Co-58	<8.56E+00	0.00E+00	8.56E+00
			Fe-59	<1.29E+01	0.00E+00	1.29E+01
			Co-60	<9.41E+00	0.00E+00	9.41E+00
			Zn-65	<1.67E+01	0.00E+00	1.67E+01
			Zr-95	<1.42E+01	0.00E+00	1.42E+01
			Nb-95	<7.41E+00	0.00E+00	7.41E+00
			I-131	<6.49E+00	0.00E+00	6.49E+00
			Cs-134	<4.86E+00	0.00E+00	4.86E+00
			Cs-137	<6.80E+00	0.00E+00	6.80E+00
			BaLa-140	<1.13E+01	0.00E+00	1.13E+01
			Be-7	<6.34E+01	0.00E+00	6.34E+01
			K-40	<1.52E+02	0.00E+00	1.52E+02
Sample ID:	**247178**	**Sample Dates: 9/18/2012 - 10/16/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Beta	1.10E+00	4.04E-01	1.29E+00
			Mn-54	<6.00E+00	0.00E+00	6.00E+00
			Co-58	<7.50E+00	0.00E+00	7.50E+00
			Fe-59	<1.18E+01	0.00E+00	1.18E+01
			Co-60	<1.06E+01	0.00E+00	1.06E+01
			Zn-65	<1.97E+01	0.00E+00	1.97E+01
			Zr-95	<1.26E+01	0.00E+00	1.26E+01
			Nb-95	<9.14E+00	0.00E+00	9.14E+00
			I-131	<7.86E+00	0.00E+00	7.86E+00
			Cs-134	<7.52E+00	0.00E+00	7.52E+00
			Cs-137	<8.79E+00	0.00E+00	8.79E+00
			BaLa-140	<1.35E+01	0.00E+00	1.35E+01
			Be-7	<5.30E+01	0.00E+00	5.30E+01
			K-40	<1.09E+02	0.00E+00	1.09E+02
Sample ID:	**248424**	**Sample Dates: 10/16/2012 - 11/13/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Beta	2.10E+00	4.38E-01	1.34E+00
			Mn-54	<4.46E+00	0.00E+00	4.46E+00
			Co-58	<4.41E+00	0.00E+00	4.41E+00
			Fe-59	<1.23E+01	0.00E+00	1.23E+01
			Co-60	<6.12E+00	0.00E+00	6.12E+00
			Zn-65	<1.30E+01	0.00E+00	1.30E+01
			Zr-95	<7.69E+00	0.00E+00	7.69E+00
			Nb-95	<5.27E+00	0.00E+00	5.27E+00
			I-131	<5.49E+00	0.00E+00	5.49E+00
			Cs-134	<4.87E+00	0.00E+00	4.87E+00
			Cs-137	<5.01E+00	0.00E+00	5.01E+00
			BaLa-140	<5.91E+00	0.00E+00	5.91E+00
			Be-7	<4.16E+01	0.00E+00	4.16E+01
			K-40	1.41E+02	2.57E+01	5.27E+01
Sample ID:	**249049**	**Sample Dates: 8/21/2012 - 12/11/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			H3DW	7.04E+02	6.12E+01	1.64E+02
Sample ID:	**249528**	**Sample Dates: 11/13/2012 - 12/11/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Beta	1.85E+00	4.15E-01	1.28E+00
			Mn-54	<5.52E+00	0.00E+00	5.52E+00
			Co-58	<4.35E+00	0.00E+00	4.35E+00
			Fe-59	<1.07E+01	0.00E+00	1.07E+01
			Co-60	<6.17E+00	0.00E+00	6.17E+00
			Zn-65	<1.00E+01	0.00E+00	1.00E+01
			Zr-95	<8.90E+00	0.00E+00	8.90E+00
			Nb-95	<6.31E+00	0.00E+00	6.31E+00
			I-131	<6.24E+00	0.00E+00	6.24E+00
			Cs-134	<4.65E+00	0.00E+00	4.65E+00
			Cs-137	<6.40E+00	0.00E+00	6.40E+00
			BaLa-140	<6.66E+00	0.00E+00	6.66E+00

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

Sample Point 214 [INDICATOR - SSE @ 7.3 miles]

Sample ID:	249528	Sample Dates: 11/13/2012 - 12/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<3.38E+01	0.00E+00	3.38E+01
			K-40	1.76E+02	3.08E+01	4.31E+01

Sample Point 218 [CONTROL - NNE @ 13.5 miles]

Sample ID:	227357	Sample Dates: 12/13/2011 - 1/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.26E+00	4.09E-01	1.21E+00
			Mn-54	<4.84E+00	0.00E+00	4.84E+00
			Co-58	<4.97E+00	0.00E+00	4.97E+00
			Fe-59	<1.05E+01	0.00E+00	1.05E+01
			Co-60	<5.69E+00	0.00E+00	5.69E+00
			Zn-65	<1.06E+01	0.00E+00	1.06E+01
			Zr-95	<6.43E+00	0.00E+00	6.43E+00
			Nb-95	<4.91E+00	0.00E+00	4.91E+00
			I-131	<5.97E+00	0.00E+00	5.97E+00
			Cs-134	<5.18E+00	0.00E+00	5.18E+00
			Cs-137	<4.90E+00	0.00E+00	4.90E+00
			BaLa-140	<5.16E+00	0.00E+00	5.16E+00
			Be-7	<3.89E+01	0.00E+00	3.89E+01
			K-40	1.22E+02	2.94E+01	6.93E+01
Sample ID:	229900	Sample Dates: 1/10/2012 - 2/7/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.82E+00	3.99E-01	1.22E+00
			Mn-54	<4.78E+00	0.00E+00	4.78E+00
			Co-58	<4.62E+00	0.00E+00	4.62E+00
			Fe-59	<1.12E+01	0.00E+00	1.12E+01
			Co-60	<4.44E+00	0.00E+00	4.44E+00
			Zn-65	<8.93E+00	0.00E+00	8.93E+00
			Zr-95	<8.76E+00	0.00E+00	8.76E+00
			Nb-95	<5.75E+00	0.00E+00	5.75E+00
			I-131	<4.95E+00	0.00E+00	4.95E+00
			Cs-134	<4.73E+00	0.00E+00	4.73E+00
			Cs-137	<5.23E+00	0.00E+00	5.23E+00
			BaLa-140	<7.06E+00	0.00E+00	7.06E+00
			Be-7	<4.28E+01	0.00E+00	4.28E+01
			K-40	1.01E+02	2.41E+01	6.88E+01
Sample ID:	231380	Sample Dates: 12/13/2011 - 3/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			H3DW	4.99E+02	5.87E+01	1.65E+02
Sample ID:	231688	Sample Dates: 2/7/2012 - 3/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.04E+00	3.67E-01	1.07E+00
			Mn-54	<4.79E+00	0.00E+00	4.79E+00
			Co-58	<4.43E+00	0.00E+00	4.43E+00
			Fe-59	<1.10E+01	0.00E+00	1.10E+01
			Co-60	<5.34E+00	0.00E+00	5.34E+00
			Zn-65	<8.90E+00	0.00E+00	8.90E+00
			Zr-95	<8.10E+00	0.00E+00	8.10E+00
			Nb-95	<5.14E+00	0.00E+00	5.14E+00
			I-131	<5.68E+00	0.00E+00	5.68E+00
			Cs-134	<4.84E+00	0.00E+00	4.84E+00
			Cs-137	<5.54E+00	0.00E+00	5.54E+00
			BaLa-140	<5.72E+00	0.00E+00	5.72E+00
			Be-7	<4.25E+01	0.00E+00	4.25E+01
			K-40	2.18E+02	3.37E+01	6.67E+01
Sample ID:	234607	Sample Dates: 3/6/2012 - 4/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.03E+00	4.17E-01	1.27E+00
			Mn-54	<5.49E+00	0.00E+00	5.49E+00
			Co-58	<5.64E+00	0.00E+00	5.64E+00
			Fe-59	<9.15E+00	0.00E+00	9.15E+00
			Co-60	<7.43E+00	0.00E+00	7.43E+00
			Zn-65	<1.25E+01	0.00E+00	1.25E+01
			Zr-95	<8.17E+00	0.00E+00	8.17E+00
			Nb-95	<4.79E+00	0.00E+00	4.79E+00
			I-131	<3.75E+00	0.00E+00	3.75E+00
			Cs-134	<5.47E+00	0.00E+00	5.47E+00
			Cs-137	<5.46E+00	0.00E+00	5.46E+00
			BaLa-140	<4.60E+00	0.00E+00	4.60E+00
			Be-7	<3.76E+01	0.00E+00	3.76E+01

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

Sample Point 218 [CONTROL - NNE @ 13.5 miles]

Sample ID:	234607	Sample Dates: 3/6/2012 - 4/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			K-40	<7.71E+01	0.00E+00	7.71E+01
Sample ID:	235792	Sample Dates: 4/3/2012 - 5/1/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.80E+00	4.42E-01	1.39E+00
			Mn-54	<5.33E+00	0.00E+00	5.33E+00
			Co-58	<4.39E+00	0.00E+00	4.39E+00
			Fe-59	<7.17E+00	0.00E+00	7.17E+00
			Co-60	<5.95E+00	0.00E+00	5.95E+00
			Zn-65	<6.79E+00	0.00E+00	6.79E+00
			Zr-95	<7.43E+00	0.00E+00	7.43E+00
			Nb-95	<4.45E+00	0.00E+00	4.45E+00
			I-131	<4.50E+00	0.00E+00	4.50E+00
			Cs-134	<4.56E+00	0.00E+00	4.56E+00
			Cs-137	<5.78E+00	0.00E+00	5.78E+00
			BaLa-140	<7.56E+00	0.00E+00	7.56E+00
			Be-7	<3.54E+01	0.00E+00	3.54E+01
			K-40	<1.11E+02	0.00E+00	1.11E+02
Sample ID:	236880	Sample Dates: 5/1/2012 - 5/30/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.88E+00	4.39E-01	1.35E+00
			Mn-54	<5.75E+00	0.00E+00	5.75E+00
			Co-58	<3.84E+00	0.00E+00	3.84E+00
			Fe-59	<1.12E+01	0.00E+00	1.12E+01
			Co-60	<4.55E+00	0.00E+00	4.55E+00
			Zn-65	<1.14E+01	0.00E+00	1.14E+01
			Zr-95	<7.99E+00	0.00E+00	7.99E+00
			Nb-95	<4.85E+00	0.00E+00	4.85E+00
			I-131	<5.24E+00	0.00E+00	5.24E+00
			Cs-134	<4.73E+00	0.00E+00	4.73E+00
			Cs-137	<5.27E+00	0.00E+00	5.27E+00
			BaLa-140	<5.51E+00	0.00E+00	5.51E+00
			Be-7	<3.78E+01	0.00E+00	3.78E+01
			K-40	1.96E+02	3.07E+01	5.47E+01
Sample ID:	236949	Sample Dates: 3/6/2012 - 5/30/2012	Nuclide	Activity	1 Sigma Error	LLD
			H3DW	4.55E+02	6.05E+01	1.74E+02
Sample ID:	238794	Sample Dates: 5/30/2012 - 6/26/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	1.91E+00	4.33E-01	1.34E+00
			Mn-54	<6.70E+00	0.00E+00	6.70E+00
			Co-58	<6.64E+00	0.00E+00	6.64E+00
			Fe-59	<1.22E+01	0.00E+00	1.22E+01
			Co-60	<1.33E+01	0.00E+00	1.33E+01
			Zn-65	<1.17E+01	0.00E+00	1.17E+01
			Zr-95	<6.64E+00	0.00E+00	6.64E+00
			Nb-95	<7.74E+00	0.00E+00	7.74E+00
			I-131	<6.07E+00	0.00E+00	6.07E+00
			Cs-134	<6.73E+00	0.00E+00	6.73E+00
			Cs-137	<8.08E+00	0.00E+00	8.08E+00
			BaLa-140	<8.70E+00	0.00E+00	8.70E+00
			Be-7	<5.56E+01	0.00E+00	5.56E+01
			K-40	<1.24E+02	0.00E+00	1.24E+02
Sample ID:	240641	Sample Dates: 6/26/2012 - 7/24/2012	Nuclide	Activity	1 Sigma Error	LLD
			Beta	2.04E+00	4.21E-01	1.28E+00
			Mn-54	<3.24E+00	0.00E+00	3.24E+00
			Co-58	<3.18E+00	0.00E+00	3.18E+00
			Fe-59	<5.80E+00	0.00E+00	5.80E+00
			Co-60	<4.31E+00	0.00E+00	4.31E+00
			Zn-65	<7.04E+00	0.00E+00	7.04E+00
			Zr-95	<5.09E+00	0.00E+00	5.09E+00
			Nb-95	<3.16E+00	0.00E+00	3.16E+00
			I-131	<3.43E+00	0.00E+00	3.43E+00
			Cs-134	<3.10E+00	0.00E+00	3.10E+00
			Cs-137	<3.95E+00	0.00E+00	3.95E+00
			BaLa-140	<3.30E+00	0.00E+00	3.30E+00
			Be-7	<2.53E+01	0.00E+00	2.53E+01
			K-40	5.29E+01	2.11E+01	3.80E+01

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

Sample Point 218 [CONTROL - NNE @ 13.5 miles]

Sample ID: 242225 **Sample Dates: 7/24/2012 - 8/21/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.90E+00	4.01E-01	1.22E+00
Mn-54	<5.30E+00	0.00E+00	5.30E+00
Co-58	<6.12E+00	0.00E+00	6.12E+00
Fe-59	<1.62E+01	0.00E+00	1.62E+01
Co-60	<8.48E+00	0.00E+00	8.48E+00
Zn-65	<1.81E+01	0.00E+00	1.81E+01
Zr-95	<9.23E+00	0.00E+00	9.23E+00
Nb-95	<7.36E+00	0.00E+00	7.36E+00
I-131	<7.58E+00	0.00E+00	7.58E+00
Cs-134	<6.27E+00	0.00E+00	6.27E+00
Cs-137	<5.98E+00	0.00E+00	5.98E+00
BaLa-140	<8.85E+00	0.00E+00	8.85E+00
Be-7	<5.64E+01	0.00E+00	5.64E+01
K-40	<1.63E+02	0.00E+00	1.63E+02

Sample ID: 242525 **Sample Dates: 5/30/2012 - 8/21/2012**

Nuclide	Activity	1 Sigma Error	LLD
H3DW	4.06E+02	6.07E+01	1.78E+02

Sample ID: 244371 **Sample Dates: 8/21/2012 - 9/18/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	2.68E+00	3.95E-01	1.12E+00
Mn-54	<7.35E+00	0.00E+00	7.35E+00
Co-58	<6.07E+00	0.00E+00	6.07E+00
Fe-59	<8.72E+00	0.00E+00	8.72E+00
Co-60	<9.20E+00	0.00E+00	9.20E+00
Zn-65	<1.42E+01	0.00E+00	1.42E+01
Zr-95	<1.02E+01	0.00E+00	1.02E+01
Nb-95	<6.49E+00	0.00E+00	6.49E+00
I-131	<4.54E+00	0.00E+00	4.54E+00
Cs-134	<5.41E+00	0.00E+00	5.41E+00
Cs-137	<8.06E+00	0.00E+00	8.06E+00
BaLa-140	<7.57E+00	0.00E+00	7.57E+00
Be-7	<3.44E+01	0.00E+00	3.44E+01
K-40	<1.22E+02	0.00E+00	1.22E+02

Sample ID: 247173 **Sample Dates: 9/18/2012 - 10/16/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.15E+00	4.00E-01	1.28E+00
Mn-54	<5.59E+00	0.00E+00	5.59E+00
Co-58	<4.82E+00	0.00E+00	4.82E+00
Fe-59	<1.06E+01	0.00E+00	1.06E+01
Co-60	<7.42E+00	0.00E+00	7.42E+00
Zn-65	<1.01E+01	0.00E+00	1.01E+01
Zr-95	<9.35E+00	0.00E+00	9.35E+00
Nb-95	<5.28E+00	0.00E+00	5.28E+00
I-131	<5.35E+00	0.00E+00	5.35E+00
Cs-134	<5.38E+00	0.00E+00	5.38E+00
Cs-137	<6.30E+00	0.00E+00	6.30E+00
BaLa-140	<6.74E+00	0.00E+00	6.74E+00
Be-7	<3.37E+01	0.00E+00	3.37E+01
K-40	9.26E+01	2.96E+01	5.82E+01

Sample ID: 248420 **Sample Dates: 10/16/2012 - 11/13/2012**

Nuclide	Activity	1 Sigma Error	LLD
Beta	8.94E-01	4.09E-01	1.33E+00
Mn-54	<6.34E+00	0.00E+00	6.34E+00
Co-58	<6.98E+00	0.00E+00	6.98E+00
Fe-59	<1.76E+01	0.00E+00	1.76E+01
Co-60	<1.10E+01	0.00E+00	1.10E+01
Zn-65	<1.51E+01	0.00E+00	1.51E+01
Zr-95	<1.34E+01	0.00E+00	1.34E+01
Nb-95	<8.40E+00	0.00E+00	8.40E+00
I-131	<6.65E+00	0.00E+00	6.65E+00
Cs-134	<7.40E+00	0.00E+00	7.40E+00
Cs-137	<6.65E+00	0.00E+00	6.65E+00
BaLa-140	<1.01E+01	0.00E+00	1.01E+01
Be-7	<6.35E+01	0.00E+00	6.35E+01
K-40	1.65E+02	3.69E+01	7.27E+01

Sample ID: 249048 **Sample Dates: 8/21/2012 - 12/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
H3DW	6.47E+02	6.05E+01	1.65E+02

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

Sample Point 218 [CONTROL - NNE @ 13.5 miles]

Sample ID: 249523 Sample Dates: 11/13/2012 - 12/11/2012

Nuclide	Activity	1 Sigma Error	LLD
Beta	1.52E+00	4.05E-01	1.26E+00
Mn-54	<7.24E+00	0.00E+00	7.24E+00
Co-58	<6.88E+00	0.00E+00	6.88E+00
Fe-59	<1.70E+01	0.00E+00	1.70E+01
Co-60	<7.53E+00	0.00E+00	7.53E+00
Zn-65	<2.12E+01	0.00E+00	2.12E+01
Zr-95	<1.43E+01	0.00E+00	1.43E+01
Nb-95	<8.65E+00	0.00E+00	8.65E+00
I-131	<1.08E+01	0.00E+00	1.08E+01
Cs-134	<6.40E+00	0.00E+00	6.40E+00
Cs-137	<8.83E+00	0.00E+00	8.83E+00
BaLa-140	<7.98E+00	0.00E+00	7.98E+00
Be-7	<6.77E+01	0.00E+00	6.77E+01
K-40	<1.18E+02	0.00E+00	1.18E+02

Media Type: FISH_BTMFEEDER Concentration (Activity): pCi/kg

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID: 233494 Sample Dates: 4/9/2012 - 4/9/2012

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<1.30E+01	0.00E+00	1.30E+01
Co-58	<1.06E+01	0.00E+00	1.06E+01
Fe-59	<3.28E+01	0.00E+00	3.28E+01
Co-60	<1.56E+01	0.00E+00	1.56E+01
Zn-65	<3.60E+01	0.00E+00	3.60E+01
Nb-95	<1.44E+01	0.00E+00	1.44E+01
I-131	<1.47E+01	0.00E+00	1.47E+01
Cs-134	<1.16E+01	0.00E+00	1.16E+01
Cs-137	<1.49E+01	0.00E+00	1.49E+01
Be-7	<8.99E+01	0.00E+00	8.99E+01
K-40	3.92E+03	2.30E+02	1.50E+02
Ag-110M	<1.07E+01	0.00E+00	1.07E+01
Sb-122	<2.21E+01	0.00E+00	2.21E+01
Sb-125	<3.08E+01	0.00E+00	3.08E+01

Sample ID: 244922 Sample Dates: 10/3/2012 - 10/3/2012

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<2.36E+01	0.00E+00	2.36E+01
Co-58	<1.67E+01	0.00E+00	1.67E+01
Fe-59	<5.05E+01	0.00E+00	5.05E+01
Co-60	<2.82E+01	0.00E+00	2.82E+01
Zn-65	<5.71E+01	0.00E+00	5.71E+01
Nb-95	<2.00E+01	0.00E+00	2.00E+01
I-131	<1.53E+01	0.00E+00	1.53E+01
Cs-134	<1.88E+01	0.00E+00	1.88E+01
Cs-137	<2.37E+01	0.00E+00	2.37E+01
Be-7	<1.01E+02	0.00E+00	1.01E+02
K-40	2.94E+03	2.76E+02	2.28E+02
Ag-110M	<2.14E+01	0.00E+00	2.14E+01
Sb-122	<2.63E+01	0.00E+00	2.63E+01
Sb-125	<4.49E+01	0.00E+00	4.49E+01

Sample Point 216 [CONTROL - NNE @ 4.19 miles]

Sample ID: 233495 Sample Dates: 4/9/2012 - 4/9/2012

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<6.58E+00	0.00E+00	6.58E+00
Co-58	<6.12E+00	0.00E+00	6.12E+00
Fe-59	<1.28E+01	0.00E+00	1.28E+01
Co-60	<7.36E+00	0.00E+00	7.36E+00
Zn-65	<1.36E+01	0.00E+00	1.36E+01
Nb-95	<6.59E+00	0.00E+00	6.59E+00
I-131	<5.52E+00	0.00E+00	5.52E+00
Cs-134	<5.52E+00	0.00E+00	5.52E+00
Cs-137	<7.95E+00	0.00E+00	7.95E+00
Be-7	<4.88E+01	0.00E+00	4.88E+01
K-40	2.83E+03	1.03E+02	6.96E+01
Ag-110M	<4.49E+00	0.00E+00	4.49E+00
Sb-122	<8.20E+00	0.00E+00	8.20E+00
Sb-125	<1.53E+01	0.00E+00	1.53E+01

Media Type: FISH_BTMFEEDER Concentration (Activity): pCi/kg

Sample Point 216 [CONTROL - NNE @ 4.19 miles]

Sample ID: 244923 **Sample Dates: 10/3/2012 - 10/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<1.51E+01	0.00E+00	1.51E+01
Co-58	<1.08E+01	0.00E+00	1.08E+01
Fe-59	<3.16E+01	0.00E+00	3.16E+01
Co-60	<1.79E+01	0.00E+00	1.79E+01
Zn-65	<2.96E+01	0.00E+00	2.96E+01
Nb-95	<1.23E+01	0.00E+00	1.23E+01
I-131	<1.13E+01	0.00E+00	1.13E+01
Cs-134	<1.14E+01	0.00E+00	1.14E+01
Cs-137	<1.54E+01	0.00E+00	1.54E+01
Be-7	<8.06E+01	0.00E+00	8.06E+01
K-40	3.86E+03	2.03E+02	1.56E+02
Ag-110M	<1.22E+01	0.00E+00	1.22E+01
Sb-122	<1.63E+01	0.00E+00	1.63E+01
Sb-125	<2.58E+01	0.00E+00	2.58E+01

Media Type: FISH_FORAGER Concentration (Activity): pCi/kg

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID: 233496 **Sample Dates: 4/9/2012 - 4/9/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<2.11E+01	0.00E+00	2.11E+01
Co-58	<1.48E+01	0.00E+00	1.48E+01
Fe-59	<4.56E+01	0.00E+00	4.56E+01
Co-60	<2.57E+01	0.00E+00	2.57E+01
Zn-65	<5.13E+01	0.00E+00	5.13E+01
Nb-95	<1.95E+01	0.00E+00	1.95E+01
I-131	<1.85E+01	0.00E+00	1.85E+01
Cs-134	<1.60E+01	0.00E+00	1.60E+01
Cs-137	<2.24E+01	0.00E+00	2.24E+01
Be-7	<1.36E+02	0.00E+00	1.36E+02
K-40	2.90E+03	2.53E+02	1.96E+02
Ag-110M	<1.62E+01	0.00E+00	1.62E+01
Sb-122	<2.81E+01	0.00E+00	2.81E+01
Sb-125	<5.20E+01	0.00E+00	5.20E+01

Sample ID: 244924 **Sample Dates: 10/3/2012 - 10/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<1.67E+01	0.00E+00	1.67E+01
Co-58	<2.57E+01	0.00E+00	2.57E+01
Fe-59	<3.59E+01	0.00E+00	3.59E+01
Co-60	<3.72E+01	0.00E+00	3.72E+01
Zn-65	<5.75E+01	0.00E+00	5.75E+01
Nb-95	<1.90E+01	0.00E+00	1.90E+01
I-131	<1.96E+01	0.00E+00	1.96E+01
Cs-134	<2.22E+01	0.00E+00	2.22E+01
Cs-137	<2.24E+01	0.00E+00	2.24E+01
Be-7	<9.97E+01	0.00E+00	9.97E+01
K-40	2.65E+03	2.68E+02	2.24E+02
Ag-110M	<1.90E+01	0.00E+00	1.90E+01
Sb-122	<3.75E+01	0.00E+00	3.75E+01
Sb-125	<5.66E+01	0.00E+00	5.66E+01

Sample Point 216 [CONTROL - NNE @ 4.19 miles]

Sample ID: 233497 **Sample Dates: 4/9/2012 - 4/9/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<1.66E+01	0.00E+00	1.66E+01
Co-58	<1.38E+01	0.00E+00	1.38E+01
Fe-59	<3.27E+01	0.00E+00	3.27E+01
Co-60	<2.19E+01	0.00E+00	2.19E+01
Zn-65	<3.64E+01	0.00E+00	3.64E+01
Nb-95	<1.44E+01	0.00E+00	1.44E+01
I-131	<1.45E+01	0.00E+00	1.45E+01
Cs-134	<1.46E+01	0.00E+00	1.46E+01
Cs-137	<1.80E+01	0.00E+00	1.80E+01
Be-7	<1.17E+02	0.00E+00	1.17E+02
K-40	3.41E+03	1.92E+02	1.42E+02
Ag-110M	<1.50E+01	0.00E+00	1.50E+01
Sb-122	<2.51E+01	0.00E+00	2.51E+01
Sb-125	<3.92E+01	0.00E+00	3.92E+01

Media Type: FISH_FORAGER Concentration (Activity): pCi/kg

Sample Point 216 [CONTROL - NNE @ 4.19 miles]

Sample ID: 244925 Sample Dates: 10/3/2012 - 10/3/2012

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<1.51E+01	0.00E+00	1.51E+01
Co-58	<1.54E+01	0.00E+00	1.54E+01
Fe-59	<2.33E+01	0.00E+00	2.33E+01
Co-60	<1.91E+01	0.00E+00	1.91E+01
Zn-65	<3.78E+01	0.00E+00	3.78E+01
Nb-95	<1.62E+01	0.00E+00	1.62E+01
I-131	<1.45E+01	0.00E+00	1.45E+01
Cs-134	<1.27E+01	0.00E+00	1.27E+01
Cs-137	<1.65E+01	0.00E+00	1.65E+01
Be-7	<1.09E+02	0.00E+00	1.09E+02
K-40	3.66E+03	2.00E+02	1.12E+02
Ag-110M	<1.33E+01	0.00E+00	1.33E+01
Sb-122	<2.55E+01	0.00E+00	2.55E+01
Sb-125	<3.67E+01	0.00E+00	3.67E+01

Media Type: FISH_PREDATOR Concentration (Activity): pCi/kg

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID: 233498 Sample Dates: 4/9/2012 - 4/9/2012

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<1.96E+01	0.00E+00	1.96E+01
Co-58	<1.37E+01	0.00E+00	1.37E+01
Fe-59	<3.89E+01	0.00E+00	3.89E+01
Co-60	<2.52E+01	0.00E+00	2.52E+01
Zn-65	<4.47E+01	0.00E+00	4.47E+01
Nb-95	<1.34E+01	0.00E+00	1.34E+01
I-131	<1.91E+01	0.00E+00	1.91E+01
Cs-134	<1.72E+01	0.00E+00	1.72E+01
Cs-137	<1.55E+01	0.00E+00	1.55E+01
Be-7	<1.20E+02	0.00E+00	1.20E+02
K-40	3.02E+03	2.40E+02	1.65E+02
Ag-110M	<1.35E+01	0.00E+00	1.35E+01
Sb-122	<2.29E+01	0.00E+00	2.29E+01
Sb-125	<3.52E+01	0.00E+00	3.52E+01

Sample ID: 244926 Sample Dates: 10/3/2012 - 10/3/2012

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<2.23E+01	0.00E+00	2.23E+01
Co-58	<2.25E+01	0.00E+00	2.25E+01
Fe-59	<4.70E+01	0.00E+00	4.70E+01
Co-60	<2.14E+01	0.00E+00	2.14E+01
Zn-65	<4.61E+01	0.00E+00	4.61E+01
Nb-95	<1.61E+01	0.00E+00	1.61E+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	1.84E+01	7.17E+00	2.03E+01
Be-7	<1.18E+02	0.00E+00	1.18E+02
K-40	6.08E+03	3.02E+02	1.60E+02
Ag-110M	<1.91E+01	0.00E+00	1.91E+01
Sb-122	<2.94E+01	0.00E+00	2.94E+01
Sb-125	<5.18E+01	0.00E+00	5.18E+01

Sample Point 216 [CONTROL - NNE @ 4.19 miles]

Sample ID: 233499 Sample Dates: 4/9/2012 - 4/9/2012

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<1.14E+01	0.00E+00	1.14E+01
Co-58	<9.85E+00	0.00E+00	9.85E+00
Fe-59	<2.63E+01	0.00E+00	2.63E+01
Co-60	<1.20E+01	0.00E+00	1.20E+01
Zn-65	<2.97E+01	0.00E+00	2.97E+01
Nb-95	<1.03E+01	0.00E+00	1.03E+01
I-131	<1.00E+01	0.00E+00	1.00E+01
Cs-134	<1.11E+01	0.00E+00	1.11E+01
Cs-137	<1.22E+01	0.00E+00	1.22E+01
Be-7	<7.48E+01	0.00E+00	7.48E+01
K-40	3.38E+03	1.60E+02	9.58E+01
Ag-110M	<8.48E+00	0.00E+00	8.48E+00
Sb-122	<1.57E+01	0.00E+00	1.57E+01
Sb-125	<2.96E+01	0.00E+00	2.96E+01

Media Type: FISH_PREDATOR Concentration (Activity): pCi/kg

Sample Point 216 [CONTROL - NNE @ 4.19 miles]

Sample ID: 244927 **Sample Dates: 10/3/2012 - 10/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<1.17E+01	0.00E+00	1.17E+01
Co-58	<9.95E+00	0.00E+00	9.95E+00
Fe-59	<3.03E+01	0.00E+00	3.03E+01
Co-60	<2.06E+01	0.00E+00	2.06E+01
Zn-65	<3.65E+01	0.00E+00	3.65E+01
Nb-95	<1.24E+01	0.00E+00	1.24E+01
I-131	<1.12E+01	0.00E+00	1.12E+01
Cs-134	<9.84E+00	0.00E+00	9.84E+00
Cs-137	<1.62E+01	0.00E+00	1.62E+01
Be-7	<8.91E+01	0.00E+00	8.91E+01
K-40	4.22E+03	2.08E+02	1.14E+02
Ag-110M	<1.14E+01	0.00E+00	1.14E+01
Sb-122	<1.68E+01	0.00E+00	1.68E+01
Sb-125	<3.44E+01	0.00E+00	3.44E+01

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

Sample Point 254 [INDICATOR - N @ 0.82 miles]

Sample ID: 229904 **Sample Dates: 3/6/2012 - 3/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<4.25E+00	0.00E+00	4.25E+00
Co-58	<4.24E+00	0.00E+00	4.24E+00
Fe-59	<8.48E+00	0.00E+00	8.48E+00
Co-60	<4.85E+00	0.00E+00	4.85E+00
Zn-65	<9.34E+00	0.00E+00	9.34E+00
Zr-95	<7.12E+00	0.00E+00	7.12E+00
Nb-95	<4.80E+00	0.00E+00	4.80E+00
I-131	<4.91E+00	0.00E+00	4.91E+00
Cs-134	<4.68E+00	0.00E+00	4.68E+00
Cs-137	<4.27E+00	0.00E+00	4.27E+00
BaLa-140	<5.68E+00	0.00E+00	5.68E+00
Be-7	<3.53E+01	0.00E+00	3.53E+01
K-40	1.08E+02	2.46E+01	4.68E+01
H3GW	<-9.8E+01	0.00E+00	1.82E+02

Sample ID: 235807 **Sample Dates: 5/30/2012 - 5/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<4.56E+00	0.00E+00	4.56E+00
Co-58	<4.27E+00	0.00E+00	4.27E+00
Fe-59	<8.15E+00	0.00E+00	8.15E+00
Co-60	<4.73E+00	0.00E+00	4.73E+00
Zn-65	<9.43E+00	0.00E+00	9.43E+00
Zr-95	<7.98E+00	0.00E+00	7.98E+00
Nb-95	<6.15E+00	0.00E+00	6.15E+00
I-131	<5.44E+00	0.00E+00	5.44E+00
Cs-134	<4.48E+00	0.00E+00	4.48E+00
Cs-137	<4.35E+00	0.00E+00	4.35E+00
BaLa-140	<6.46E+00	0.00E+00	6.46E+00
Be-7	<3.98E+01	0.00E+00	3.98E+01
K-40	1.51E+02	3.20E+01	5.05E+01
H3GW	<-1.6E+01	0.00E+00	1.76E+02

Sample ID: 240645 **Sample Dates: 9/18/2012 - 9/18/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<4.30E+00	0.00E+00	4.30E+00
Co-58	<4.40E+00	0.00E+00	4.40E+00
Fe-59	<8.21E+00	0.00E+00	8.21E+00
Co-60	<5.06E+00	0.00E+00	5.06E+00
Zn-65	<9.36E+00	0.00E+00	9.36E+00
Zr-95	<7.06E+00	0.00E+00	7.06E+00
Nb-95	<4.59E+00	0.00E+00	4.59E+00
I-131	<4.77E+00	0.00E+00	4.77E+00
Cs-134	<4.74E+00	0.00E+00	4.74E+00
Cs-137	<4.32E+00	0.00E+00	4.32E+00
BaLa-140	<4.96E+00	0.00E+00	4.96E+00
Be-7	<3.66E+01	0.00E+00	3.66E+01
K-40	8.12E+01	2.97E+01	4.72E+01
H3GW	<3.35E+01	0.00E+00	1.58E+02

Sample ID: 247177 **Sample Dates: 12/11/2012 - 12/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<4.58E+00	0.00E+00	4.58E+00
Co-58	<4.20E+00	0.00E+00	4.20E+00

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

Sample Point 254 [INDICATOR - N @ 0.82 miles]

Sample ID: 247177 **Sample Dates: 12/11/2012 - 12/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
Fe-59	<8.29E+00	0.00E+00	8.29E+00
Co-60	<4.91E+00	0.00E+00	4.91E+00
Zn-65	<9.48E+00	0.00E+00	9.48E+00
Zr-95	<7.01E+00	0.00E+00	7.01E+00
Nb-95	<4.63E+00	0.00E+00	4.63E+00
I-131	<4.93E+00	0.00E+00	4.93E+00
Cs-134	<4.35E+00	0.00E+00	4.35E+00
Cs-137	<4.16E+00	0.00E+00	4.16E+00
BaLa-140	<6.09E+00	0.00E+00	6.09E+00
Be-7	<3.80E+01	0.00E+00	3.80E+01
K-40	<5.07E+01	0.00E+00	5.07E+01
H3GW	<-5.4E+01	0.00E+00	1.62E+02

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 221 [CONTROL - NW @ 14.5 miles]

Sample ID: 227252 **Sample Dates: 1/4/2012 - 1/4/2012**

Nuclide	Activity	1 Sigma Error	LLD
Be-7	<4.22E+00	0.00E+00	4.22E+00
K-40	3.51E+01	5.38E+00	6.59E+00
LLI-131	<5.50E-01	0.00E+00	5.50E-01
I-131	<7.23E+00	0.00E+00	7.23E+00
Cs-134	<7.49E+00	0.00E+00	7.49E+00
Cs-137	<1.03E+01	0.00E+00	1.03E+01
BaLa-140	<2.71E+00	0.00E+00	2.71E+00
Be-7	<5.92E+01	0.00E+00	5.92E+01
K-40	1.73E+03	1.19E+02	8.85E+01

Sample ID: 227555 **Sample Dates: 1/17/2012 - 1/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
Be-7	<6.41E+00	0.00E+00	6.41E+00
K-40	2.04E+01	5.04E+00	9.01E+00
LLI-131	<6.42E-01	0.00E+00	6.42E-01
I-131	<5.45E+00	0.00E+00	5.45E+00
Cs-134	<5.08E+00	0.00E+00	5.08E+00
Cs-137	<6.56E+00	0.00E+00	6.56E+00
BaLa-140	<6.41E+00	0.00E+00	6.41E+00
Be-7	<4.19E+01	0.00E+00	4.19E+01
K-40	1.62E+03	8.62E+01	5.81E+01

Sample ID: 228145 **Sample Dates: 1/31/2012 - 1/31/2012**

Nuclide	Activity	1 Sigma Error	LLD
Be-7	<4.10E+00	0.00E+00	4.10E+00
K-40	3.28E+01	3.75E+00	5.88E+00
LLI-131	<5.56E-01	0.00E+00	5.56E-01
I-131	<5.49E+00	0.00E+00	5.49E+00
Cs-134	<5.22E+00	0.00E+00	5.22E+00
Cs-137	<7.15E+00	0.00E+00	7.15E+00
BaLa-140	<7.78E+00	0.00E+00	7.78E+00
Be-7	<4.32E+01	0.00E+00	4.32E+01
K-40	1.79E+03	8.43E+01	3.97E+01

Sample ID: 230081 **Sample Dates: 2/14/2012 - 2/14/2012**

Nuclide	Activity	1 Sigma Error	LLD
Be-7	<5.26E+00	0.00E+00	5.26E+00
K-40	6.85E+01	6.26E+00	6.76E+00
LLI-131	<6.48E-01	0.00E+00	6.48E-01
I-131	<5.91E+00	0.00E+00	5.91E+00
Cs-134	<5.23E+00	0.00E+00	5.23E+00
Cs-137	<7.27E+00	0.00E+00	7.27E+00
BaLa-140	<2.42E+00	0.00E+00	2.42E+00
Be-7	<4.10E+01	0.00E+00	4.10E+01
K-40	1.58E+03	1.13E+02	7.93E+01

Sample ID: 230965 **Sample Dates: 2/28/2012 - 2/28/2012**

Nuclide	Activity	1 Sigma Error	LLD
Be-7	<4.55E+00	0.00E+00	4.55E+00
K-40	3.28E+01	4.59E+00	7.42E+00
LLI-131	<6.05E-01	0.00E+00	6.05E-01
I-131	<4.70E+00	0.00E+00	4.70E+00
Cs-134	<5.83E+00	0.00E+00	5.83E+00
Cs-137	<6.90E+00	0.00E+00	6.90E+00
BaLa-140	<5.98E+00	0.00E+00	5.98E+00
Be-7	<3.72E+01	0.00E+00	3.72E+01

Sample ID:	230965	Sample Dates: 2/28/2012 - 2/28/2012	Nuclide	Activity	1 Sigma Error	LLD
			K-40	1.70E+03	8.02E+01	4.44E+01
Sample ID:	232489	Sample Dates: 3/13/2012 - 3/13/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<5.76E+00	0.00E+00	5.76E+00
			K-40	2.81E+01	4.90E+00	8.05E+00
			LLI-131	<6.34E-01	0.00E+00	6.34E-01
			I-131	<4.86E+00	0.00E+00	4.86E+00
			Cs-134	<5.27E+00	0.00E+00	5.27E+00
			Cs-137	<7.16E+00	0.00E+00	7.16E+00
			BaLa-140	<5.96E+00	0.00E+00	5.96E+00
			Be-7	<4.64E+01	0.00E+00	4.64E+01
			K-40	1.46E+03	8.04E+01	6.30E+01
Sample ID:	233570	Sample Dates: 3/27/2012 - 3/27/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<4.34E+00	0.00E+00	4.34E+00
			K-40	2.81E+01	3.82E+00	5.96E+00
			LLI-131	<5.95E-01	0.00E+00	5.95E-01
			I-131	<5.76E+00	0.00E+00	5.76E+00
			Cs-134	<4.63E+00	0.00E+00	4.63E+00
			Cs-137	<6.26E+00	0.00E+00	6.26E+00
			BaLa-140	<4.22E+00	0.00E+00	4.22E+00
			Be-7	<4.61E+01	0.00E+00	4.61E+01
			K-40	1.62E+03	8.11E+01	6.01E+01
Sample ID:	234919	Sample Dates: 4/10/2012 - 4/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<3.84E+00	0.00E+00	3.84E+00
			K-40	2.18E+01	3.72E+00	6.87E+00
			LLI-131	<5.41E-01	0.00E+00	5.41E-01
			I-131	<5.86E+00	0.00E+00	5.86E+00
			Cs-134	<5.26E+00	0.00E+00	5.26E+00
			Cs-137	<8.55E+00	0.00E+00	8.55E+00
			BaLa-140	<8.31E+00	0.00E+00	8.31E+00
			Be-7	<6.17E+01	0.00E+00	6.17E+01
			K-40	1.38E+03	1.08E+02	7.94E+01
Sample ID:	235430	Sample Dates: 4/24/2012 - 4/24/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<4.01E+00	0.00E+00	4.01E+00
			K-40	2.66E+01	4.34E+00	6.21E+00
			LLI-131	<5.34E-01	0.00E+00	5.34E-01
			I-131	<5.88E+00	0.00E+00	5.88E+00
			Cs-134	<5.33E+00	0.00E+00	5.33E+00
			Cs-137	<6.83E+00	0.00E+00	6.83E+00
			BaLa-140	<3.61E+00	0.00E+00	3.61E+00
			Be-7	<4.95E+01	0.00E+00	4.95E+01
			K-40	1.80E+03	8.64E+01	7.11E+01
Sample ID:	236007	Sample Dates: 5/8/2012 - 5/8/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<5.23E+00	0.00E+00	5.23E+00
			K-40	5.27E+01	5.87E+00	6.91E+00
			LLI-131	<6.46E-01	0.00E+00	6.46E-01
			I-131	<5.36E+00	0.00E+00	5.36E+00
			Cs-134	<5.03E+00	0.00E+00	5.03E+00
			Cs-137	<5.13E+00	0.00E+00	5.13E+00
			BaLa-140	<5.23E+00	0.00E+00	5.23E+00
			Be-7	<4.31E+01	0.00E+00	4.31E+01
			K-40	1.65E+03	8.34E+01	6.14E+01
Sample ID:	236530	Sample Dates: 5/22/2012 - 5/22/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<4.43E+00	0.00E+00	4.43E+00
			K-40	6.09E+01	5.76E+00	5.93E+00
			LLI-131	<6.47E-01	0.00E+00	6.47E-01
			I-131	<5.61E+00	0.00E+00	5.61E+00
			Cs-134	<4.64E+00	0.00E+00	4.64E+00
			Cs-137	<6.02E+00	0.00E+00	6.02E+00
			BaLa-140	<5.03E+00	0.00E+00	5.03E+00
			Be-7	<4.38E+01	0.00E+00	4.38E+01
			K-40	1.69E+03	8.06E+01	3.57E+01
Sample ID:	237155	Sample Dates: 6/5/2012 - 6/5/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<4.92E+00	0.00E+00	4.92E+00

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 221 [CONTROL - NW @ 14.5 miles]

Sample ID:	237155	Sample Dates: 6/5/2012 - 6/5/2012	Nuclide	Activity	1 Sigma Error	LLD
			K-40	3.48E+01	4.31E+00	6.97E+00
			LLI-131	<6.40E-01	0.00E+00	6.40E-01
			I-131	<7.41E+00	0.00E+00	7.41E+00
			Cs-134	<7.07E+00	0.00E+00	7.07E+00
			Cs-137	<1.07E+01	0.00E+00	1.07E+01
			BaLa-140	<2.55E+00	0.00E+00	2.55E+00
			Be-7	<6.40E+01	0.00E+00	6.40E+01
			K-40	1.63E+03	1.10E+02	6.81E+01
Sample ID:	238006	Sample Dates: 6/19/2012 - 6/19/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<5.81E+00	0.00E+00	5.81E+00
			K-40	5.61E+01	5.45E+00	7.05E+00
			LLI-131	<6.40E-01	0.00E+00	6.40E-01
			I-131	<7.26E+00	0.00E+00	7.26E+00
			Cs-134	<8.07E+00	0.00E+00	8.07E+00
			Cs-137	<1.06E+01	0.00E+00	1.06E+01
			BaLa-140	<1.08E+01	0.00E+00	1.08E+01
			Be-7	<8.04E+01	0.00E+00	8.04E+01
			K-40	1.61E+03	1.23E+02	1.30E+02
Sample ID:	239158	Sample Dates: 7/3/2012 - 7/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<4.76E+00	0.00E+00	4.76E+00
			K-40	3.59E+01	5.24E+00	7.15E+00
			LLI-131	<5.38E-01	0.00E+00	5.38E-01
			I-131	<7.18E+00	0.00E+00	7.18E+00
			Cs-134	<6.92E+00	0.00E+00	6.92E+00
			Cs-137	<9.71E+00	0.00E+00	9.71E+00
			BaLa-140	<9.31E+00	0.00E+00	9.31E+00
			Be-7	<6.98E+01	0.00E+00	6.98E+01
			K-40	1.60E+03	1.15E+02	5.98E+01
Sample ID:	240031	Sample Dates: 7/17/2012 - 7/17/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<3.86E+00	0.00E+00	3.86E+00
			K-40	4.70E+01	4.51E+00	5.17E+00
			LLI-131	<5.81E-01	0.00E+00	5.81E-01
			I-131	<4.81E+00	0.00E+00	4.81E+00
			Cs-134	<4.44E+00	0.00E+00	4.44E+00
			Cs-137	<6.90E+00	0.00E+00	6.90E+00
			BaLa-140	<5.68E+00	0.00E+00	5.68E+00
			Be-7	<3.21E+01	0.00E+00	3.21E+01
			K-40	1.58E+03	7.87E+01	4.17E+01
Sample ID:	240991	Sample Dates: 7/31/2012 - 7/31/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<5.24E+00	0.00E+00	5.24E+00
			K-40	8.57E+00	5.22E+00	9.37E+00
			LLI-131	<6.48E-01	0.00E+00	6.48E-01
			I-131	<6.49E+00	0.00E+00	6.49E+00
			Cs-134	<8.22E+00	0.00E+00	8.22E+00
			Cs-137	<9.26E+00	0.00E+00	9.26E+00
			BaLa-140	<7.38E+00	0.00E+00	7.38E+00
			Be-7	<6.61E+01	0.00E+00	6.61E+01
			K-40	1.44E+03	1.16E+02	8.55E+01
Sample ID:	241566	Sample Dates: 8/14/2012 - 8/14/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<4.32E+00	0.00E+00	4.32E+00
			K-40	4.67E+01	5.67E+00	6.63E+00
			LLI-131	<5.26E-01	0.00E+00	5.26E-01
			I-131	<6.84E+00	0.00E+00	6.84E+00
			Cs-134	<7.18E+00	0.00E+00	7.18E+00
			Cs-137	<1.02E+01	0.00E+00	1.02E+01
			BaLa-140	<2.71E+00	0.00E+00	2.71E+00
			Be-7	<6.04E+01	0.00E+00	6.04E+01
			K-40	1.47E+03	1.14E+02	9.52E+01
Sample ID:	242499	Sample Dates: 8/28/2012 - 8/28/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<4.94E+00	0.00E+00	4.94E+00
			K-40	3.33E+01	4.59E+00	5.87E+00
			LLI-131	<6.48E-01	0.00E+00	6.48E-01
			I-131	<6.03E+00	0.00E+00	6.03E+00
			Cs-134	<6.57E+00	0.00E+00	6.57E+00

Sample ID:	242499	Sample Dates: 8/28/2012 - 8/28/2012	Nuclide	Activity	1 Sigma Error	LLD
			Cs-137	<1.00E+01	0.00E+00	1.00E+01
			BaLa-140	<2.60E+00	0.00E+00	2.60E+00
			Be-7	<4.92E+01	0.00E+00	4.92E+01
			K-40	1.59E+03	1.12E+02	6.84E+01
Sample ID:	243769	Sample Dates: 9/11/2012 - 9/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<6.60E+00	0.00E+00	6.60E+00
			K-40	2.26E+01	5.98E+00	1.06E+01
			LLI-131	<6.08E-01	0.00E+00	6.08E-01
			I-131	<7.36E+00	0.00E+00	7.36E+00
			Cs-134	<5.86E+00	0.00E+00	5.86E+00
			Cs-137	<8.40E+00	0.00E+00	8.40E+00
			BaLa-140	<8.67E+00	0.00E+00	8.67E+00
			Be-7	<5.94E+01	0.00E+00	5.94E+01
			K-40	1.12E+03	9.73E+01	7.06E+01
Sample ID:	245059	Sample Dates: 9/25/2012 - 9/25/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<5.01E+00	0.00E+00	5.01E+00
			K-40	3.51E+01	5.67E+00	8.41E+00
			LLI-131	<6.22E-01	0.00E+00	6.22E-01
			I-131	<8.56E+00	0.00E+00	8.56E+00
			Cs-134	<6.33E+00	0.00E+00	6.33E+00
			Cs-137	<1.07E+01	0.00E+00	1.07E+01
			BaLa-140	<8.81E+00	0.00E+00	8.81E+00
			Be-7	<4.55E+01	0.00E+00	4.55E+01
			K-40	1.43E+03	1.07E+02	6.83E+01
Sample ID:	246716	Sample Dates: 10/9/2012 - 10/9/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<7.74E+00	0.00E+00	7.74E+00
			K-40	<1.88E+01	0.00E+00	1.88E+01
			LLI-131	<6.05E-01	0.00E+00	6.05E-01
			I-131	<8.24E+00	0.00E+00	8.24E+00
			Cs-134	<9.52E+00	0.00E+00	9.52E+00
			Cs-137	<9.45E+00	0.00E+00	9.45E+00
			BaLa-140	<1.20E+01	0.00E+00	1.20E+01
			Be-7	<7.33E+01	0.00E+00	7.33E+01
			K-40	1.54E+03	1.21E+02	9.76E+01
Sample ID:	247444	Sample Dates: 10/23/2012 - 10/23/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<3.86E+00	0.00E+00	3.86E+00
			K-40	5.50E+01	4.44E+00	6.00E+00
			LLI-131	<5.13E-01	0.00E+00	5.13E-01
			I-131	<5.46E+00	0.00E+00	5.46E+00
			Cs-134	<4.07E+00	0.00E+00	4.07E+00
			Cs-137	<7.63E+00	0.00E+00	7.63E+00
			BaLa-140	<6.46E+00	0.00E+00	6.46E+00
			Be-7	<3.90E+01	0.00E+00	3.90E+01
			K-40	1.43E+03	8.28E+01	5.70E+01
Sample ID:	247977	Sample Dates: 11/6/2012 - 11/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<4.31E+00	0.00E+00	4.31E+00
			K-40	5.82E+01	4.64E+00	6.22E+00
			LLI-131	<6.02E-01	0.00E+00	6.02E-01
			I-131	<8.04E+00	0.00E+00	8.04E+00
			Cs-134	<6.64E+00	0.00E+00	6.64E+00
			Cs-137	<1.00E+01	0.00E+00	1.00E+01
			BaLa-140	<6.07E+00	0.00E+00	6.07E+00
			Be-7	<5.88E+01	0.00E+00	5.88E+01
			K-40	1.78E+03	1.21E+02	7.32E+01
Sample ID:	248667	Sample Dates: 11/20/2012 - 11/20/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<3.86E+00	0.00E+00	3.86E+00
			K-40	4.14E+01	4.99E+00	7.60E+00
			LLI-131	<5.56E-01	0.00E+00	5.56E-01
			I-131	<5.44E+00	0.00E+00	5.44E+00
			Cs-134	<5.36E+00	0.00E+00	5.36E+00
			Cs-137	<7.16E+00	0.00E+00	7.16E+00
			BaLa-140	<5.82E+00	0.00E+00	5.82E+00
			Be-7	<4.26E+01	0.00E+00	4.26E+01

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 221 [CONTROL - NW @ 14.5 miles]

Sample ID:	248667	Sample Dates: 11/20/2012 - 11/20/2012	Nuclide	Activity	1 Sigma Error	LLD
			K-40	1.65E+03	8.32E+01	4.90E+01
Sample ID:	249272	Sample Dates: 12/4/2012 - 12/4/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<4.28E+00	0.00E+00	4.28E+00
			K-40	9.17E+00	3.84E+00	8.49E+00
			LLI-131	<5.35E-01	0.00E+00	5.35E-01
			I-131	<7.57E+00	0.00E+00	7.57E+00
			Cs-134	<5.31E+00	0.00E+00	5.31E+00
			Cs-137	<7.58E+00	0.00E+00	7.58E+00
			BaLa-140	<1.12E+01	0.00E+00	1.12E+01
			Be-7	<7.21E+01	0.00E+00	7.21E+01
			K-40	1.68E+03	1.18E+02	8.02E+01
Sample ID:	249897	Sample Dates: 12/18/2012 - 12/18/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<5.38E+00	0.00E+00	5.38E+00
			K-40	2.49E+01	5.33E+00	7.56E+00
			LLI-131	<5.97E-01	0.00E+00	5.97E-01
			I-131	<4.71E+00	0.00E+00	4.71E+00
			Cs-134	<5.46E+00	0.00E+00	5.46E+00
			Cs-137	<7.48E+00	0.00E+00	7.48E+00
			BaLa-140	<6.46E+00	0.00E+00	6.46E+00
			Be-7	<4.49E+01	0.00E+00	4.49E+01
			K-40	1.48E+03	8.33E+01	4.72E+01

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	233509	Sample Dates: 4/17/2012 - 4/17/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<2.06E+01	0.00E+00	2.06E+01
			Co-58	5.69E+01	9.48E+00	1.88E+01
			Fe-59	<4.49E+01	0.00E+00	4.49E+01
			Co-60	1.46E+02	1.40E+01	2.12E+01
			Zn-65	<4.96E+01	0.00E+00	4.96E+01
			Zr-95	<3.12E+01	0.00E+00	3.12E+01
			Nb-95	<2.16E+01	0.00E+00	2.16E+01
			I-131	<1.50E+01	0.00E+00	1.50E+01
			Cs-134	<1.59E+01	0.00E+00	1.59E+01
			Cs-137	<2.09E+01	0.00E+00	2.09E+01
			Be-7	3.13E+02	6.43E+01	1.22E+02
			K-40	1.67E+04	3.89E+02	1.63E+02
			Co-57	<1.11E+01	0.00E+00	1.11E+01
			Mo-99	<1.72E+02	0.00E+00	1.72E+02
			Ag-110M	<1.78E+01	0.00E+00	1.78E+01
			Sb-122	<2.73E+01	0.00E+00	2.73E+01
			Sb-125	<4.47E+01	0.00E+00	4.47E+01
Sample ID:	244937	Sample Dates: 10/2/2012 - 10/2/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<2.08E+01	0.00E+00	2.08E+01
			Co-58	5.48E+01	1.57E+01	1.84E+01
			Fe-59	<4.85E+01	0.00E+00	4.85E+01
			Co-60	1.94E+02	1.72E+01	2.26E+01
			Zn-65	<5.66E+01	0.00E+00	5.66E+01
			Zr-95	<3.38E+01	0.00E+00	3.38E+01
			Nb-95	<2.12E+01	0.00E+00	2.12E+01
			I-131	<2.58E+01	0.00E+00	2.58E+01
			Cs-134	<1.68E+01	0.00E+00	1.68E+01
			Cs-137	<2.24E+01	0.00E+00	2.24E+01
			Be-7	4.48E+02	8.76E+01	1.39E+02
			K-40	1.56E+04	3.55E+02	1.79E+02
			Co-57	<1.35E+01	0.00E+00	1.35E+01
			Mo-99	<5.92E+02	0.00E+00	5.92E+02
			Ag-110M	<1.87E+01	0.00E+00	1.87E+01
			Sb-122	<1.02E+02	0.00E+00	1.02E+02
			Sb-125	<4.87E+01	0.00E+00	4.87E+01

Sample Point 210 [INDICATOR - SE @ 2.31 miles]

Sample ID:	233510	Sample Dates: 4/17/2012 - 4/17/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<1.58E+01	0.00E+00	1.58E+01

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

Sample Point 210 [INDICATOR - SE @ 2.31 miles]

Sample ID: 233510 **Sample Dates: 4/17/2012 - 4/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
Co-58	<1.42E+01	0.00E+00	1.42E+01
Fe-59	<3.15E+01	0.00E+00	3.15E+01
Co-60	<1.71E+01	0.00E+00	1.71E+01
Zn-65	<3.54E+01	0.00E+00	3.54E+01
Zr-95	<2.69E+01	0.00E+00	2.69E+01
Nb-95	<1.43E+01	0.00E+00	1.43E+01
I-131	<1.27E+01	0.00E+00	1.27E+01
Cs-134	<1.22E+01	0.00E+00	1.22E+01
Cs-137	<1.50E+01	0.00E+00	1.50E+01
Be-7	<1.16E+02	0.00E+00	1.16E+02
K-40	1.29E+04	3.08E+02	1.50E+02
Co-57	<1.06E+01	0.00E+00	1.06E+01
Mo-99	<1.23E+02	0.00E+00	1.23E+02
Ag-110M	<1.11E+01	0.00E+00	1.11E+01
Sb-122	<2.16E+01	0.00E+00	2.16E+01
Sb-125	<3.27E+01	0.00E+00	3.27E+01

Sample ID: 244938 **Sample Dates: 10/2/2012 - 10/2/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<2.43E+01	0.00E+00	2.43E+01
Co-58	<2.00E+01	0.00E+00	2.00E+01
Fe-59	<4.91E+01	0.00E+00	4.91E+01
Co-60	<3.22E+01	0.00E+00	3.22E+01
Zn-65	<5.64E+01	0.00E+00	5.64E+01
Zr-95	<3.37E+01	0.00E+00	3.37E+01
Nb-95	<2.30E+01	0.00E+00	2.30E+01
I-131	<1.98E+01	0.00E+00	1.98E+01
Cs-134	<1.84E+01	0.00E+00	1.84E+01
Cs-137	3.15E+01	1.10E+01	2.03E+01
Be-7	3.90E+02	7.36E+01	1.50E+02
K-40	1.88E+04	4.10E+02	1.58E+02
Co-57	<1.32E+01	0.00E+00	1.32E+01
Mo-99	<2.56E+02	0.00E+00	2.56E+02
Ag-110M	<1.97E+01	0.00E+00	1.97E+01
Sb-122	<4.37E+01	0.00E+00	4.37E+01
Sb-125	<5.19E+01	0.00E+00	5.19E+01

Sample Point 215 [CONTROL - NNE @ 4.21 miles]

Sample ID: 233511 **Sample Dates: 4/17/2012 - 4/17/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<1.61E+01	0.00E+00	1.61E+01
Co-58	<1.14E+01	0.00E+00	1.14E+01
Fe-59	<3.19E+01	0.00E+00	3.19E+01
Co-60	<1.45E+01	0.00E+00	1.45E+01
Zn-65	<3.72E+01	0.00E+00	3.72E+01
Zr-95	<2.13E+01	0.00E+00	2.13E+01
Nb-95	<1.41E+01	0.00E+00	1.41E+01
I-131	<1.35E+01	0.00E+00	1.35E+01
Cs-134	<1.10E+01	0.00E+00	1.10E+01
Cs-137	<1.45E+01	0.00E+00	1.45E+01
Be-7	1.07E+02	5.91E+01	1.06E+02
K-40	1.33E+04	3.04E+02	1.07E+02
Co-57	<1.11E+01	0.00E+00	1.11E+01
Mo-99	<1.14E+02	0.00E+00	1.14E+02
Ag-110M	<1.10E+01	0.00E+00	1.10E+01
Sb-122	<1.71E+01	0.00E+00	1.71E+01
Sb-125	<3.16E+01	0.00E+00	3.16E+01

Sample ID: 244939 **Sample Dates: 10/2/2012 - 10/2/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<1.03E+01	0.00E+00	1.03E+01
Co-58	<8.75E+00	0.00E+00	8.75E+00
Fe-59	<2.49E+01	0.00E+00	2.49E+01
Co-60	<1.31E+01	0.00E+00	1.31E+01
Zn-65	<2.74E+01	0.00E+00	2.74E+01
Zr-95	<1.68E+01	0.00E+00	1.68E+01
Nb-95	<1.12E+01	0.00E+00	1.12E+01
I-131	<1.34E+01	0.00E+00	1.34E+01
Cs-134	<8.75E+00	0.00E+00	8.75E+00
Cs-137	<1.11E+01	0.00E+00	1.11E+01
Be-7	8.30E+01	3.80E+01	6.87E+01

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

Sample Point 215 [CONTROL - NNE @ 4.21 miles]

Sample ID: 244939 **Sample Dates: 10/2/2012 - 10/2/2012**

Nuclide	Activity	1 Sigma Error	LLD
K-40	1.08E+04	2.07E+02	9.08E+01
Co-57	<7.00E+00	0.00E+00	7.00E+00
Mo-99	<3.03E+02	0.00E+00	3.03E+02
Ag-110M	<8.19E+00	0.00E+00	8.19E+00
Sb-122	<5.35E+01	0.00E+00	5.35E+01
Sb-125	<2.39E+01	0.00E+00	2.39E+01

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID: 227358 **Sample Dates: 12/13/2011 - 1/10/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<7.94E+00	0.00E+00	7.94E+00
Co-58	<6.81E+00	0.00E+00	6.81E+00
Fe-59	<1.71E+01	0.00E+00	1.71E+01
Co-60	<1.38E+01	0.00E+00	1.38E+01
Zn-65	<1.96E+01	0.00E+00	1.96E+01
Zr-95	<1.32E+01	0.00E+00	1.32E+01
Nb-95	<5.76E+00	0.00E+00	5.76E+00
I-131	<8.33E+00	0.00E+00	8.33E+00
Cs-134	<4.58E+00	0.00E+00	4.58E+00
Cs-137	<8.81E+00	0.00E+00	8.81E+00
BaLa-140	<1.21E+01	0.00E+00	1.21E+01
Be-7	<6.37E+01	0.00E+00	6.37E+01
K-40	8.42E+01	4.41E+01	8.85E+01

Sample ID: 229901 **Sample Dates: 1/10/2012 - 2/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<5.67E+00	0.00E+00	5.67E+00
Co-58	<6.64E+00	0.00E+00	6.64E+00
Fe-59	<1.40E+01	0.00E+00	1.40E+01
Co-60	<8.91E+00	0.00E+00	8.91E+00
Zn-65	<1.12E+01	0.00E+00	1.12E+01
Zr-95	<9.81E+00	0.00E+00	9.81E+00
Nb-95	<6.99E+00	0.00E+00	6.99E+00
I-131	<8.48E+00	0.00E+00	8.48E+00
Cs-134	<7.02E+00	0.00E+00	7.02E+00
Cs-137	<6.74E+00	0.00E+00	6.74E+00
BaLa-140	<9.20E+00	0.00E+00	9.20E+00
Be-7	<6.20E+01	0.00E+00	6.20E+01
K-40	1.34E+02	3.46E+01	6.10E+01

Sample ID: 231374 **Sample Dates: 12/13/2011 - 3/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
H3SW	3.30E+04	2.53E+02	1.64E+02

Sample ID: 231689 **Sample Dates: 2/7/2012 - 3/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<5.84E+00	0.00E+00	5.84E+00
Co-58	<5.92E+00	0.00E+00	5.92E+00
Fe-59	<8.70E+00	0.00E+00	8.70E+00
Co-60	<9.81E+00	0.00E+00	9.81E+00
Zn-65	<1.08E+01	0.00E+00	1.08E+01
Zr-95	<1.14E+01	0.00E+00	1.14E+01
Nb-95	<5.71E+00	0.00E+00	5.71E+00
I-131	<5.20E+00	0.00E+00	5.20E+00
Cs-134	<5.14E+00	0.00E+00	5.14E+00
Cs-137	<5.03E+00	0.00E+00	5.03E+00
BaLa-140	<9.14E+00	0.00E+00	9.14E+00
Be-7	<3.76E+01	0.00E+00	3.76E+01
K-40	<1.10E+02	0.00E+00	1.10E+02

Sample ID: 234608 **Sample Dates: 3/6/2012 - 4/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<3.25E+00	0.00E+00	3.25E+00
Co-58	<3.32E+00	0.00E+00	3.32E+00
Fe-59	<6.24E+00	0.00E+00	6.24E+00
Co-60	<4.74E+00	0.00E+00	4.74E+00
Zn-65	<5.98E+00	0.00E+00	5.98E+00
Zr-95	<4.61E+00	0.00E+00	4.61E+00
Nb-95	<3.85E+00	0.00E+00	3.85E+00
I-131	<3.85E+00	0.00E+00	3.85E+00
Cs-134	<3.22E+00	0.00E+00	3.22E+00
Cs-137	<3.03E+00	0.00E+00	3.03E+00

Sample ID: 234608 **Sample Dates: 3/6/2012 - 4/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
BaLa-140	<3.59E+00	0.00E+00	3.59E+00
Be-7	<3.10E+01	0.00E+00	3.10E+01
K-40	2.61E+02	2.82E+01	3.00E+01

Sample ID: 235793 **Sample Dates: 4/3/2012 - 5/1/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<5.55E+00	0.00E+00	5.55E+00
Co-58	<8.31E+00	0.00E+00	8.31E+00
Fe-59	<1.37E+01	0.00E+00	1.37E+01
Co-60	<7.99E+00	0.00E+00	7.99E+00
Zn-65	<1.53E+01	0.00E+00	1.53E+01
Zr-95	<1.05E+01	0.00E+00	1.05E+01
Nb-95	<5.31E+00	0.00E+00	5.31E+00
I-131	<6.49E+00	0.00E+00	6.49E+00
Cs-134	<4.93E+00	0.00E+00	4.93E+00
Cs-137	<5.84E+00	0.00E+00	5.84E+00
BaLa-140	<1.03E+01	0.00E+00	1.03E+01
Be-7	<4.61E+01	0.00E+00	4.61E+01
K-40	6.74E+01	3.11E+01	6.52E+01

Sample ID: 236881 **Sample Dates: 5/1/2012 - 5/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<4.64E+00	0.00E+00	4.64E+00
Co-58	<4.65E+00	0.00E+00	4.65E+00
Fe-59	<9.05E+00	0.00E+00	9.05E+00
Co-60	<5.69E+00	0.00E+00	5.69E+00
Zn-65	<9.86E+00	0.00E+00	9.86E+00
Zr-95	<7.34E+00	0.00E+00	7.34E+00
Nb-95	<5.58E+00	0.00E+00	5.58E+00
I-131	<4.93E+00	0.00E+00	4.93E+00
Cs-134	<4.74E+00	0.00E+00	4.74E+00
Cs-137	<5.56E+00	0.00E+00	5.56E+00
BaLa-140	<8.18E+00	0.00E+00	8.18E+00
Be-7	<3.63E+01	0.00E+00	3.63E+01
K-40	1.68E+02	3.47E+01	5.47E+01

Sample ID: 236946 **Sample Dates: 3/6/2012 - 5/30/2012**

Nuclide	Activity	1 Sigma Error	LLD
H3SW	3.65E+03	9.89E+01	1.74E+02

Sample ID: 238795 **Sample Dates: 5/30/2012 - 6/26/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<4.29E+00	0.00E+00	4.29E+00
Co-58	<5.08E+00	0.00E+00	5.08E+00
Fe-59	<7.63E+00	0.00E+00	7.63E+00
Co-60	<7.13E+00	0.00E+00	7.13E+00
Zn-65	<9.64E+00	0.00E+00	9.64E+00
Zr-95	<6.85E+00	0.00E+00	6.85E+00
Nb-95	<5.46E+00	0.00E+00	5.46E+00
I-131	<4.66E+00	0.00E+00	4.66E+00
Cs-134	<4.24E+00	0.00E+00	4.24E+00
Cs-137	<5.23E+00	0.00E+00	5.23E+00
BaLa-140	<5.15E+00	0.00E+00	5.15E+00
Be-7	<3.27E+01	0.00E+00	3.27E+01
K-40	5.07E+01	1.98E+01	5.08E+01

Sample ID: 240642 **Sample Dates: 6/26/2012 - 7/24/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<4.75E+00	0.00E+00	4.75E+00
Co-58	<4.11E+00	0.00E+00	4.11E+00
Fe-59	<7.19E+00	0.00E+00	7.19E+00
Co-60	<7.14E+00	0.00E+00	7.14E+00
Zn-65	<1.26E+01	0.00E+00	1.26E+01
Zr-95	<8.16E+00	0.00E+00	8.16E+00
Nb-95	<4.81E+00	0.00E+00	4.81E+00
I-131	<5.18E+00	0.00E+00	5.18E+00
Cs-134	<4.81E+00	0.00E+00	4.81E+00
Cs-137	<5.57E+00	0.00E+00	5.57E+00
BaLa-140	<4.01E+00	0.00E+00	4.01E+00
Be-7	<3.73E+01	0.00E+00	3.73E+01
K-40	1.16E+02	2.69E+01	4.62E+01

Sample ID: 242226 **Sample Dates: 7/24/2012 - 8/21/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<5.41E+00	0.00E+00	5.41E+00
Co-58	<4.17E+00	0.00E+00	4.17E+00

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	242226	Sample Dates: 7/24/2012 - 8/21/2012	Nuclide	Activity	1 Sigma Error	LLD
			Fe-59	<1.29E+01	0.00E+00	1.29E+01
			Co-60	<6.82E+00	0.00E+00	6.82E+00
			Zn-65	<8.52E+00	0.00E+00	8.52E+00
			Zr-95	<6.68E+00	0.00E+00	6.68E+00
			Nb-95	<3.98E+00	0.00E+00	3.98E+00
			I-131	<5.18E+00	0.00E+00	5.18E+00
			Cs-134	<5.12E+00	0.00E+00	5.12E+00
			Cs-137	<7.34E+00	0.00E+00	7.34E+00
			BaLa-140	<6.75E+00	0.00E+00	6.75E+00
			Be-7	<3.77E+01	0.00E+00	3.77E+01
			K-40	4.55E+01	2.67E+01	6.41E+01
Sample ID:	242522	Sample Dates: 5/30/2012 - 8/21/2012	Nuclide	Activity	1 Sigma Error	LLD
			H3SW	4.85E+03	1.09E+02	1.77E+02
Sample ID:	244372	Sample Dates: 8/21/2012 - 9/18/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<5.05E+00	0.00E+00	5.05E+00
			Co-58	<5.58E+00	0.00E+00	5.58E+00
			Fe-59	<8.00E+00	0.00E+00	8.00E+00
			Co-60	<7.07E+00	0.00E+00	7.07E+00
			Zn-65	<1.00E+01	0.00E+00	1.00E+01
			Zr-95	<1.01E+01	0.00E+00	1.01E+01
			Nb-95	<5.45E+00	0.00E+00	5.45E+00
			I-131	<5.83E+00	0.00E+00	5.83E+00
			Cs-134	<4.98E+00	0.00E+00	4.98E+00
			Cs-137	<6.28E+00	0.00E+00	6.28E+00
			BaLa-140	<5.67E+00	0.00E+00	5.67E+00
			Be-7	<3.80E+01	0.00E+00	3.80E+01
			K-40	1.12E+02	3.35E+01	6.56E+01
Sample ID:	247174	Sample Dates: 9/18/2012 - 10/16/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<4.01E+00	0.00E+00	4.01E+00
			Co-58	<4.52E+00	0.00E+00	4.52E+00
			Fe-59	<8.87E+00	0.00E+00	8.87E+00
			Co-60	<7.58E+00	0.00E+00	7.58E+00
			Zn-65	<1.33E+01	0.00E+00	1.33E+01
			Zr-95	<1.01E+01	0.00E+00	1.01E+01
			Nb-95	<5.23E+00	0.00E+00	5.23E+00
			I-131	<5.71E+00	0.00E+00	5.71E+00
			Cs-134	<4.76E+00	0.00E+00	4.76E+00
			Cs-137	<5.79E+00	0.00E+00	5.79E+00
			BaLa-140	<5.33E+00	0.00E+00	5.33E+00
			Be-7	<3.94E+01	0.00E+00	3.94E+01
			K-40	1.36E+02	2.75E+01	3.44E+01
Sample ID:	248421	Sample Dates: 10/16/2012 - 11/13/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<8.20E+00	0.00E+00	8.20E+00
			Co-58	<7.03E+00	0.00E+00	7.03E+00
			Fe-59	<1.81E+01	0.00E+00	1.81E+01
			Co-60	<1.04E+01	0.00E+00	1.04E+01
			Zn-65	<1.55E+01	0.00E+00	1.55E+01
			Zr-95	<1.43E+01	0.00E+00	1.43E+01
			Nb-95	<6.94E+00	0.00E+00	6.94E+00
			I-131	<6.33E+00	0.00E+00	6.33E+00
			Cs-134	<5.16E+00	0.00E+00	5.16E+00
			Cs-137	<8.65E+00	0.00E+00	8.65E+00
			BaLa-140	<2.75E+00	0.00E+00	2.75E+00
			Be-7	<5.21E+01	0.00E+00	5.21E+01
			K-40	1.18E+02	3.87E+01	6.16E+01
Sample ID:	249042	Sample Dates: 8/21/2012 - 12/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			H3SW	7.01E+03	1.22E+02	1.64E+02
Sample ID:	249524	Sample Dates: 11/13/2012 - 12/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<5.47E+00	0.00E+00	5.47E+00
			Co-58	<5.20E+00	0.00E+00	5.20E+00
			Fe-59	<1.22E+01	0.00E+00	1.22E+01
			Co-60	<6.43E+00	0.00E+00	6.43E+00
			Zn-65	<1.09E+01	0.00E+00	1.09E+01
			Zr-95	<9.58E+00	0.00E+00	9.58E+00

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	249524	Sample Dates: 11/13/2012 - 12/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			Nb-95	<5.27E+00	0.00E+00	5.27E+00
			I-131	<5.18E+00	0.00E+00	5.18E+00
			Cs-134	<4.30E+00	0.00E+00	4.30E+00
			Cs-137	<5.56E+00	0.00E+00	5.56E+00
			BaLa-140	<4.13E+00	0.00E+00	4.13E+00
			Be-7	<3.61E+01	0.00E+00	3.61E+01
			K-40	5.81E+01	1.61E+01	3.23E+01

Sample Point 211 [INDICATOR - ESE @ 4.06 miles]

Sample ID:	227359	Sample Dates: 12/13/2011 - 1/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<6.69E+00	0.00E+00	6.69E+00
			Co-58	<5.86E+00	0.00E+00	5.86E+00
			Fe-59	<1.16E+01	0.00E+00	1.16E+01
			Co-60	<9.53E+00	0.00E+00	9.53E+00
			Zn-65	<1.32E+01	0.00E+00	1.32E+01
			Zr-95	<1.18E+01	0.00E+00	1.18E+01
			Nb-95	<6.03E+00	0.00E+00	6.03E+00
			I-131	<6.63E+00	0.00E+00	6.63E+00
			Cs-134	<6.47E+00	0.00E+00	6.47E+00
			Cs-137	<7.43E+00	0.00E+00	7.43E+00
			BaLa-140	<8.79E+00	0.00E+00	8.79E+00
			Be-7	<5.28E+01	0.00E+00	5.28E+01
			K-40	<1.33E+02	0.00E+00	1.33E+02
Sample ID:	229902	Sample Dates: 1/10/2012 - 2/7/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<5.34E+00	0.00E+00	5.34E+00
			Co-58	<6.29E+00	0.00E+00	6.29E+00
			Fe-59	<7.27E+00	0.00E+00	7.27E+00
			Co-60	<8.24E+00	0.00E+00	8.24E+00
			Zn-65	<1.15E+01	0.00E+00	1.15E+01
			Zr-95	<8.04E+00	0.00E+00	8.04E+00
			Nb-95	<6.84E+00	0.00E+00	6.84E+00
			I-131	<6.09E+00	0.00E+00	6.09E+00
			Cs-134	<4.59E+00	0.00E+00	4.59E+00
			Cs-137	<6.83E+00	0.00E+00	6.83E+00
			BaLa-140	<7.42E+00	0.00E+00	7.42E+00
			Be-7	<4.31E+01	0.00E+00	4.31E+01
			K-40	1.52E+02	3.20E+01	6.14E+01
Sample ID:	231375	Sample Dates: 12/13/2011 - 3/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			H3SW	1.60E+03	7.41E+01	1.65E+02
Sample ID:	231690	Sample Dates: 2/7/2012 - 3/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<5.13E+00	0.00E+00	5.13E+00
			Co-58	<5.05E+00	0.00E+00	5.05E+00
			Fe-59	<7.29E+00	0.00E+00	7.29E+00
			Co-60	<6.57E+00	0.00E+00	6.57E+00
			Zn-65	<1.03E+01	0.00E+00	1.03E+01
			Zr-95	<6.47E+00	0.00E+00	6.47E+00
			Nb-95	<4.15E+00	0.00E+00	4.15E+00
			I-131	<4.36E+00	0.00E+00	4.36E+00
			Cs-134	<3.54E+00	0.00E+00	3.54E+00
			Cs-137	<5.86E+00	0.00E+00	5.86E+00
			BaLa-140	<5.65E+00	0.00E+00	5.65E+00
			Be-7	<4.04E+01	0.00E+00	4.04E+01
			K-40	1.04E+02	2.49E+01	6.08E+01
Sample ID:	234609	Sample Dates: 3/6/2012 - 4/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<9.23E+00	0.00E+00	9.23E+00
			Co-58	<6.80E+00	0.00E+00	6.80E+00
			Fe-59	<1.65E+01	0.00E+00	1.65E+01
			Co-60	<6.03E+00	0.00E+00	6.03E+00
			Zn-65	<1.30E+01	0.00E+00	1.30E+01
			Zr-95	<1.32E+01	0.00E+00	1.32E+01
			Nb-95	<6.53E+00	0.00E+00	6.53E+00
			I-131	<8.17E+00	0.00E+00	8.17E+00
			Cs-134	<7.81E+00	0.00E+00	7.81E+00
			Cs-137	<8.86E+00	0.00E+00	8.86E+00
			BaLa-140	<1.29E+01	0.00E+00	1.29E+01

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

Sample Point 211 [INDICATOR - ESE @ 4.06 miles]

Sample ID:	234609	Sample Dates: 3/6/2012 - 4/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			Be-7	<6.56E+01	0.00E+00	6.56E+01
			K-40	1.65E+02	3.69E+01	9.45E+01
Sample ID:	235794	Sample Dates: 4/3/2012 - 5/1/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<4.36E+00	0.00E+00	4.36E+00
			Co-58	<5.24E+00	0.00E+00	5.24E+00
			Fe-59	<9.75E+00	0.00E+00	9.75E+00
			Co-60	<4.49E+00	0.00E+00	4.49E+00
			Zn-65	<8.76E+00	0.00E+00	8.76E+00
			Zr-95	<9.22E+00	0.00E+00	9.22E+00
			Nb-95	<4.16E+00	0.00E+00	4.16E+00
			I-131	<5.38E+00	0.00E+00	5.38E+00
			Cs-134	<4.85E+00	0.00E+00	4.85E+00
			Cs-137	<5.24E+00	0.00E+00	5.24E+00
			BaLa-140	<6.20E+00	0.00E+00	6.20E+00
			Be-7	<4.78E+01	0.00E+00	4.78E+01
			K-40	1.52E+02	2.69E+01	3.94E+01
Sample ID:	236882	Sample Dates: 5/1/2012 - 5/30/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<4.21E+00	0.00E+00	4.21E+00
			Co-58	<4.38E+00	0.00E+00	4.38E+00
			Fe-59	<9.94E+00	0.00E+00	9.94E+00
			Co-60	<6.53E+00	0.00E+00	6.53E+00
			Zn-65	<1.04E+01	0.00E+00	1.04E+01
			Zr-95	<7.57E+00	0.00E+00	7.57E+00
			Nb-95	<4.79E+00	0.00E+00	4.79E+00
			I-131	<4.68E+00	0.00E+00	4.68E+00
			Cs-134	<5.01E+00	0.00E+00	5.01E+00
			Cs-137	<6.01E+00	0.00E+00	6.01E+00
			BaLa-140	<6.83E+00	0.00E+00	6.83E+00
			Be-7	<3.96E+01	0.00E+00	3.96E+01
			K-40	8.19E+01	2.30E+01	5.17E+01
Sample ID:	236947	Sample Dates: 3/6/2012 - 5/30/2012	Nuclide	Activity	1 Sigma Error	LLD
			H3SW	7.20E+02	6.48E+01	1.75E+02
Sample ID:	238796	Sample Dates: 5/30/2012 - 6/26/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<4.58E+00	0.00E+00	4.58E+00
			Co-58	<4.04E+00	0.00E+00	4.04E+00
			Fe-59	<9.84E+00	0.00E+00	9.84E+00
			Co-60	<7.80E+00	0.00E+00	7.80E+00
			Zn-65	<9.08E+00	0.00E+00	9.08E+00
			Zr-95	<7.23E+00	0.00E+00	7.23E+00
			Nb-95	<4.41E+00	0.00E+00	4.41E+00
			I-131	<5.48E+00	0.00E+00	5.48E+00
			Cs-134	<5.24E+00	0.00E+00	5.24E+00
			Cs-137	<5.82E+00	0.00E+00	5.82E+00
			BaLa-140	<6.57E+00	0.00E+00	6.57E+00
			Be-7	<4.22E+01	0.00E+00	4.22E+01
			K-40	1.84E+02	3.04E+01	4.25E+01
Sample ID:	240643	Sample Dates: 6/26/2012 - 7/24/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<4.55E+00	0.00E+00	4.55E+00
			Co-58	<4.59E+00	0.00E+00	4.59E+00
			Fe-59	<1.83E+00	0.00E+00	1.83E+00
			Co-60	<7.81E+00	0.00E+00	7.81E+00
			Zn-65	<9.08E+00	0.00E+00	9.08E+00
			Zr-95	<9.97E+00	0.00E+00	9.97E+00
			Nb-95	<4.44E+00	0.00E+00	4.44E+00
			I-131	<4.52E+00	0.00E+00	4.52E+00
			Cs-134	<3.60E+00	0.00E+00	3.60E+00
			Cs-137	<7.05E+00	0.00E+00	7.05E+00
			BaLa-140	<5.80E+00	0.00E+00	5.80E+00
			Be-7	<3.81E+01	0.00E+00	3.81E+01
			K-40	1.05E+02	2.42E+01	3.94E+01
Sample ID:	242227	Sample Dates: 7/24/2012 - 8/21/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<7.85E+00	0.00E+00	7.85E+00
			Co-58	<5.80E+00	0.00E+00	5.80E+00
			Fe-59	<1.47E+01	0.00E+00	1.47E+01

Sample ID: 242227 **Sample Dates: 7/24/2012 - 8/21/2012**

Nuclide	Activity	1 Sigma Error	LLD
Co-60	<1.05E+01	0.00E+00	1.05E+01
Zn-65	<1.56E+01	0.00E+00	1.56E+01
Zr-95	<1.09E+01	0.00E+00	1.09E+01
Nb-95	<6.13E+00	0.00E+00	6.13E+00
I-131	<5.90E+00	0.00E+00	5.90E+00
Cs-134	<6.27E+00	0.00E+00	6.27E+00
Cs-137	<7.34E+00	0.00E+00	7.34E+00
BaLa-140	<9.03E+00	0.00E+00	9.03E+00
Be-7	<4.26E+01	0.00E+00	4.26E+01
K-40	<1.35E+02	0.00E+00	1.35E+02

Sample ID: 242523 **Sample Dates: 5/30/2012 - 8/21/2012**

Nuclide	Activity	1 Sigma Error	LLD
H3SW	6.08E+02	6.37E+01	1.78E+02

Sample ID: 244373 **Sample Dates: 8/21/2012 - 9/18/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<6.74E+00	0.00E+00	6.74E+00
Co-58	<6.27E+00	0.00E+00	6.27E+00
Fe-59	<1.16E+01	0.00E+00	1.16E+01
Co-60	<1.36E+01	0.00E+00	1.36E+01
Zn-65	<9.85E+00	0.00E+00	9.85E+00
Zr-95	<9.32E+00	0.00E+00	9.32E+00
Nb-95	<5.25E+00	0.00E+00	5.25E+00
I-131	<4.71E+00	0.00E+00	4.71E+00
Cs-134	<7.02E+00	0.00E+00	7.02E+00
Cs-137	<7.43E+00	0.00E+00	7.43E+00
BaLa-140	<5.36E+00	0.00E+00	5.36E+00
Be-7	<5.75E+01	0.00E+00	5.75E+01
K-40	<1.31E+02	0.00E+00	1.31E+02

Sample ID: 247175 **Sample Dates: 9/18/2012 - 10/16/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<6.03E+00	0.00E+00	6.03E+00
Co-58	<5.49E+00	0.00E+00	5.49E+00
Fe-59	<1.07E+01	0.00E+00	1.07E+01
Co-60	<5.47E+00	0.00E+00	5.47E+00
Zn-65	<1.32E+01	0.00E+00	1.32E+01
Zr-95	<9.55E+00	0.00E+00	9.55E+00
Nb-95	<4.26E+00	0.00E+00	4.26E+00
I-131	<5.71E+00	0.00E+00	5.71E+00
Cs-134	<5.38E+00	0.00E+00	5.38E+00
Cs-137	<6.55E+00	0.00E+00	6.55E+00
BaLa-140	<5.81E+00	0.00E+00	5.81E+00
Be-7	<4.51E+01	0.00E+00	4.51E+01
K-40	1.71E+02	2.94E+01	6.04E+01

Sample ID: 248422 **Sample Dates: 10/16/2012 - 11/13/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<6.61E+00	0.00E+00	6.61E+00
Co-58	<5.93E+00	0.00E+00	5.93E+00
Fe-59	<9.59E+00	0.00E+00	9.59E+00
Co-60	<6.07E+00	0.00E+00	6.07E+00
Zn-65	<1.00E+01	0.00E+00	1.00E+01
Zr-95	<9.37E+00	0.00E+00	9.37E+00
Nb-95	<4.51E+00	0.00E+00	4.51E+00
I-131	<5.80E+00	0.00E+00	5.80E+00
Cs-134	<4.72E+00	0.00E+00	4.72E+00
Cs-137	<4.19E+00	0.00E+00	4.19E+00
BaLa-140	<5.69E+00	0.00E+00	5.69E+00
Be-7	<4.36E+01	0.00E+00	4.36E+01
K-40	7.77E+01	2.45E+01	7.10E+01

Sample ID: 249043 **Sample Dates: 8/21/2012 - 12/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
H3SW	6.42E+02	6.01E+01	1.64E+02

Sample ID: 249525 **Sample Dates: 11/13/2012 - 12/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
Mn-54	<5.24E+00	0.00E+00	5.24E+00
Co-58	<5.00E+00	0.00E+00	5.00E+00
Fe-59	<1.05E+01	0.00E+00	1.05E+01
Co-60	<9.44E+00	0.00E+00	9.44E+00
Zn-65	<1.34E+01	0.00E+00	1.34E+01
Zr-95	<1.08E+01	0.00E+00	1.08E+01
Nb-95	<4.61E+00	0.00E+00	4.61E+00

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

Sample Point 211 [INDICATOR - ESE @ 4.06 miles]

Sample ID:	249525	Sample Dates: 11/13/2012 - 12/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<5.51E+00	0.00E+00	5.51E+00
			Cs-134	<4.82E+00	0.00E+00	4.82E+00
			Cs-137	<5.88E+00	0.00E+00	5.88E+00
			BaLa-140	<5.00E+00	0.00E+00	5.00E+00
			Be-7	<4.55E+01	0.00E+00	4.55E+01
			K-40	2.21E+02	2.93E+01	4.82E+01

Sample Point 215 [CONTROL - NNE @ 4.21 miles]

Sample ID:	227360	Sample Dates: 12/13/2011 - 1/10/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<4.58E+00	0.00E+00	4.58E+00
			Co-58	<6.13E+00	0.00E+00	6.13E+00
			Fe-59	<1.03E+01	0.00E+00	1.03E+01
			Co-60	<5.73E+00	0.00E+00	5.73E+00
			Zn-65	<1.00E+01	0.00E+00	1.00E+01
			Zr-95	<9.72E+00	0.00E+00	9.72E+00
			Nb-95	<4.95E+00	0.00E+00	4.95E+00
			I-131	<5.83E+00	0.00E+00	5.83E+00
			Cs-134	<3.28E+00	0.00E+00	3.28E+00
			Cs-137	<5.24E+00	0.00E+00	5.24E+00
			BaLa-140	<5.19E+00	0.00E+00	5.19E+00
			Be-7	<3.64E+01	0.00E+00	3.64E+01
			K-40	2.85E+02	3.31E+01	3.72E+01
Sample ID:	229903	Sample Dates: 1/10/2012 - 2/7/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<5.08E+00	0.00E+00	5.08E+00
			Co-58	<4.68E+00	0.00E+00	4.68E+00
			Fe-59	<9.40E+00	0.00E+00	9.40E+00
			Co-60	<1.21E+01	0.00E+00	1.21E+01
			Zn-65	<1.07E+01	0.00E+00	1.07E+01
			Zr-95	<8.80E+00	0.00E+00	8.80E+00
			Nb-95	<4.68E+00	0.00E+00	4.68E+00
			I-131	<5.25E+00	0.00E+00	5.25E+00
			Cs-134	<4.40E+00	0.00E+00	4.40E+00
			Cs-137	<6.27E+00	0.00E+00	6.27E+00
			BaLa-140	<6.53E+00	0.00E+00	6.53E+00
			Be-7	<3.94E+01	0.00E+00	3.94E+01
			K-40	6.62E+01	2.21E+01	5.77E+01
Sample ID:	231376	Sample Dates: 12/13/2011 - 3/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			H3SW	4.07E+02	5.74E+01	1.66E+02
Sample ID:	231691	Sample Dates: 2/7/2012 - 3/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<4.97E+00	0.00E+00	4.97E+00
			Co-58	<3.74E+00	0.00E+00	3.74E+00
			Fe-59	<8.47E+00	0.00E+00	8.47E+00
			Co-60	<5.95E+00	0.00E+00	5.95E+00
			Zn-65	<7.01E+00	0.00E+00	7.01E+00
			Zr-95	<5.85E+00	0.00E+00	5.85E+00
			Nb-95	<4.96E+00	0.00E+00	4.96E+00
			I-131	<4.94E+00	0.00E+00	4.94E+00
			Cs-134	<4.37E+00	0.00E+00	4.37E+00
			Cs-137	<4.51E+00	0.00E+00	4.51E+00
			BaLa-140	<5.65E+00	0.00E+00	5.65E+00
			Be-7	<3.99E+01	0.00E+00	3.99E+01
			K-40	2.10E+02	3.60E+01	4.42E+01
Sample ID:	234610	Sample Dates: 3/6/2012 - 4/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<4.70E+00	0.00E+00	4.70E+00
			Co-58	<4.08E+00	0.00E+00	4.08E+00
			Fe-59	<9.38E+00	0.00E+00	9.38E+00
			Co-60	<6.36E+00	0.00E+00	6.36E+00
			Zn-65	<9.98E+00	0.00E+00	9.98E+00
			Zr-95	<9.22E+00	0.00E+00	9.22E+00
			Nb-95	<4.44E+00	0.00E+00	4.44E+00
			I-131	<3.83E+00	0.00E+00	3.83E+00
			Cs-134	<3.18E+00	0.00E+00	3.18E+00
			Cs-137	<4.87E+00	0.00E+00	4.87E+00
			BaLa-140	<5.22E+00	0.00E+00	5.22E+00
			Be-7	<4.05E+01	0.00E+00	4.05E+01

Sample ID:	234610	Sample Dates: 3/6/2012 - 4/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			K-40	6.41E+01	2.80E+01	6.76E+01
Sample ID:	**235798**	**Sample Dates: 4/3/2012 - 5/1/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Mn-54	<6.79E+00	0.00E+00	6.79E+00
			Co-58	<6.52E+00	0.00E+00	6.52E+00
			Fe-59	<1.16E+01	0.00E+00	1.16E+01
			Co-60	<5.46E+00	0.00E+00	5.46E+00
			Zn-65	<1.37E+01	0.00E+00	1.37E+01
			Zr-95	<9.70E+00	0.00E+00	9.70E+00
			Nb-95	<6.15E+00	0.00E+00	6.15E+00
			I-131	<5.91E+00	0.00E+00	5.91E+00
			Cs-134	<5.19E+00	0.00E+00	5.19E+00
			Cs-137	<7.50E+00	0.00E+00	7.50E+00
			BaLa-140	<1.02E+01	0.00E+00	1.02E+01
			Be-7	<6.06E+01	0.00E+00	6.06E+01
			K-40	<1.30E+02	0.00E+00	1.30E+02
Sample ID:	**236897**	**Sample Dates: 5/1/2012 - 5/30/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Mn-54	<6.19E+00	0.00E+00	6.19E+00
			Co-58	<4.73E+00	0.00E+00	4.73E+00
			Fe-59	<1.06E+01	0.00E+00	1.06E+01
			Co-60	<9.44E+00	0.00E+00	9.44E+00
			Zn-65	<1.66E+01	0.00E+00	1.66E+01
			Zr-95	<1.15E+01	0.00E+00	1.15E+01
			Nb-95	<5.23E+00	0.00E+00	5.23E+00
			I-131	<4.85E+00	0.00E+00	4.85E+00
			Cs-134	<4.82E+00	0.00E+00	4.82E+00
			Cs-137	<8.85E+00	0.00E+00	8.85E+00
			BaLa-140	<8.64E+00	0.00E+00	8.64E+00
			Be-7	<5.53E+01	0.00E+00	5.53E+01
			K-40	<1.11E+02	0.00E+00	1.11E+02
Sample ID:	**236948**	**Sample Dates: 3/6/2012 - 5/30/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			H3SW	4.09E+02	6.00E+01	1.75E+02
Sample ID:	**238797**	**Sample Dates: 5/30/2012 - 6/26/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Mn-54	<5.44E+00	0.00E+00	5.44E+00
			Co-58	<3.86E+00	0.00E+00	3.86E+00
			Fe-59	<7.18E+00	0.00E+00	7.18E+00
			Co-60	<7.95E+00	0.00E+00	7.95E+00
			Zn-65	<7.58E+00	0.00E+00	7.58E+00
			Zr-95	<7.23E+00	0.00E+00	7.23E+00
			Nb-95	<3.56E+00	0.00E+00	3.56E+00
			I-131	<4.28E+00	0.00E+00	4.28E+00
			Cs-134	<4.11E+00	0.00E+00	4.11E+00
			Cs-137	<5.57E+00	0.00E+00	5.57E+00
			BaLa-140	<6.14E+00	0.00E+00	6.14E+00
			Be-7	<3.18E+01	0.00E+00	3.18E+01
			K-40	6.37E+01	1.89E+01	2.70E+01
Sample ID:	**240644**	**Sample Dates: 6/26/2012 - 7/24/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Mn-54	<4.76E+00	0.00E+00	4.76E+00
			Co-58	<3.65E+00	0.00E+00	3.65E+00
			Fe-59	<9.07E+00	0.00E+00	9.07E+00
			Co-60	<5.77E+00	0.00E+00	5.77E+00
			Zn-65	<1.03E+01	0.00E+00	1.03E+01
			Zr-95	<8.30E+00	0.00E+00	8.30E+00
			Nb-95	<3.09E+00	0.00E+00	3.09E+00
			I-131	<4.09E+00	0.00E+00	4.09E+00
			Cs-134	<4.47E+00	0.00E+00	4.47E+00
			Cs-137	<5.18E+00	0.00E+00	5.18E+00
			BaLa-140	<6.88E+00	0.00E+00	6.88E+00
			Be-7	<3.54E+01	0.00E+00	3.54E+01
			K-40	5.30E+01	2.19E+01	4.87E+01
Sample ID:	**242228**	**Sample Dates: 7/24/2012 - 8/21/2012**	**Nuclide**	**Activity**	**1 Sigma Error**	**LLD**
			Mn-54	<4.55E+00	0.00E+00	4.55E+00
			Co-58	<4.63E+00	0.00E+00	4.63E+00
			Fe-59	<1.08E+01	0.00E+00	1.08E+01
			Co-60	<7.76E+00	0.00E+00	7.76E+00

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

Sample Point 215 [CONTROL - NNE @ 4.21 miles]

Sample ID:	242228	Sample Dates: 7/24/2012 - 8/21/2012	Nuclide	Activity	1 Sigma Error	LLD
			Zn-65	<1.12E+01	0.00E+00	1.12E+01
			Zr-95	<1.10E+01	0.00E+00	1.10E+01
			Nb-95	<5.24E+00	0.00E+00	5.24E+00
			I-131	<4.98E+00	0.00E+00	4.98E+00
			Cs-134	<5.70E+00	0.00E+00	5.70E+00
			Cs-137	<7.99E+00	0.00E+00	7.99E+00
			BaLa-140	<7.60E+00	0.00E+00	7.60E+00
			Be-7	<4.75E+01	0.00E+00	4.75E+01
			K-40	1.14E+02	2.15E+01	5.17E+01
Sample ID:	242524	Sample Dates: 5/30/2012 - 8/21/2012	Nuclide	Activity	1 Sigma Error	LLD
			H3SW	2.68E+02	5.92E+01	1.80E+02
Sample ID:	244374	Sample Dates: 8/21/2012 - 9/18/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<5.56E+00	0.00E+00	5.56E+00
			Co-58	<4.79E+00	0.00E+00	4.79E+00
			Fe-59	<1.03E+01	0.00E+00	1.03E+01
			Co-60	<6.71E+00	0.00E+00	6.71E+00
			Zn-65	<1.17E+01	0.00E+00	1.17E+01
			Zr-95	<8.46E+00	0.00E+00	8.46E+00
			Nb-95	<4.39E+00	0.00E+00	4.39E+00
			I-131	<5.52E+00	0.00E+00	5.52E+00
			Cs-134	<4.42E+00	0.00E+00	4.42E+00
			Cs-137	<5.12E+00	0.00E+00	5.12E+00
			BaLa-140	<4.17E+00	0.00E+00	4.17E+00
			Be-7	<3.89E+01	0.00E+00	3.89E+01
			K-40	2.38E+02	3.31E+01	6.48E+01
Sample ID:	247176	Sample Dates: 9/18/2012 - 10/16/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<5.07E+00	0.00E+00	5.07E+00
			Co-58	<5.12E+00	0.00E+00	5.12E+00
			Fe-59	<7.42E+00	0.00E+00	7.42E+00
			Co-60	<8.47E+00	0.00E+00	8.47E+00
			Zn-65	<1.16E+01	0.00E+00	1.16E+01
			Zr-95	<6.76E+00	0.00E+00	6.76E+00
			Nb-95	<4.92E+00	0.00E+00	4.92E+00
			I-131	<5.41E+00	0.00E+00	5.41E+00
			Cs-134	<5.78E+00	0.00E+00	5.78E+00
			Cs-137	<6.41E+00	0.00E+00	6.41E+00
			BaLa-140	<6.80E+00	0.00E+00	6.80E+00
			Be-7	<3.43E+01	0.00E+00	3.43E+01
			K-40	<7.40E+01	0.00E+00	7.40E+01
Sample ID:	248423	Sample Dates: 10/16/2012 - 11/13/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<5.67E+00	0.00E+00	5.67E+00
			Co-58	<5.80E+00	0.00E+00	5.80E+00
			Fe-59	<1.36E+01	0.00E+00	1.36E+01
			Co-60	<9.94E+00	0.00E+00	9.94E+00
			Zn-65	<1.58E+01	0.00E+00	1.58E+01
			Zr-95	<1.25E+01	0.00E+00	1.25E+01
			Nb-95	<9.21E+00	0.00E+00	9.21E+00
			I-131	<6.62E+00	0.00E+00	6.62E+00
			Cs-134	<5.68E+00	0.00E+00	5.68E+00
			Cs-137	<5.37E+00	0.00E+00	5.37E+00
			BaLa-140	<2.57E+00	0.00E+00	2.57E+00
			Be-7	<5.19E+01	0.00E+00	5.19E+01
			K-40	<1.31E+02	0.00E+00	1.31E+02
Sample ID:	249044	Sample Dates: 8/21/2012 - 12/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			H3SW	4.01E+02	5.68E+01	1.65E+02
Sample ID:	249526	Sample Dates: 11/13/2012 - 12/11/2012	Nuclide	Activity	1 Sigma Error	LLD
			Mn-54	<4.72E+00	0.00E+00	4.72E+00
			Co-58	<6.09E+00	0.00E+00	6.09E+00
			Fe-59	<1.22E+01	0.00E+00	1.22E+01
			Co-60	<7.23E+00	0.00E+00	7.23E+00
			Zn-65	<1.14E+01	0.00E+00	1.14E+01
			Zr-95	<9.66E+00	0.00E+00	9.66E+00
			Nb-95	<7.17E+00	0.00E+00	7.17E+00
			I-131	<6.50E+00	0.00E+00	6.50E+00

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

Sample Point 215 [CONTROL - NNE @ 4.21 miles]

Sample ID: 249526 **Sample Dates: 11/13/2012 - 12/11/2012**

Nuclide	Activity	1 Sigma Error	LLD
Cs-134	<5.02E+00	0.00E+00	5.02E+00
Cs-137	<6.09E+00	0.00E+00	6.09E+00
BaLa-140	<5.44E+00	0.00E+00	5.44E+00
Be-7	<4.34E+01	0.00E+00	4.34E+01
K-40	1.39E+02	3.86E+01	5.35E+01

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 200 [INDICATOR - NNE @ 0.63 miles] **TLD RING TLD_INNER**

Sample ID	Sample Dates	Nuclide	Activity
232943	12/14/2011 - 3/14/2012	mR/Std Qtr	19.0
237629	3/14/2012 - 6/13/2012	mR/Std Qtr	20.0
243995	6/13/2012 - 9/12/2012	mR/Std Qtr	16.0
249653	9/12/2012 - 12/12/2012	mR/Std Qtr	19.0

Sample Point 201 [INDICATOR - NE @ 0.53 miles] **TLD RING TLD_INNER**

Sample ID	Sample Dates	Nuclide	Activity
232944	12/14/2011 - 3/14/2012	mR/Std Qtr	19.0
237630	3/14/2012 - 6/13/2012	mR/Std Qtr	19.0
243996	6/13/2012 - 9/12/2012	mR/Std Qtr	15.0
249654	9/12/2012 - 12/12/2012	mR/Std Qtr	20.0

Sample Point 203 [INDICATOR - ESE @ 0.38 miles] **TLD RING TLD_INNER**

Sample ID	Sample Dates	Nuclide	Activity
232945	12/14/2011 - 3/14/2012	mR/Std Qtr	21.0
237631	3/14/2012 - 6/13/2012	mR/Std Qtr	20.0
243997	6/13/2012 - 9/12/2012	mR/Std Qtr	18.0
249655	9/12/2012 - 12/12/2012	mR/Std Qtr	23.0

Sample Point 204 [INDICATOR - SSW @ 0.48 miles] **TLD RING TLD_INNER**

Sample ID	Sample Dates	Nuclide	Activity
232946	12/14/2011 - 3/14/2012	mR/Std Qtr	19.0
237632	3/14/2012 - 6/13/2012	mR/Std Qtr	20.0
243998	6/13/2012 - 9/12/2012	mR/Std Qtr	17.0
249656	9/12/2012 - 12/12/2012	mR/Std Qtr	20.0

Sample Point 205 [INDICATOR - SW @ 0.25 miles] **TLD RING TLD_INNER**

Sample ID	Sample Dates	Nuclide	Activity
232947	12/14/2011 - 3/14/2012	mR/Std Qtr	21.0
237633	3/14/2012 - 6/13/2012	mR/Std Qtr	24.0

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 205 [INDICATOR - SW @ 0.25 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
243999	6/13/2012 - 9/12/2012	mR/Std Qtr	17.0
249657	9/12/2012 - 12/12/2012	mR/Std Qtr	21.0

Sample Point 206 [INDICATOR - WNW @ 0.67 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
232948	12/14/2011 - 3/14/2012	mR/Std Qtr	23.0
237634	3/14/2012 - 6/13/2012	mR/Std Qtr	24.0
244000	6/13/2012 - 9/12/2012	mR/Std Qtr	18.0
249658	9/12/2012 - 12/12/2012	mR/Std Qtr	23.0

Sample Point 207 [INDICATOR - NNW @ 0.95 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
232949	12/14/2011 - 3/14/2012	mR/Std Qtr	23.0
237635	3/14/2012 - 6/13/2012	mR/Std Qtr	21.0
244001	6/13/2012 - 9/12/2012	mR/Std Qtr	18.0
249659	9/12/2012 - 12/12/2012	mR/Std Qtr	21.0

Sample Point 212 [INDICATOR - E @ 3.32 miles] — TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
232950	12/14/2011 - 3/14/2012	mR/Std Qtr	19.0
237636	3/14/2012 - 6/13/2012	mR/Std Qtr	19.0
244002	6/13/2012 - 9/12/2012	mR/Std Qtr	14.0
249660	9/12/2012 - 12/12/2012	mR/Std Qtr	18.0

Sample Point 217 [CONTROL - SSE @ 10.3 miles] — TLD RING TLD_CTRL

Sample ID:	Sample Dates:	Nuclide	Activity
232951	12/14/2011 - 3/14/2012	mR/Std Qtr	15.0
237637	3/14/2012 - 6/13/2012	mR/Std Qtr	12.0
244003	6/13/2012 - 9/12/2012	mR/Std Qtr	12.0
249661	9/12/2012 - 12/12/2012	mR/Std Qtr	13.0

Sample Point 222 [INDICATOR - N @ 0.7 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
232928	12/14/2011 - 3/14/2012	mR/Std Qtr	20
237614	3/14/2012 - 6/13/2012	mR/Std Qtr	19.0
243980	6/13/2012 - 9/12/2012	mR/Std Qtr	16.0

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 222 [INDICATOR - N @ 0.7 miles] TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
249638	9/12/2012 - 12/12/2012	mR/Std Qtr	19.0

Sample Point 223 [INDICATOR - E @ 0.57 miles] TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
232929	12/14/2011 - 3/14/2012	mR/Std Qtr	21
237615	3/14/2012 - 6/13/2012	mR/Std Qtr	20.0
243981	6/13/2012 - 9/12/2012	mR/Std Qtr	21.0
249639	9/12/2012 - 12/12/2012	mR/Std Qtr	20.0

Sample Point 225 [INDICATOR - SE @ 0.68 miles] TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
232930	12/14/2011 - 3/14/2012	mR/Std Qtr	22.0
237616	3/14/2012 - 6/13/2012	mR/Std Qtr	20.0
243982	6/13/2012 - 9/12/2012	mR/Std Qtr	17.0
249640	9/12/2012 - 12/12/2012	mR/Std Qtr	20.0

Sample Point 226 [INDICATOR - S @ 0.48 miles] TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
232952	12/14/2011 - 3/14/2012	mR/Std Qtr	20.0
237638	3/14/2012 - 6/13/2012	mR/Std Qtr	17.0
244004	6/13/2012 - 9/12/2012	mR/Std Qtr	18.0
249662	9/12/2012 - 12/12/2012	mR/Std Qtr	20.0

Sample Point 227 [INDICATOR - WSW @ 0.52 miles] TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
232931	12/14/2011 - 3/14/2012	mR/Std Qtr	21.0
237617	3/14/2012 - 6/13/2012	mR/Std Qtr	17.0
243983	6/13/2012 - 9/12/2012	mR/Std Qtr	17.0
249641	9/12/2012 - 12/12/2012	mR/Std Qtr	18.0

Sample Point 228 [INDICATOR - W @ 0.61 miles] TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
232932	12/14/2011 - 3/14/2012	mR/Std Qtr	20.0
237618	3/14/2012 - 6/13/2012	mR/Std Qtr	17.0
243984	6/13/2012 - 9/12/2012	mR/Std Qtr	17.0
249642	9/12/2012 - 12/12/2012	mR/Std Qtr	18.0

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 229 [INDICATOR - NW @ 0.84 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
232933	12/14/2011 - 3/14/2012	mR/Std Qtr	27.0
237619	3/14/2012 - 6/13/2012	mR/Std Qtr	23.0
243985	6/13/2012 - 9/12/2012	mR/Std Qtr	22.0
249643	9/12/2012 - 12/12/2012	mR/Std Qtr	24.0

Sample Point 230 [INDICATOR - N @ 4.37 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
232934	12/14/2011 - 3/14/2012	mR/Std Qtr	15.0
237620	3/14/2012 - 6/13/2012	mR/Std Qtr	13.0
243986	6/13/2012 - 9/12/2012	mR/Std Qtr	12.0
249644	9/12/2012 - 12/12/2012	mR/Std Qtr	13.0

Sample Point 231 [INDICATOR - NNE @ 4.21 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
232935	12/14/2011 - 3/14/2012	mR/Std Qtr	21.0
237621	3/14/2012 - 6/13/2012	mR/Std Qtr	18.0
243987	6/13/2012 - 9/12/2012	mR/Std Qtr	20.0
249645	9/12/2012 - 12/12/2012	mR/Std Qtr	20.0

Sample Point 232 [INDICATOR - NE @ 4.18 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
232936	12/14/2011 - 3/14/2012	mR/Std Qtr	24.0
237622	3/14/2012 - 6/13/2012	mR/Std Qtr	22.0
243988	6/13/2012 - 9/12/2012	mR/Std Qtr	20.0
249646	9/12/2012 - 12/12/2012	mR/Std Qtr	23.0

Sample Point 233 [INDICATOR - ENE @ 3.95 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
232937	12/14/2011 - 3/14/2012	mR/Std Qtr	18.0
237623	3/14/2012 - 6/13/2012	mR/Std Qtr	14.0
243989	6/13/2012 - 9/12/2012	mR/Std Qtr	14.0
249647	9/12/2012 - 12/12/2012	mR/Std Qtr	16.0

Sample Point 234 [INDICATOR - E @ 4.5 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
232938	12/14/2011 - 3/14/2012	mR/Std Qtr	20.0

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 234 [INDICATOR - E @ 4.5 miles] TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
237624	3/14/2012 - 6/13/2012	mR/Std Qtr	17.0
243990	6/13/2012 - 9/12/2012	mR/Std Qtr	16.0
249648	9/12/2012 - 12/12/2012	mR/Std Qtr	16.0

Sample Point 235 [INDICATOR - ESE @ 4.07 miles] TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
232939	12/14/2011 - 3/14/2012	mR/Std Qtr	20.0
237625	3/14/2012 - 6/13/2012	mR/Std Qtr	17.0
243991	6/13/2012 - 9/12/2012	mR/Std Qtr	15.0
249649	9/12/2012 - 12/12/2012	mR/Std Qtr	16.0

Sample Point 236 [INDICATOR - SE @ 4.25 miles] TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
232940	12/14/2011 - 3/14/2012	mR/Std Qtr	23.0
237626	3/14/2012 - 6/13/2012	mR/Std Qtr	21.0
243992	6/13/2012 - 9/12/2012	mR/Std Qtr	19.0
249650	9/12/2012 - 12/12/2012	mR/Std Qtr	22.0

Sample Point 237 [INDICATOR - SSE @ 4.75 miles] TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
232941	12/14/2011 - 3/14/2012	mR/Std Qtr	26.0
237627	3/14/2012 - 6/13/2012	mR/Std Qtr	22.0
243993	6/13/2012 - 9/12/2012	mR/Std Qtr	20.0
249651	9/12/2012 - 12/12/2012	mR/Std Qtr	25.0

Sample Point 238 [INDICATOR - S @ 4.02 miles] TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
232942	12/14/2011 - 3/14/2012	mR/Std Qtr	20.0
237628	3/14/2012 - 6/13/2012	mR/Std Qtr	18.0
243994	6/13/2012 - 9/12/2012	mR/Std Qtr	16.0
249652	9/12/2012 - 12/12/2012	mR/Std Qtr	17.0

Sample Point 239 [INDICATOR - SSW @ 4.49 miles] TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
232953	12/14/2011 - 3/14/2012	mR/Std Qtr	22.0
237639	3/14/2012 - 6/13/2012	mR/Std Qtr	20.0

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 239 [INDICATOR - SSW @ 4.49 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
244005	6/13/2012 - 9/12/2012	mR/Std Qtr	17.0
249663	9/12/2012 - 12/12/2012	mR/Std Qtr	21.0

Sample Point 240 [INDICATOR - SW @ 4.07 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
232954	12/14/2011 - 3/14/2012	mR/Std Qtr	14.0
237640	3/14/2012 - 6/13/2012	mR/Std Qtr	12.0
244006	6/13/2012 - 9/12/2012	mR/Std Qtr	12.0
249664	9/12/2012 - 12/12/2012	mR/Std Qtr	13.0

Sample Point 241 [INDICATOR - WSW @ 4.58 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
232955	12/14/2011 - 3/14/2012	mR/Std Qtr	14.0
237641	3/14/2012 - 6/13/2012	mR/Std Qtr	15.0
244007	6/13/2012 - 9/12/2012	mR/Std Qtr	13.0
249665	9/12/2012 - 12/12/2012	mR/Std Qtr	15.0

Sample Point 242 [INDICATOR - W @ 4.56 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
232956	12/14/2011 - 3/14/2012	mR/Std Qtr	20.0
237642	3/14/2012 - 6/13/2012	mR/Std Qtr	18.0
244008	6/13/2012 - 9/12/2012	mR/Std Qtr	15.0
249666	9/12/2012 - 12/12/2012	mR/Std Qtr	19.0

Sample Point 243 [INDICATOR - WNW @ 4.39 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
232957	12/14/2011 - 3/14/2012	mR/Std Qtr	18.0
237643	3/14/2012 - 6/13/2012	mR/Std Qtr	16.0
244009	6/13/2012 - 9/12/2012	mR/Std Qtr	15.0
249667	9/12/2012 - 12/12/2012	mR/Std Qtr	18.0

Sample Point 244 [INDICATOR - NW @ 4.02 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
232958	12/14/2011 - 3/14/2012	mR/Std Qtr	22.0
237644	3/14/2012 - 6/13/2012	mR/Std Qtr	18.0
244010	6/13/2012 - 9/12/2012	mR/Std Qtr	17.0

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 244 [INDICATOR - NW @ 4.02 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
249668	9/12/2012 - 12/12/2012	mR/Std Qtr	20.0

Sample Point 245 [INDICATOR - NNW @ 4.01 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
232959	12/14/2011 - 3/14/2012	mR/Std Qtr	20.0
237645	3/14/2012 - 6/13/2012	mR/Std Qtr	17.0
244011	6/13/2012 - 9/12/2012	mR/Std Qtr	15.0
249669	9/12/2012 - 12/12/2012	mR/Std Qtr	20.0

Sample Point 246 [INDICATOR - ENE @ 7.87 miles] — TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
232969	12/14/2011 - 3/14/2012	mR/Std Qtr	17.0
237655	3/14/2012 - 6/13/2012	mR/Std Qtr	15.0
244021	6/13/2012 - 9/12/2012	mR/Std Qtr	14.0
249720	9/12/2012 - 12/12/2012	mR/Std Qtr	15.0

Sample Point 247 [CONTROL - ESE @ 7.33 miles] — TLD RING TLD_CTRL

Sample ID:	Sample Dates:	Nuclide	Activity
232846	12/14/2011 - 3/14/2012	mR/Std Qtr	16.0
237532	3/14/2012 - 6/13/2012	mR/Std Qtr	15.0
243898	6/13/2012 - 9/12/2012	mR/Std Qtr	13.0
249553	9/12/2012 - 12/12/2012	mR/Std Qtr	14.0

Sample Point 248 [INDICATOR - S @ 6.54 miles] — TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
232845	12/14/2011 - 3/14/2012	mR/Std Qtr	17.0
237531	3/14/2012 - 6/13/2012	mR/Std Qtr	15.0
243897	6/13/2012 - 9/12/2012	mR/Std Qtr	14.0
249552	9/12/2012 - 12/12/2012	mR/Std Qtr	16.0

Sample Point 249 [INDICATOR - S @ 7.17 miles] — TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
232847	12/14/2011 - 3/14/2012	mR/Std Qtr	19.0
237533	3/14/2012 - 6/13/2012	mR/Std Qtr	17.0
243899	6/13/2012 - 9/12/2012	mR/Std Qtr	15.0
249554	9/12/2012 - 12/12/2012	mR/Std Qtr	19.0

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 250 [INDICATOR - WSW @ 10.4 miles] — TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
232850	12/14/2011 - 3/14/2012	mR/Std Qtr	19.0
237536	3/14/2012 - 6/13/2012	mR/Std Qtr	17.0
243902	6/13/2012 - 9/12/2012	mR/Std Qtr	15.0
249557	9/12/2012 - 12/12/2012	mR/Std Qtr	18.0

Sample Point 251 [CONTROL - WNW @ 9.72 miles] — TLD RING TLD_CTRL

Sample ID:	Sample Dates:	Nuclide	Activity
232848	12/14/2011 - 3/14/2012	mR/Std Qtr	20.0
237534	3/14/2012 - 6/13/2012	mR/Std Qtr	16.0
243900	6/13/2012 - 9/12/2012	mR/Std Qtr	19.0
249555	9/12/2012 - 12/12/2012	mR/Std Qtr	19.0

Sample Point 255 [INDICATOR - ENE @ 0.61 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
232849	12/14/2011 - 3/14/2012	mR/Std Qtr	22.0
237535	3/14/2012 - 6/13/2012	mR/Std Qtr	21.0
243901	6/13/2012 - 9/12/2012	mR/Std Qtr	20.0
249556	9/12/2012 - 12/12/2012	mR/Std Qtr	23.0

Sample Point 256 [INDICATOR - SSE @ 0.58 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
232858	12/14/2011 - 3/14/2012	mR/Std Qtr	21.0
237544	3/14/2012 - 6/13/2012	mR/Std Qtr	20.0
243910	6/13/2012 - 9/12/2012	mR/Std Qtr	20.0
249565	9/12/2012 - 12/12/2012	mR/Std Qtr	24.0

Sample Point 258 [CONTROL - W @ 9.84 miles] — TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
232851	12/14/2011 - 3/14/2012	mR/Std Qtr	22.0
237537	3/14/2012 - 6/13/2012	mR/Std Qtr	19.0
243903	6/13/2012 - 9/12/2012	mR/Std Qtr	18.0
249558	9/12/2012 - 12/12/2012	mR/Std Qtr	20.0

Sample Point 259 [SPECIAL - SW @ 0.38 miles] — TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
232968	12/14/2011 - 3/14/2012	mR/Std Qtr	20.0

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 259 [SPECIAL - SW @ 0.38 miles] TLD RING TLD_SPEC

Sample ID:	237654	Sample Dates: 3/14/2012 - 6/13/2012	Nuclide	Activity
			mR/Std Qtr	18.0
Sample ID:	244020	Sample Dates: 6/13/2012 - 9/12/2012	Nuclide	Activity
			mR/Std Qtr	16.0
Sample ID:	249678	Sample Dates: 9/12/2012 - 12/12/2012	Nuclide	Activity
			mR/Std Qtr	19.0

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	226938	Sample Dates: 1/4/2012 - 1/4/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<3.42E+01	0.00E+00	3.42E+01
			Cs-134	<3.02E+01	0.00E+00	3.02E+01
			Cs-137	<3.37E+01	0.00E+00	3.37E+01
			Be-7	1.26E+03	1.73E+02	2.33E+02
			K-40	4.94E+03	4.56E+02	4.41E+02
Sample ID:	227933	Sample Dates: 2/7/2012 - 2/7/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<2.65E+01	0.00E+00	2.65E+01
			Cs-134	<2.07E+01	0.00E+00	2.07E+01
			Cs-137	<2.49E+01	0.00E+00	2.49E+01
			Be-7	7.54E+02	1.02E+02	1.59E+02
			K-40	5.29E+03	3.27E+02	2.58E+02
Sample ID:	230885	Sample Dates: 3/6/2012 - 3/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<2.61E+01	0.00E+00	2.61E+01
			Cs-134	<1.98E+01	0.00E+00	1.98E+01
			Cs-137	<2.52E+01	0.00E+00	2.52E+01
			Be-7	1.01E+03	1.32E+02	1.50E+02
			K-40	3.56E+03	2.72E+02	2.65E+02
Sample ID:	233489	Sample Dates: 4/3/2012 - 4/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.76E+01	0.00E+00	1.76E+01
			Cs-134	<1.82E+01	0.00E+00	1.82E+01
			Cs-137	<2.22E+01	0.00E+00	2.22E+01
			Be-7	2.72E+02	6.28E+01	1.54E+02
			K-40	4.06E+03	3.50E+02	3.13E+02
Sample ID:	235425	Sample Dates: 5/1/2012 - 5/1/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<2.40E+01	0.00E+00	2.40E+01
			Cs-134	<2.74E+01	0.00E+00	2.74E+01
			Cs-137	<2.71E+01	0.00E+00	2.71E+01
			Be-7	7.64E+02	1.02E+02	1.68E+02
			K-40	5.29E+03	3.91E+02	2.67E+02
Sample ID:	236737	Sample Dates: 6/5/2012 - 6/5/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.88E+01	0.00E+00	1.88E+01
			Cs-134	<1.54E+01	0.00E+00	1.54E+01
			Cs-137	<1.78E+01	0.00E+00	1.78E+01
			Be-7	3.74E+02	8.32E+01	1.48E+02
			K-40	5.02E+03	2.61E+02	1.60E+02
Sample ID:	238704	Sample Dates: 7/3/2012 - 7/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<2.59E+01	0.00E+00	2.59E+01
			Cs-134	<2.72E+01	0.00E+00	2.72E+01
			Cs-137	<3.42E+01	0.00E+00	3.42E+01
			Be-7	6.18E+02	1.32E+02	2.25E+02
			K-40	3.76E+03	3.58E+02	3.71E+02
Sample ID:	240347	Sample Dates: 8/7/2012 - 8/7/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<2.14E+01	0.00E+00	2.14E+01
			Cs-134	<1.76E+01	0.00E+00	1.76E+01
			Cs-137	<2.34E+01	0.00E+00	2.34E+01
			Be-7	5.77E+02	1.02E+02	1.70E+02
			K-40	4.47E+03	2.54E+02	1.51E+02
Sample ID:	242218	Sample Dates: 9/5/2012 - 9/5/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<2.22E+01	0.00E+00	2.22E+01
			Cs-134	<1.95E+01	0.00E+00	1.95E+01

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Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	242218	Sample Dates: 9/5/2012 - 9/5/2012	Nuclide	Activity	1 Sigma Error	LLD
			Cs-137	<2.24E+01	0.00E+00	2.24E+01
			Be-7	1.01E+03	1.25E+02	1.39E+02
			K-40	4.19E+03	2.53E+02	1.33E+02
Sample ID:	244917	Sample Dates: 10/2/2012 - 10/2/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<2.09E+01	0.00E+00	2.09E+01
			Cs-134	<2.15E+01	0.00E+00	2.15E+01
			Cs-137	<3.24E+01	0.00E+00	3.24E+01
			Be-7	9.42E+02	1.10E+02	1.61E+02
			K-40	3.72E+03	3.29E+02	3.36E+02
Sample ID:	247393	Sample Dates: 11/6/2012 - 11/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.87E+01	0.00E+00	1.87E+01
			Cs-134	<2.49E+01	0.00E+00	2.49E+01
			Cs-137	<2.90E+01	0.00E+00	2.90E+01
			Be-7	1.28E+03	1.25E+02	1.67E+02
			K-40	3.33E+03	2.82E+02	2.74E+02
Sample ID:	248662	Sample Dates: 12/4/2012 - 12/4/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<2.36E+01	0.00E+00	2.36E+01
			Cs-134	<2.05E+01	0.00E+00	2.05E+01
			Cs-137	<2.97E+01	0.00E+00	2.97E+01
			Be-7	6.94E+02	1.04E+02	1.69E+02
			K-40	5.01E+03	3.16E+02	2.25E+02

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	226939	Sample Dates: 1/4/2012 - 1/4/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.96E+01	0.00E+00	1.96E+01
			Cs-134	<3.16E+01	0.00E+00	3.16E+01
			Cs-137	<3.61E+01	0.00E+00	3.61E+01
			Be-7	2.01E+03	1.97E+02	1.94E+02
			K-40	3.74E+03	3.52E+02	3.12E+02
Sample ID:	227934	Sample Dates: 2/7/2012 - 2/7/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<3.07E+01	0.00E+00	3.07E+01
			Cs-134	<2.89E+01	0.00E+00	2.89E+01
			Cs-137	<3.32E+01	0.00E+00	3.32E+01
			Be-7	1.18E+03	1.42E+02	2.29E+02
			K-40	3.51E+03	3.74E+02	3.65E+02
Sample ID:	230886	Sample Dates: 3/6/2012 - 3/6/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<2.45E+01	0.00E+00	2.45E+01
			Cs-134	<3.42E+01	0.00E+00	3.42E+01
			Cs-137	<4.10E+01	0.00E+00	4.10E+01
			Be-7	1.65E+03	1.71E+02	2.14E+02
			K-40	4.48E+03	4.10E+02	3.44E+02
Sample ID:	233490	Sample Dates: 4/3/2012 - 4/3/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<2.67E+01	0.00E+00	2.67E+01
			Cs-134	<2.11E+01	0.00E+00	2.11E+01
			Cs-137	<3.36E+01	0.00E+00	3.36E+01
			Be-7	6.18E+02	1.18E+02	1.80E+02
			K-40	4.25E+03	3.42E+02	3.42E+02
Sample ID:	235426	Sample Dates: 5/1/2012 - 5/1/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.61E+01	0.00E+00	1.61E+01
			Cs-134	<1.18E+01	0.00E+00	1.18E+01
			Cs-137	<1.47E+01	0.00E+00	1.47E+01
			Be-7	9.32E+02	7.47E+01	1.11E+02
			K-40	4.69E+03	1.97E+02	1.15E+02
Sample ID:	236738	Sample Dates: 6/5/2012 - 6/5/2012	Nuclide	Activity	1 Sigma Error	LLD
			I-131	<1.78E+01	0.00E+00	1.78E+01
			Cs-134	<1.51E+01	0.00E+00	1.51E+01
			Cs-137	<1.68E+01	0.00E+00	1.68E+01
			Be-7	4.10E+02	7.84E+01	1.28E+02
			K-40	3.31E+03	2.18E+02	1.86E+02

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID: 238705 **Sample Dates: 7/3/2012 - 7/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<3.49E+01	0.00E+00	3.49E+01
Cs-134	<3.67E+01	0.00E+00	3.67E+01
Cs-137	<4.71E+01	0.00E+00	4.71E+01
Be-7	5.93E+02	1.48E+02	2.71E+02
K-40	3.68E+03	3.85E+02	3.68E+02

Sample ID: 240348 **Sample Dates: 8/7/2012 - 8/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.40E+01	0.00E+00	2.40E+01
Cs-134	<1.98E+01	0.00E+00	1.98E+01
Cs-137	<2.93E+01	0.00E+00	2.93E+01
Be-7	7.32E+02	1.49E+02	1.85E+02
K-40	3.54E+03	2.57E+02	2.61E+02

Sample ID: 242219 **Sample Dates: 9/5/2012 - 9/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.15E+01	0.00E+00	2.15E+01
Cs-134	<2.65E+01	0.00E+00	2.65E+01
Cs-137	<3.36E+01	0.00E+00	3.36E+01
Be-7	1.63E+03	1.48E+02	1.88E+02
K-40	3.17E+03	2.72E+02	3.03E+02

Sample ID: 244918 **Sample Dates: 10/2/2012 - 10/2/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.51E+01	0.00E+00	1.51E+01
Cs-134	<1.92E+01	0.00E+00	1.92E+01
Cs-137	<2.49E+01	0.00E+00	2.49E+01
Be-7	1.24E+03	1.12E+02	1.23E+02
K-40	3.42E+03	2.50E+02	2.43E+02

Sample ID: 247394 **Sample Dates: 11/6/2012 - 11/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.30E+01	0.00E+00	2.30E+01
Cs-134	<2.03E+01	0.00E+00	2.03E+01
Cs-137	<3.06E+01	0.00E+00	3.06E+01
Be-7	1.28E+03	1.57E+02	2.05E+02
K-40	3.66E+03	2.98E+02	2.33E+02

Sample ID: 248663 **Sample Dates: 12/4/2012 - 12/4/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<4.08E+01	0.00E+00	4.08E+01
Cs-134	<3.85E+01	0.00E+00	3.85E+01
Cs-137	<5.34E+01	0.00E+00	5.34E+01
Be-7	9.07E+02	1.91E+02	2.99E+02
K-40	4.40E+03	4.67E+02	3.62E+02

Sample Point 222 [INDICATOR - N @ 0.7 miles]

Sample ID: 226940 **Sample Dates: 1/4/2012 - 1/4/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.74E+01	0.00E+00	2.74E+01
Cs-134	<3.20E+01	0.00E+00	3.20E+01
Cs-137	<3.73E+01	0.00E+00	3.73E+01
Be-7	2.02E+03	1.91E+02	2.14E+02
K-40	3.10E+03	3.29E+02	3.28E+02

Sample ID: 227935 **Sample Dates: 2/7/2012 - 2/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.27E+01	0.00E+00	2.27E+01
Cs-134	<2.47E+01	0.00E+00	2.47E+01
Cs-137	<2.84E+01	0.00E+00	2.84E+01
Be-7	1.68E+03	1.52E+02	1.90E+02
K-40	4.93E+03	3.34E+02	1.68E+02

Sample ID: 230887 **Sample Dates: 3/6/2012 - 3/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<3.72E+01	0.00E+00	3.72E+01
Cs-134	<3.14E+01	0.00E+00	3.14E+01
Cs-137	<4.61E+01	0.00E+00	4.61E+01
Be-7	2.22E+03	2.07E+02	3.04E+02
K-40	4.94E+03	4.93E+02	4.50E+02

Sample ID: 233491 **Sample Dates: 4/3/2012 - 4/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<3.34E+01	0.00E+00	3.34E+01
Cs-134	<2.86E+01	0.00E+00	2.86E+01
Cs-137	<4.67E+01	0.00E+00	4.67E+01
Be-7	4.39E+02	1.39E+02	2.56E+02
K-40	4.64E+03	4.38E+02	1.12E+02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 222 [INDICATOR - N @ 0.7 miles]

Sample ID: 235427 **Sample Dates: 5/1/2012 - 5/1/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.44E+01	0.00E+00	1.44E+01
Cs-134	<1.41E+01	0.00E+00	1.41E+01
Cs-137	<1.30E+01	0.00E+00	1.30E+01
Be-7	9.06E+02	7.49E+01	1.12E+02
K-40	3.67E+03	2.14E+02	1.45E+02

Sample ID: 236739 **Sample Dates: 6/5/2012 - 6/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<3.06E+01	0.00E+00	3.06E+01
Cs-134	<3.22E+01	0.00E+00	3.22E+01
Cs-137	<3.25E+01	0.00E+00	3.25E+01
Be-7	5.98E+02	1.52E+02	2.04E+02
K-40	2.68E+03	2.92E+02	8.61E+01

Sample ID: 238706 **Sample Dates: 7/3/2012 - 7/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<5.97E+01	0.00E+00	5.97E+01
Cs-134	<2.97E+01	0.00E+00	2.97E+01
Cs-137	<3.51E+01	0.00E+00	3.51E+01
Be-7	5.06E+02	1.39E+02	2.63E+02
K-40	3.63E+03	3.78E+02	4.54E+02

Sample ID: 240349 **Sample Dates: 8/7/2012 - 8/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.29E+01	0.00E+00	2.29E+01
Cs-134	<1.87E+01	0.00E+00	1.87E+01
Cs-137	<3.08E+01	0.00E+00	3.08E+01
Be-7	9.02E+02	1.78E+02	2.32E+02
K-40	1.95E+03	2.79E+02	3.98E+02

Sample ID: 242220 **Sample Dates: 9/5/2012 - 9/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.15E+01	0.00E+00	2.15E+01
Cs-134	<2.10E+01	0.00E+00	2.10E+01
Cs-137	<2.62E+01	0.00E+00	2.62E+01
Be-7	1.37E+03	1.30E+02	1.63E+02
K-40	2.36E+03	2.41E+02	2.87E+02

Sample ID: 244919 **Sample Dates: 10/2/2012 - 10/2/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.03E+01	0.00E+00	2.03E+01
Cs-134	<1.91E+01	0.00E+00	1.91E+01
Cs-137	<2.40E+01	0.00E+00	2.40E+01
Be-7	1.66E+03	1.39E+02	1.36E+02
K-40	2.65E+03	2.17E+02	2.30E+02

Sample ID: 247395 **Sample Dates: 11/6/2012 - 11/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.99E+01	0.00E+00	2.99E+01
Cs-134	<2.99E+01	0.00E+00	2.99E+01
Cs-137	<4.11E+01	0.00E+00	4.11E+01
Be-7	7.46E+02	1.33E+02	1.90E+02
K-40	3.10E+03	3.46E+02	3.03E+02

Sample ID: 248664 **Sample Dates: 12/4/2012 - 12/4/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.66E+01	0.00E+00	2.66E+01
Cs-134	<2.38E+01	0.00E+00	2.38E+01
Cs-137	<3.53E+01	0.00E+00	3.53E+01
Be-7	1.13E+03	1.16E+02	1.19E+02
K-40	4.86E+03	3.30E+02	1.96E+02

Sample Point 226 [INDICATOR - S @ 0.48 miles]

Sample ID: 226941 **Sample Dates: 1/4/2012 - 1/4/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.39E+01	0.00E+00	2.39E+01
Cs-134	<2.36E+01	0.00E+00	2.36E+01
Cs-137	<2.61E+01	0.00E+00	2.61E+01
Be-7	1.02E+03	1.47E+02	1.96E+02
K-40	4.31E+03	2.90E+02	2.54E+02

Sample ID: 227936 **Sample Dates: 2/7/2012 - 2/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.50E+01	0.00E+00	1.50E+01
Cs-134	<2.04E+01	0.00E+00	2.04E+01
Cs-137	<2.16E+01	0.00E+00	2.16E+01
Be-7	8.22E+02	1.06E+02	1.90E+02
K-40	4.67E+03	2.86E+02	1.90E+02

Sample ID: 230888 **Sample Dates: 3/6/2012 - 3/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<3.08E+01	0.00E+00	3.08E+01
Cs-134	<3.29E+01	0.00E+00	3.29E+01
Cs-137	<3.48E+01	0.00E+00	3.48E+01
Be-7	1.08E+03	1.82E+02	2.78E+02
K-40	3.81E+03	4.52E+02	5.57E+02

Sample ID: 233492 **Sample Dates: 4/3/2012 - 4/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.22E+01	0.00E+00	2.22E+01
Cs-134	<2.00E+01	0.00E+00	2.00E+01
Cs-137	<2.81E+01	0.00E+00	2.81E+01
Be-7	4.79E+02	1.16E+02	1.68E+02
K-40	4.64E+03	3.24E+02	2.24E+02

Sample ID: 235428 **Sample Dates: 5/1/2012 - 5/1/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.22E+01	0.00E+00	2.22E+01
Cs-134	<1.75E+01	0.00E+00	1.75E+01
Cs-137	<2.13E+01	0.00E+00	2.13E+01
Be-7	9.21E+02	1.16E+02	1.53E+02
K-40	4.52E+03	3.04E+02	2.73E+02

Sample ID: 236740 **Sample Dates: 6/5/2012 - 6/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.75E+01	0.00E+00	2.75E+01
Cs-134	<2.74E+01	0.00E+00	2.74E+01
Cs-137	<2.83E+01	0.00E+00	2.83E+01
Be-7	9.30E+02	1.09E+02	1.62E+02
K-40	3.23E+03	3.28E+02	3.06E+02

Sample ID: 238707 **Sample Dates: 7/3/2012 - 7/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.79E+01	0.00E+00	1.79E+01
Cs-134	<1.89E+01	0.00E+00	1.89E+01
Cs-137	<2.24E+01	0.00E+00	2.24E+01
Be-7	7.54E+02	9.08E+01	1.41E+02
K-40	3.78E+03	2.62E+02	1.94E+02

Sample ID: 240350 **Sample Dates: 8/7/2012 - 8/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.90E+01	0.00E+00	1.90E+01
Cs-134	<1.78E+01	0.00E+00	1.78E+01
Cs-137	<2.18E+01	0.00E+00	2.18E+01
Be-7	9.73E+02	1.10E+02	1.36E+02
K-40	3.04E+03	2.34E+02	2.03E+02

Sample ID: 242221 **Sample Dates: 9/5/2012 - 9/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.41E+01	0.00E+00	2.41E+01
Cs-134	<2.36E+01	0.00E+00	2.36E+01
Cs-137	<2.58E+01	0.00E+00	2.58E+01
Be-7	1.12E+03	1.15E+02	1.64E+02
K-40	3.65E+03	2.83E+02	3.36E+02

Sample ID: 244920 **Sample Dates: 10/2/2012 - 10/2/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.82E+01	0.00E+00	1.82E+01
Cs-134	<1.54E+01	0.00E+00	1.54E+01
Cs-137	<2.33E+01	0.00E+00	2.33E+01
Be-7	8.56E+02	8.45E+01	1.30E+02
K-40	3.41E+03	2.53E+02	1.85E+02

Sample ID: 247396 **Sample Dates: 11/6/2012 - 11/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.87E+01	0.00E+00	2.87E+01
Cs-134	<2.54E+01	0.00E+00	2.54E+01
Cs-137	<2.94E+01	0.00E+00	2.94E+01
Be-7	5.68E+02	1.48E+02	2.46E+02
K-40	5.03E+03	4.26E+02	3.72E+02

Sample ID: 248665 **Sample Dates: 12/4/2012 - 12/4/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.16E+01	0.00E+00	2.16E+01
Cs-134	<1.99E+01	0.00E+00	1.99E+01
Cs-137	<2.72E+01	0.00E+00	2.72E+01
Be-7	5.32E+02	1.18E+02	1.72E+02
K-40	3.92E+03	2.80E+02	2.00E+02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID: 226942 **Sample Dates: 1/4/2012 - 1/4/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.87E+01	0.00E+00	2.87E+01
Cs-134	<2.58E+01	0.00E+00	2.58E+01
Cs-137	<2.69E+01	0.00E+00	2.69E+01
Be-7	1.50E+03	1.62E+02	2.13E+02
K-40	5.47E+03	3.31E+02	2.37E+02

Sample ID: 227937 **Sample Dates: 2/7/2012 - 2/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<4.18E+01	0.00E+00	4.18E+01
Cs-134	<3.36E+01	0.00E+00	3.36E+01
Cs-137	<4.17E+01	0.00E+00	4.17E+01
Be-7	1.22E+03	1.86E+02	3.06E+02
K-40	4.84E+03	4.94E+02	5.38E+02

Sample ID: 230889 **Sample Dates: 3/6/2012 - 3/6/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.56E+01	0.00E+00	2.56E+01
Cs-134	<1.97E+01	0.00E+00	1.97E+01
Cs-137	<2.81E+01	0.00E+00	2.81E+01
Be-7	1.41E+03	1.55E+02	1.93E+02
K-40	5.63E+03	3.27E+02	1.60E+02

Sample ID: 233493 **Sample Dates: 4/3/2012 - 4/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<1.71E+01	0.00E+00	1.71E+01
Cs-134	<1.97E+01	0.00E+00	1.97E+01
Cs-137	<2.17E+01	0.00E+00	2.17E+01
Be-7	2.80E+02	9.08E+01	1.66E+02
K-40	4.10E+03	3.12E+02	1.71E+02

Sample ID: 235429 **Sample Dates: 5/1/2012 - 5/1/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.70E+01	0.00E+00	2.70E+01
Cs-134	<2.57E+01	0.00E+00	2.57E+01
Cs-137	<2.68E+01	0.00E+00	2.68E+01
Be-7	4.87E+02	1.31E+02	2.08E+02
K-40	4.52E+03	4.00E+02	2.93E+02

Sample ID: 236741 **Sample Dates: 6/5/2012 - 6/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.51E+01	0.00E+00	2.51E+01
Cs-134	<1.60E+01	0.00E+00	1.60E+01
Cs-137	<2.06E+01	0.00E+00	2.06E+01
Be-7	6.17E+02	1.23E+02	1.88E+02
K-40	4.74E+03	2.88E+02	4.71E+01

Sample ID: 238708 **Sample Dates: 7/3/2012 - 7/3/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.71E+01	0.00E+00	2.71E+01
Cs-134	<2.06E+01	0.00E+00	2.06E+01
Cs-137	<3.52E+01	0.00E+00	3.52E+01
Be-7	8.27E+02	1.20E+02	2.21E+02
K-40	5.21E+03	4.08E+02	2.23E+02

Sample ID: 240351 **Sample Dates: 8/7/2012 - 8/7/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.12E+01	0.00E+00	2.12E+01
Cs-134	<2.07E+01	0.00E+00	2.07E+01
Cs-137	<2.36E+01	0.00E+00	2.36E+01
Be-7	7.28E+02	1.30E+02	2.12E+02
K-40	3.35E+03	3.20E+02	3.07E+02

Sample ID: 242222 **Sample Dates: 9/5/2012 - 9/5/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.20E+01	0.00E+00	2.20E+01
Cs-134	<2.32E+01	0.00E+00	2.32E+01
Cs-137	<2.51E+01	0.00E+00	2.51E+01
Be-7	1.83E+03	1.49E+02	1.67E+02
K-40	4.51E+03	2.94E+02	2.42E+02

Sample ID: 244921 **Sample Dates: 10/2/2012 - 10/2/2012**

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.36E+01	0.00E+00	2.36E+01
Cs-134	<2.52E+01	0.00E+00	2.52E+01
Cs-137	<3.05E+01	0.00E+00	3.05E+01
Be-7	1.75E+03	1.46E+02	1.71E+02
K-40	4.92E+03	3.15E+02	1.88E+02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2012 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID: 247397 **Sample Dates:** 11/6/2012 - 11/6/2012

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.29E+01	0.00E+00	2.29E+01
Cs-134	<1.87E+01	0.00E+00	1.87E+01
Cs-137	<3.05E+01	0.00E+00	3.05E+01
Be-7	1.00E+03	1.28E+02	1.96E+02
K-40	5.68E+03	3.25E+02	1.96E+02

Sample ID: 248666 **Sample Dates:** 12/4/2012 - 12/4/2012

Nuclide	Activity	1 Sigma Error	LLD
I-131	<2.18E+01	0.00E+00	2.18E+01
Cs-134	<1.87E+01	0.00E+00	1.87E+01
Cs-137	<2.57E+01	0.00E+00	2.57E+01
Be-7	8.40E+02	1.30E+02	1.58E+02
K-40	5.94E+03	3.69E+02	2.90E+02

APPENDIX F

ERRATA TO PREVIOUS REPORTS

APPENDIX F

ERRATA TO THE 2012 AREOR

There are no errata to be appended to the 2012 AREOR.