ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

DUKE ENERGY CORPORATION
CATAWBA NUCLEAR STATION
Units 1 and 2

2016

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

AREOR	Annual Radiological Environmental Operating Report
ARERR	Annual Radiological Effluent Release Report
BW	BiWeekly
C	Control
CNS	Catawba Nuclear Station
CR	Condition Report (analogous to Nuclear Condition Report (NCR))
ERA	Environmental Resource Associates
EZA	Eckert & Ziegler Analytics
GEL	General Engineering Laboratory
GI-LLI	Gastrointestinal – Lower Large Intestine
GPS	Global Positioning System
I	Indicator
IR	Inner Ring
ISFSI	Independent Spent Fuel Storage Installation
LLD	Lower Limit of Detection
LLI	Low Level Iodine
M	Monthly
MDA	Minimum Detectable Activity
mrem	Millirem
MWe	Megawatt (electrical)
NIST	National Institute of Standards and Technology
NCR	Nuclear Condition Report (analogous to Condition Report (CR))
NRC	Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
OR	Outer Ring
pCi/kg	picocurie per kilogram
pCi/l	picocurie per liter
pCi/m3	picocurie per cubic meter
Q	Quarterly
REMP	Radiological Environmental Monitoring Program
SA	Semiannually
SI	Special Interest
SLCs	Selected Licensee Commitments
SM	Semimonthly
T. Body	Total Body
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 2016.

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). One-thousand thirty-four samples were analyzed comprising 1,060 test results in order to compile data for the 2016 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 2016 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, fish, and shoreline sediment 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 3.71E-2 mrem for 2016. 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).[1] It is therefore concluded that station operations has had no significant radiological impact on the health and safety of the public or the environment.

[1]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).

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 3.10.

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:

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

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" LLDs 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. Certain gross counting measurements display a calculated negative value, indicating background is greater than sample activity.

2.3.3 TREND IDENTIFICATION

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

Substantial increases or decreases in the amount of a particular radionuclide's release from the nuclear plant will greatly affect the resulting environmental levels; therefore, a knowledge of the release of a radionuclide from the nuclear plant is necessary to completely interpret the trends, or lack of trends, determined from the environmental data. Factors that may affect environmental levels of radionuclides include prevailing weather conditions (periods of drought, solar cycles or heavier than normal precipitation), construction in or around either the nuclear plant or the sampling location, and addition or deletion of other sources of radioactive materials (such as the 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

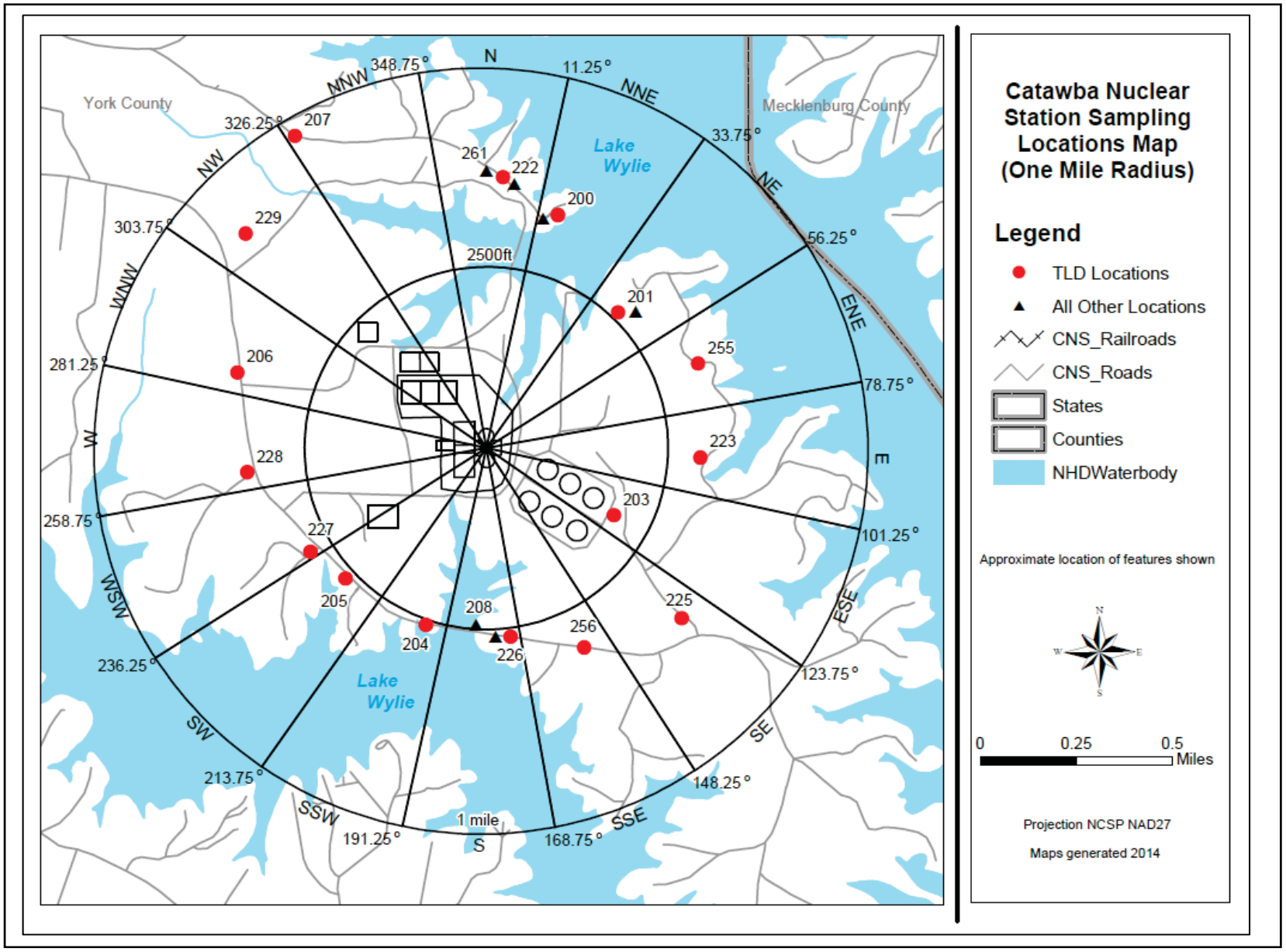
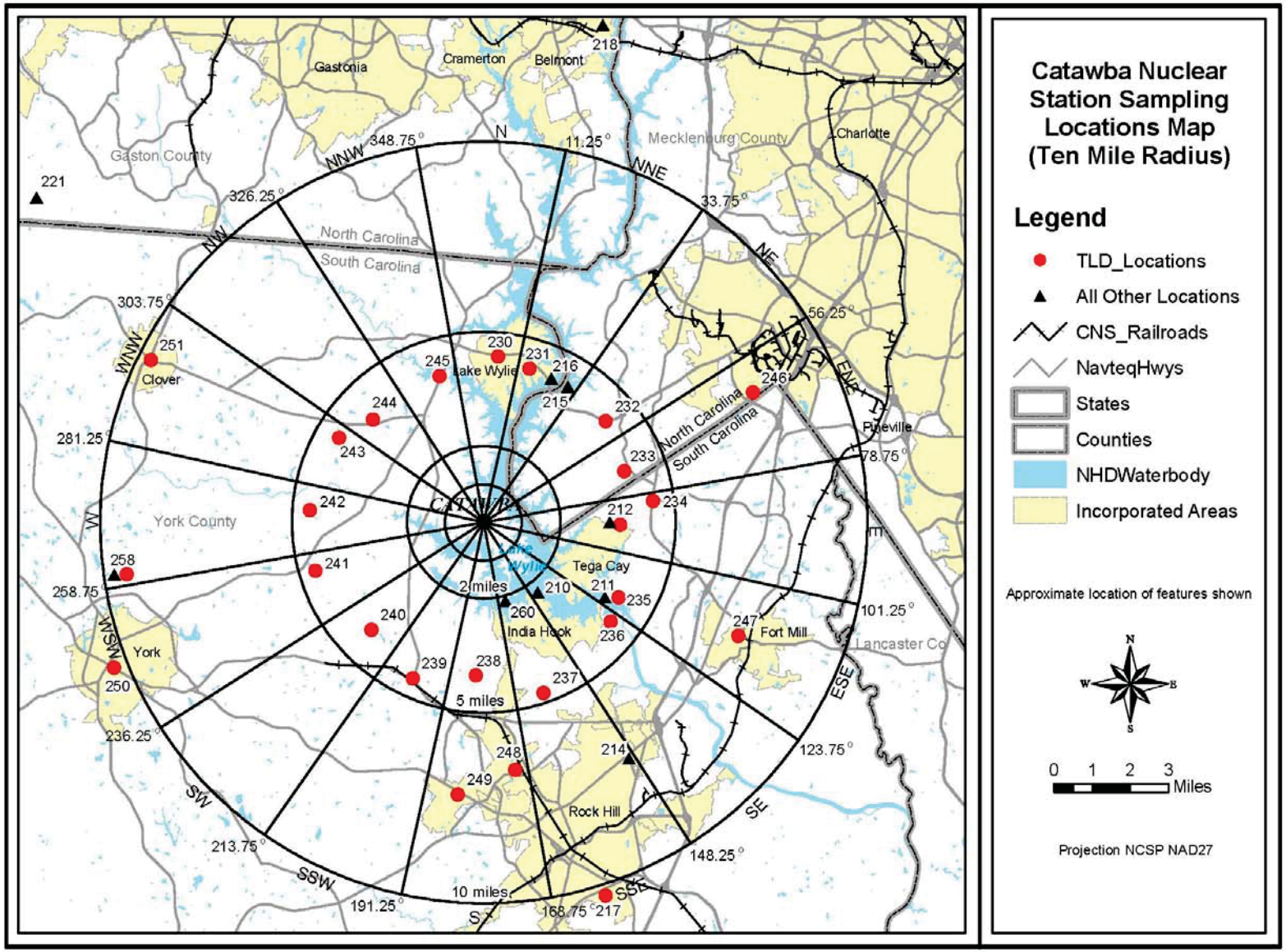

Catawba Nuclear Station Sampling Locations Map (One Mile Radius)
Legend
TLD Locations
All Other Locations
CNS_Railroads
CNS_Roads
States
Counties
NHDWaterbody
Approximate location of features shown
0
0.25
0.5
Miles
Projection NCSP NAD27
Maps generated 2014
York County
Mecklenburg County
Lake Wylie
Lake 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
207
261
222
200
229
201
255
206
223
228
203
227
205
208
225
204
256
226

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
Mecklenburg County
Charlotte
Gaston County
North Carolina
South Carolina
York County
Lancaster Co
Clover
Lake Wylie
Tega Cay
India Hook
Fort Mill
York
Rock Hill
Pineville
2 miles
5 miles
10 miles
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
NNW
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°
218
221
251
230
231
216
215
245
246
244
232
243
233
234
212
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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)
200	I	Site Boundary (0.63 mi NNE)	W							M
201	I	Site Boundary (0.53 mi NE)	W							M
208	I	Discharge Canal (0.45 mi S)	W	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
258	C	Fairhope Road (9.84 mi W)	W							M
260	I	Irrigated Gardens (2.00 mi SSE)					M(a)			
261	I	Firing Range-Site Boundary (0.72 mi N)	W							

(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	BLACKMON ROAD	10.3	SSE	242	OR	TRANSMISSION TOWER ON PARAHAM ROAD	4.56	W
222	IR	SITE BOUNDARY	0.71	N	243	OR	KINGSBURRY 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 ENERGY 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	---
	Quarterly Composite	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 *A PRIORI* 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 3,000 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 2016 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 2016 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 2016. Summary tables containing 2016 information required by Technical Specification Administrative Control 5.6.2 are located in Appendix B. REMP results for 2016 are located in Appendix E.

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 2016 maximum percentages of reporting levels attributed to CNS operation were well below the 100% action level.

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 2016 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 2016 data presented in this section supports the conclusion that there were no significant changes in environmental sample radionuclide concentrations of samples collected and analyzed from CNS site and surrounding areas that were attributable to plant operations.

3.1 AIRBORNE RADIOIODINE AND PARTICULATES

In 2016, 312 radioiodine and particulate samples were analyzed, 260 from five indicator locations and 52 at the control location. Particulate samples were analyzed weekly for gross beta. A quarterly gamma analysis was performed on the quarterly filter composite (by location). Radioiodine samples received a weekly gamma analysis.

Western North Carolina wildfires created smoky conditions affecting some air monitoring equipment during 2016 reducing air flow due to filter loading. Air radioiodine and particulate samples collected during these conditions indicated reduced volume, but no sampling deviations or data anomalies were incurred (NCR # 02079384).

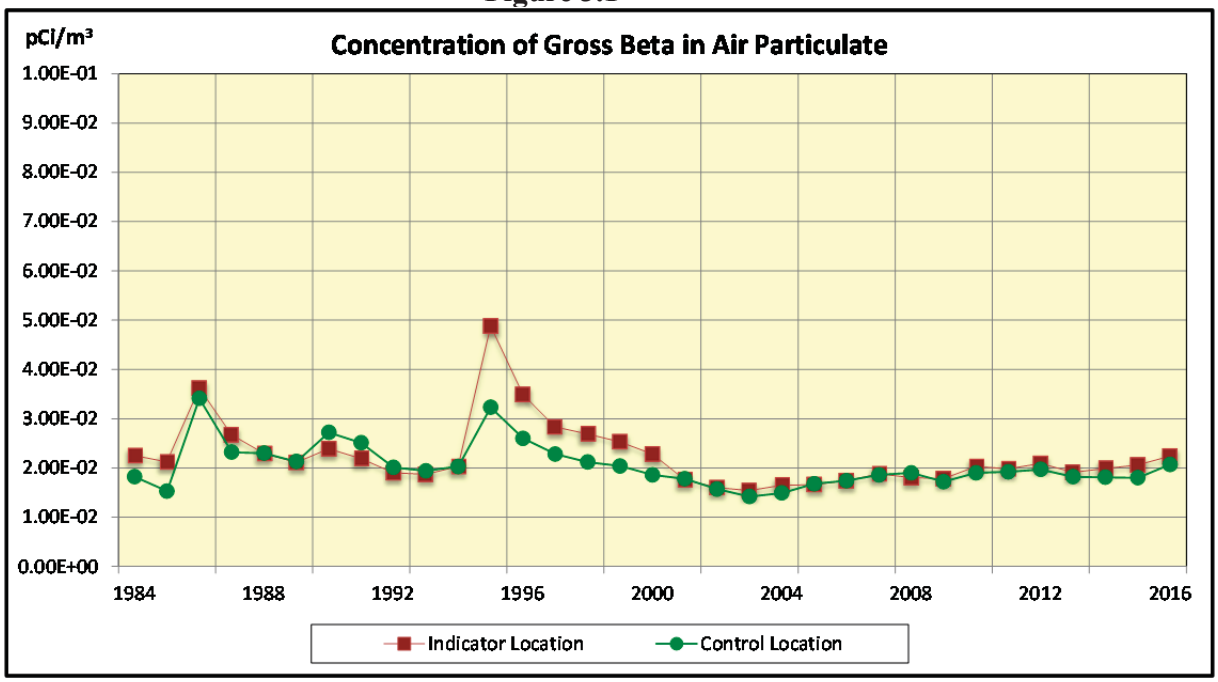
Figure 3.1 shows individual sample gross beta results for the indicator location with highest annual mean and the control location samples during 2016. The two sample locations' results are similar in concentration and have varied negligibly since preoperational periods.

There were no detectable gamma emitters attributable to plant operations identified for particulate filters analyzed during 2016. 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 2016. 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
2012	2.09E-2	1.97E-2
2013	1.92E-2	1.82E-2
2014	1.99E-2	1.81E-2
2015	2.06E-2	1.80E-2
2016	2.24E-2	2.07E-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[1]	5.53E-2	5.65E-2
2012	0.00E0	0.00E0
2013	0.00E0	0.00E0
2014[2]	0.00E0	0.00E0
2015	0.00E0	0.00E0
2016	0.00E0	0.00E0

0.00E0 indicates no detectable measurements

(1) 2011 concentration affected by Fukushima Daiichi

(2) 2014 – Gamma spectroscopy system change

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 attributable to plant operations were identified in 2016 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 1.80 pCi/l in 2016 and the control location concentration was 1.75 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 in the four control samples during 2016. The mean indicator tritium concentration for 2016 was 688 pCi/l, 3.44% of reporting level. The mean control tritium concentration for 2016 was 406 pCi/l, 2.03% 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 2016; therefore low-level iodine analysis is not required.

Figure 3.2

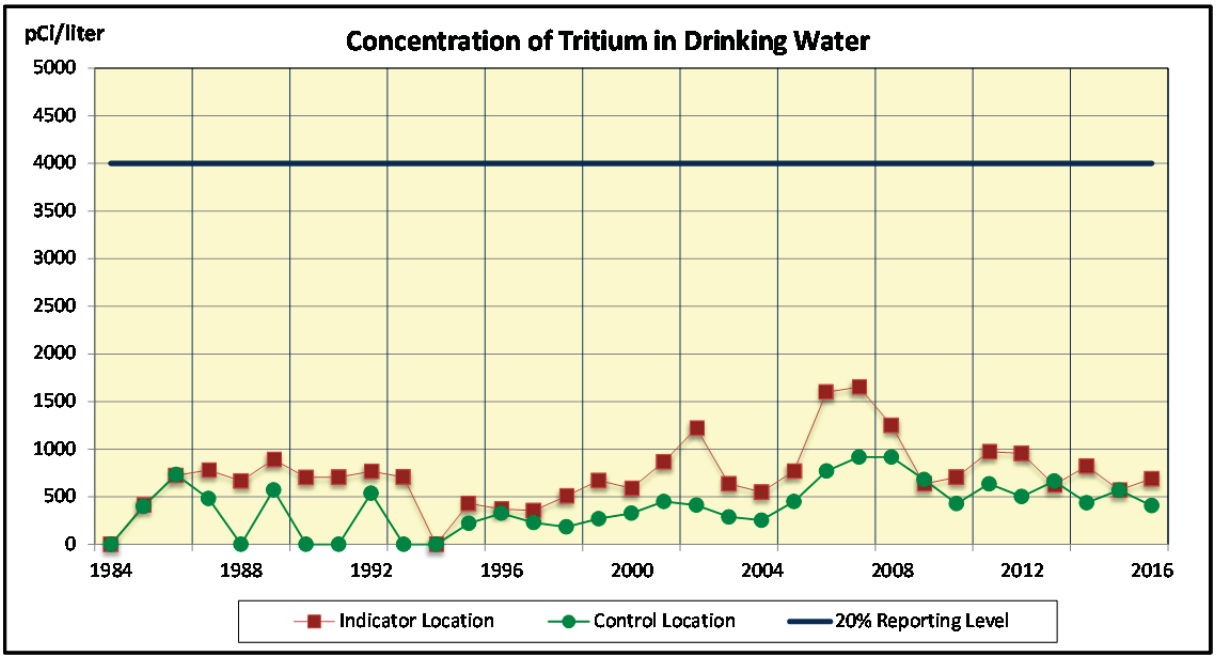

pCi/liter
Concentration of Tritium in Drinking Water
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
1984
1988
1992
1996
2000
2004
2008
2012
2016
Indicator Location
Control Location
20% Reporting Level

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
2013	1.79	1.59	6.22E2	6.64E2
2014	1.96	1.79	8.21E2	4.37E2
2015	2.48	2.07	5.70E2	5.70E2
2016	1.80	1.75	6.88E2	4.06E2

0.00E0 indicates 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 2016 indicator location samples contained tritium with an average concentration of 3,484 pCi/l. Indicator location 208 (Discharge Canal) showed a range of activities from 4,370 to 8,270 pCi/l which had the highest mean concentration of 6,338 pCi/l. Tritium was detected in all four control samples during 2016 with an average concentration of 281 pCi/l.

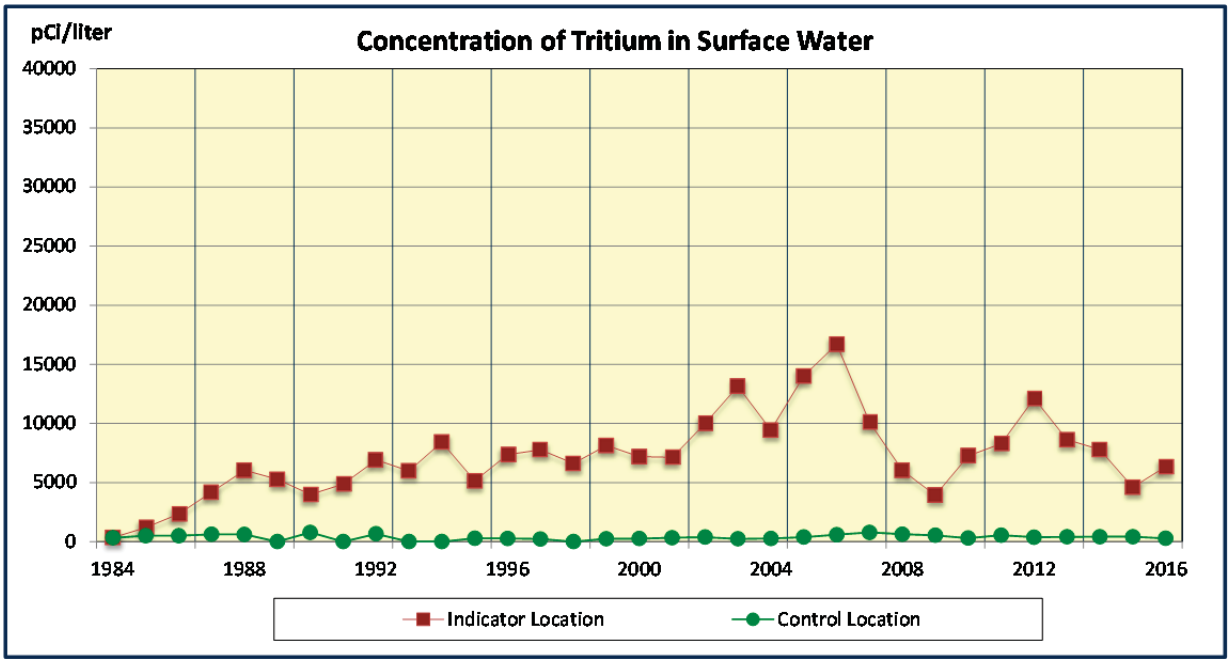
No gamma emitting radionuclides attributable to plant operations were identified in 2016 surface water samples. During 2015, Co-58 and Co-60 were detected in one indicator surface water sample at location 208 (NCR # 01934713). Table 3.3 summarizes the indicator annual means of radionuclides detected since 1984. Visual inspection of the tabular data did not reveal any increasing trends.

During the third quarter of 2014, Catawba experienced higher than normal levels of mixed fission and activation products in the liquid radioactive waste processing system due to process influent stream chemical changes and larger than normal volumes of non-contaminated water introduced into the system. As system tanks reached storage capacity, liquid radioactive waste was discharged with higher than normal concentrations of mixed fission and activation products. Other radionuclides, such as tritium, were not impacted by this operational occurrence (NCR # 01897053).

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[1]	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
2013	0.00E0	0.00E0	0.00E0	0.00E0	8.62E3	4.02E2
2014[2]	7.23E0	4.69E0	0.00E0	0.00E0	7.79E3	4.18E2
2015	1.15E1	1.07E0	0.00E0	0.00E0	4.61E3	4.14E2
2016	0.00E0	0.00E0	0.00E0	0.00E0	6.34E3	2.81E2

0.00E0 indicates no detectable measurements
1984 - 1986 mean based on all net activity
(1) 1987 – Gamma spectroscopy system change
(2) 2014 – Gamma spectroscopy system change

3.4 MILK

A total of 26 milk samples was analyzed by gamma spectroscopy and low level iodine during 2016. There was one control location sampled. No indicator dairies were identified by the 2016 land use census.

There were no gamma emitting radionuclides attributable to plant operations identified in milk samples in 2016. Cs-137 is the only radionuclide, other than naturally occurring, reported in milk samples since 1996. Cs-137 in milk is not unusual. It is a constituent of nuclear weapons test fallout and nuclear plant accidents and has been observed periodically in samples from indicator and control locations since the preoperational period. Airborne Cs-137 has not been released from the plant since 1992.

Table 3.4 lists highest indicator location annual mean and control location annual mean for Cs-137 since the preoperational period. K-40 is a naturally occurring radionuclide observed in milk samples in 2016.

Table 3.4 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[1]	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
2011	No Indicator Location	0.00E0
2012	No Indicator Location	0.00E0
2013	No Indicator Location	0.00E0
2014[2]	No Indicator Location	0.00E0
2015	No Indicator Location	0.00E0
2016	No Indicator Location	0.00E0

0.00E0 indicates no detectable measurements
1984 - 1986 mean based on all net activity
(1) 1987 – Gamma spectroscopy system change
(2) 2014 – Gamma spectroscopy system change

3.5 BROADLEAF VEGETATION

Gamma spectroscopy was performed on 60 broadleaf vegetation samples during 2016. Four indicator locations and one control location were sampled. There were no gamma emitting radionuclides attributable to plant operations identified in any indicator or control location broadleaf vegetation samples in 2016.

Cs-137 is the only gamma emitting radionuclide, other than naturally occurring, reported in vegetation samples. It is not unusual for Cs-137 to be present in vegetation. It is a constituent of nuclear weapons test fallout and nuclear plant accidents and has been observed in samples from indicator and control locations since the preoperational period. Table 3.6 lists the highest indicator location annual mean and control location annual mean for Cs-137 since early in the station's operational history. Visual inspection of the tabular data did not reveal any increasing trends.

Figure 3.5 shows indicator and control annual means for Cs-137 in vegetation since 1984. Values shown from 1984 to 2016 show a stable trend for Cs-137 in vegetation. No airborne Cs-137 has been released from the plant since 1992.

K-40 and Be-7 are naturally occurring radionuclides that were observed in broadleaf vegetation samples in 2016.

Figure 3.5

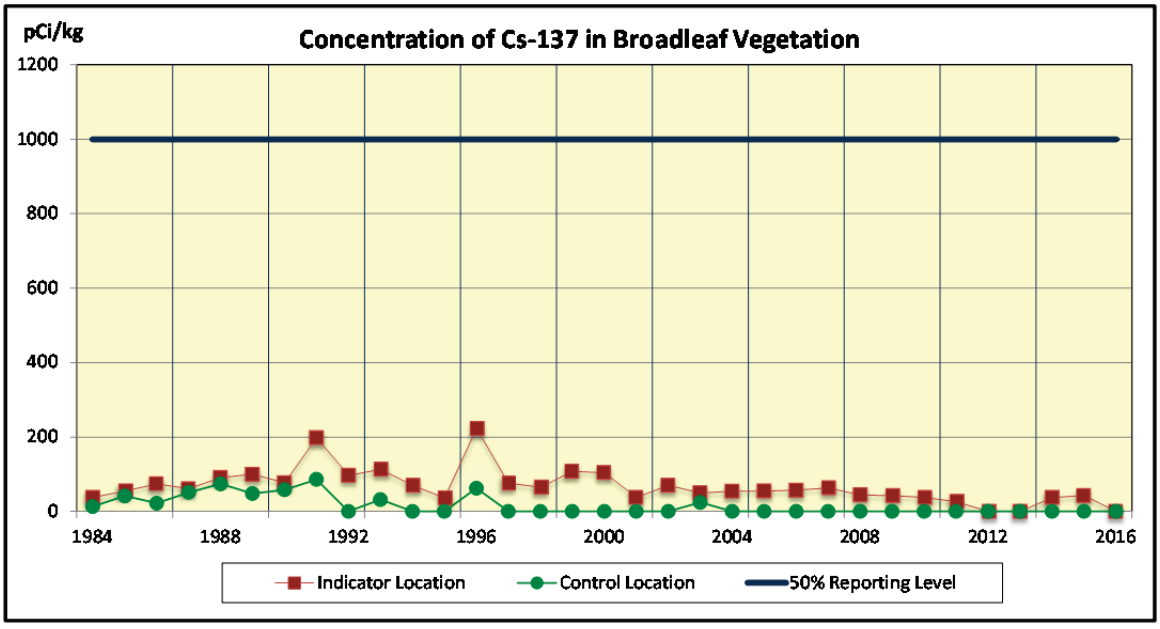


Table 3.5 Mean Concentration of Radionuclides in Broadleaf Vegetation

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[(1)]	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
2013	0.00E0	0.00E0
2014[(2)]	3.72E1	0.00E0
2015	4.29E1	0.00E0
2016	0.00E0	0.00E0

0.00E0 indicates no detectable measurements
1984 - 1986 mean based on all net activity
2011 concentration affected by Fukushima Daiichi
(1) 1987 – Gamma spectroscopy system change
(2) 2014 – Gamma spectroscopy system change

3.6 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 2016 growing season nine samples were collected and analyzed for gamma radionuclides. There were no gamma emitting radionuclides attributable to plant operations identified in food product samples in 2016. 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 are naturally occurring radionuclides that were observed in food product samples in 2016.

Table 3.6 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
2013	0.00E0
2014(1)	0.00E0
2015	0.00E0
2016	0.00E0

0.00E0 indicates no detectable measurements
There is no control location for Food Products.
(1) 2014 – Gamma spectroscopy system change

3.7 FISH

Gamma spectroscopy was performed on 12 fish samples collected during 2016. 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. There were no gamma emitting radionuclides attributable to plant operations identified in any fish samples in 2016.

Figures 3.7-1, 3.7-2, and 3.7-3 are graphs displaying annual mean concentrations for Co-58, Co-60, and Cs-137. Table 3.7 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 2016.

Figure 3.7-1

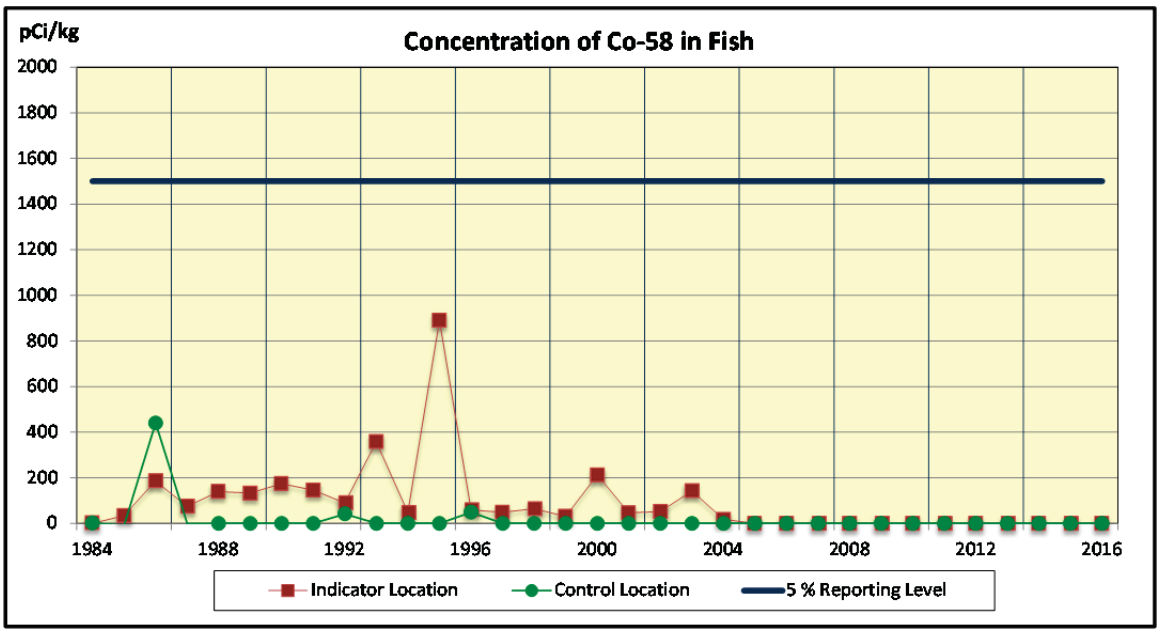


Figure 3.7-2

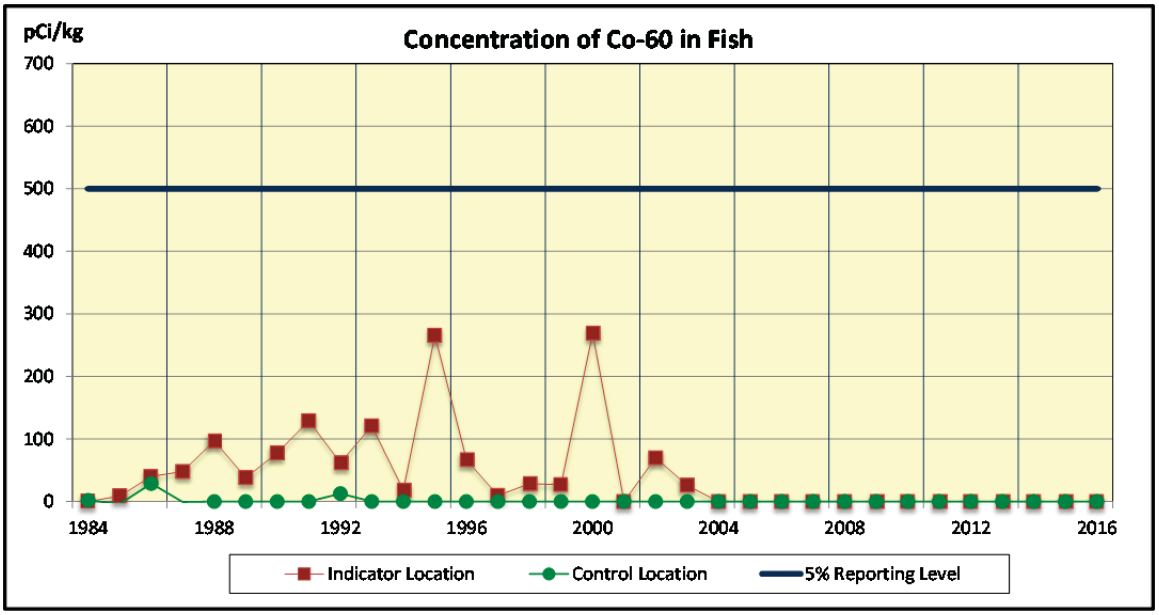


Figure 3.7-3

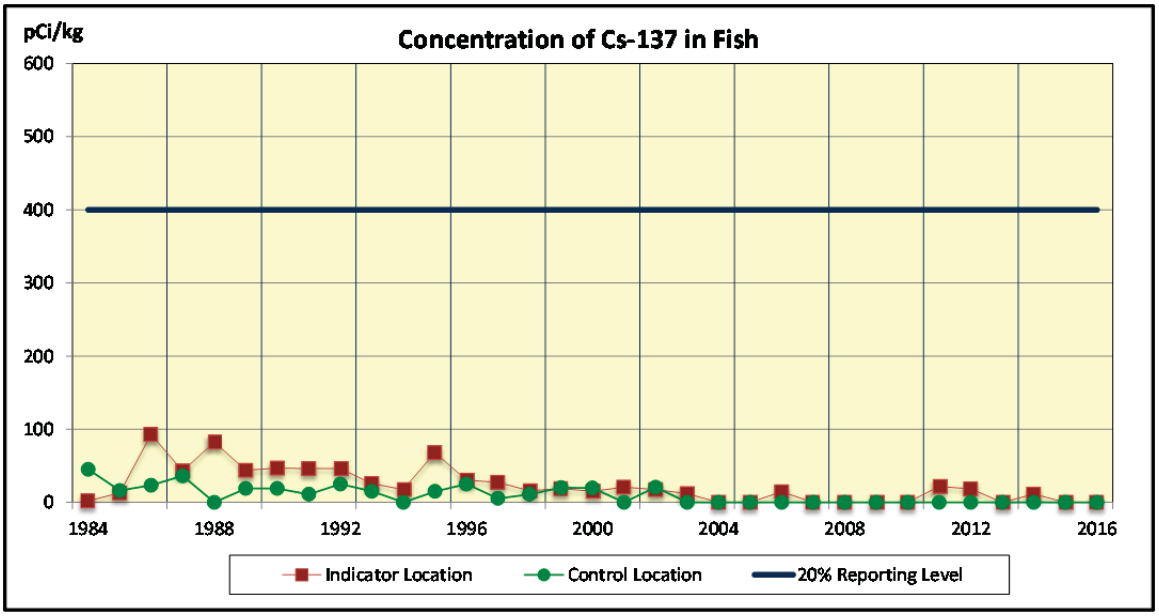


Table 3.7 Mean Concentrations of Radionuclides in Fish (pCi/kg)

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(1)	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
2013	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2014(2)	0.00E0	0.00E0	0.00E0	0.00E0	1.10E1	0.00E0	0.00E0	0.00E0	0.00E0
2015	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2016	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0

0.00E0 indicates no detectable measurements
1984 - 1986 mean based on all net activity
(1) 1987 – Gamma spectroscopy system change
(2) 2014 – Gamma spectroscopy system change

3.8 SHORELINE SEDIMENT

During 2016, a total of 6 shoreline sediment samples was analyzed, four from two indicator locations and two from the control location.

Co-58, Co-60, and Cs-137 are normally the predominant radionuclides identified in shoreline sediment samples. Co-60 was identified in indicator samples collected from location 208 (Discharge Canal), which is the closest location to the plant's liquid effluent release point. Co-60 was identified with an annual mean concentration of 131 pCi/kg. There were no gamma emitting radionuclides attributable to plant operations identified in samples from the other indicator location (210) or the control location.

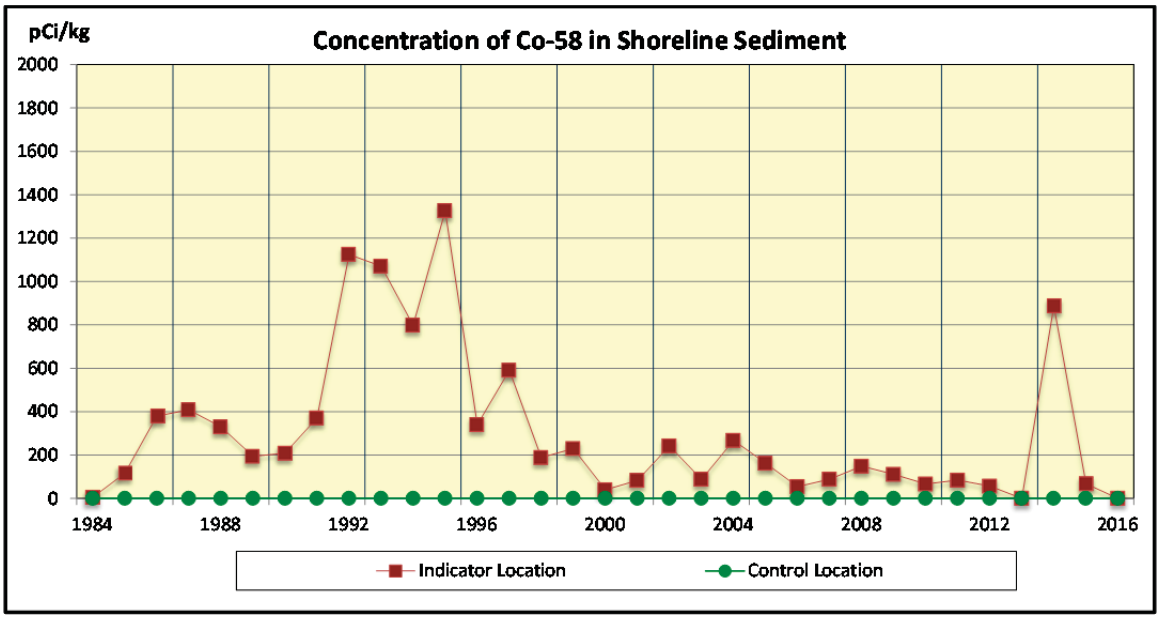
During the third quarter of 2014, Catawba experienced higher than normal levels of mixed fission and activation products in the liquid radioactive waste processing system due to process influent stream chemical changes and larger than normal volumes of non-contaminated water introduced into the system. As system tanks reached storage capacity, liquid radioactive waste was discharged with higher than normal concentrations of mixed fission and activation products (NCR # 01897053).

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 3.8-1, 3.8-2, and 3.8-3 are graphs displaying annual mean concentrations for Co-58, Co-60, and Cs-137.

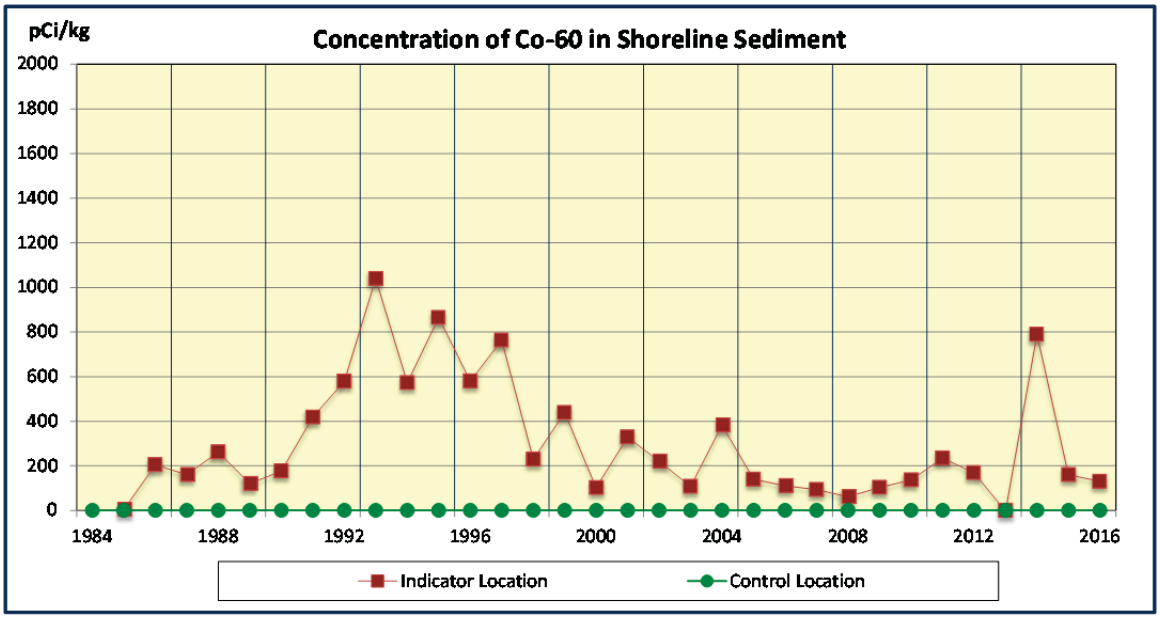
Naturally occurring K-40 was observed in some shoreline sediment samples collected during 2016.

Figure 3.8-1



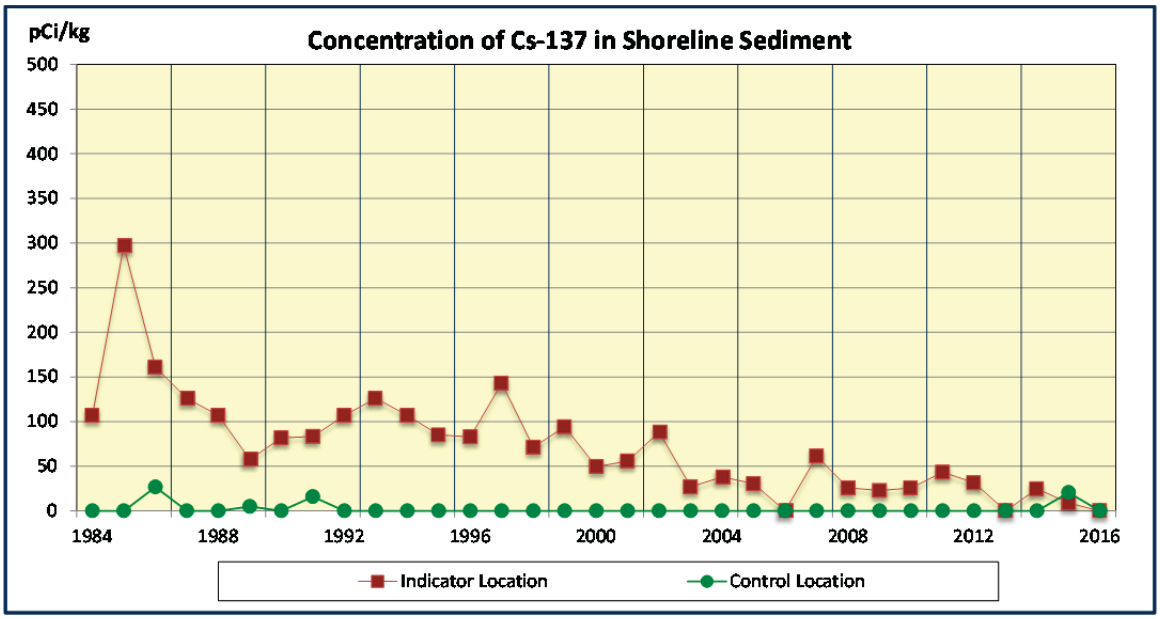
There is no reporting level for Co-58 in Shoreline Sediment

Figure 3.8-2



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

Figure 3.8-3



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

Table 3.8 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[(1)]	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
2013	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2014[(2)]	6.84E1	8.87E2	7.90E2	0.00E0	0.00E0	0.00E0	2.46E1	0.00E0	0.00E0
2015	0.00E0	6.73E1	1.61E2	0.00E0	0.00E0	0.00E0	8.75E0	0.00E0	0.00E0
2016	0.00E0	0.00E0	1.31E2	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0

0.00E0 indicates no detectable measurements
1984 - 1986 mean based on all net activity
(1) 1987 – Gamma spectroscopy system change
(2) 2014 – Gamma spectroscopy system change

3.9 DIRECT GAMMA RADIATION

3.9.1 ENVIRONMENTAL TLD

Catawba is licensed with an exclusion area boundary defined by UFSAR Section 2.1.1.2 as a 2500 foot radius from station center. This is the same boundary established for determining radioactive effluent release limits. No permanent public access is permitted within the exclusion area. TLD locations designated as "inner ring" are within a 1 mile radius from station center and all are used as indicators. TLD locations designated as "outer ring" are outside the 1 mile "inner ring" but within a 5 mile radius of station center. All outer ring TLD locations are used as indicators. A subset of TLD locations within a 7 to 11 mile radius from station center are designated as "special interest." The three "control" locations are greater than 7 miles from station center. These locations were chosen to reduce the probability of influence from Catawba operation on data. The control locations are not used as background subtraction in the TLD analysis. Their purpose is to provide a comparison to indicator locations.

In 2016, 162 total TLDs were analyzed, 152 at indicator locations and 10 at control locations. TLDs are collected and analyzed quarterly. Transit and laboratory background dose is determined and subtracted from gross field readings as required by ANSI N545-1975. Based on Appendix B TLD data, the highest annual total dose was 89.6 mrem at indicator location 232, 4.18 miles NE of station center. Figure 3.9 and Table 3.9-A show TLD inner ring, outer ring, and control location annual averages in mrem per year. Data is provided from 1984 when TLD locations were added and arranged in an inner ring and outer ring configuration. Preoperational data is also provided in the table. As shown in the graph, doses measured by environmental TLDs show little or no change since the current TLD system was implemented. Comparing data from the 2016 Catawba Annual Radiological Effluent Release Report (ARERR), dose to a member of the public resulting from gaseous effluent releases at Catawba is a small fraction of measured TLD dose. Therefore, it can be concluded that gaseous effluents from Catawba had negligible impact on measured TLD values.

Starting in 2014, enhanced analytical methods were implemented. Quarterly and annual baseline dose was determined using appropriate statistical methods considering data from 2000 through 2012. Quarterly and annual dose for 2016 was compared to baseline values to determine if an Investigation Level had been exceeded for evaluation of potential dose to a member of the public. No TLD location exceeded the Quarterly or Annual Investigation Level in 2016, therefore no evaluation of dose to a member of the public from direct or scattered radiation was performed. Table 3.9-B summarizes the data.

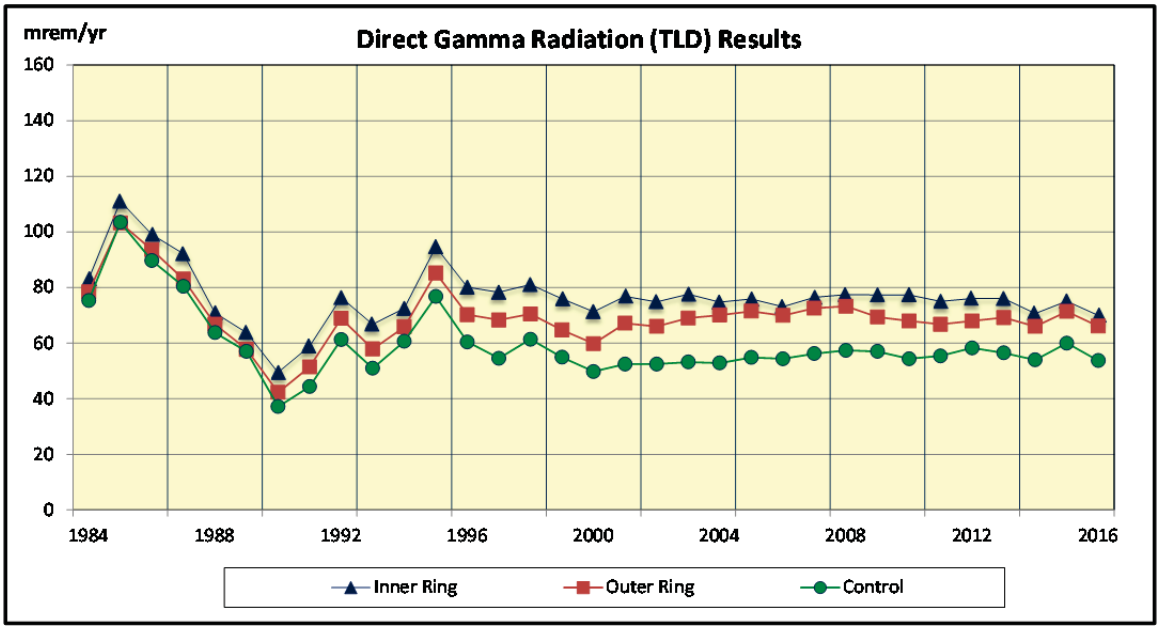
A TLD intercomparison program is conducted as part of the quality assurance program. Results of this program are included in section 5.7.

3.9.2 ISFSI

The Catawba ISFSI began operation in 2007. It is located approximately 0.2 miles north of station center in a secured area specifically constructed to provide dry storage for spent nuclear fuel. The ISFSI employs the NAC-UMS® and MAGNASTOR® vertical storage designs. Irradiated fuel assemblies are confined, protected, and shielded by a reinforced concrete modules. Both systems are completely passive and designed to provide radiation shielding and safe confinement for a range of accident conditions and natural events. Both systems use a passive natural circulation ventilation system to remove decay heat from the modules. No radiological liquid or gaseous effluents are expected from the passive storage provided by the ISFSI. Therefore any dose to offsite locations would be from direct and scattered gamma radiation.

Environmental TLD results described in 3.9.1 above are reviewed quarterly to identify trends and demonstrate compliance with dose and dose rate limits at the 2500 foot exclusion area boundary. Additional TLD locations not associated with REMP are presently located on the Catawba protected area fence near the ISFSI and on the ISFSI boundary. These are used to demonstrate compliance with occupational exposure controls and augment REMP TLD results. Doses measured by environmental TLDs show little or no change since the ISFSI began operation.

Figure 3.9



There is no reporting level for Direct Radiation (TLD)

Table 3.9-A Direct Gamma Radiation (TLD) Results[1]

Year	Inner Ring Average (mrem/yr)	Outer Ring Average (mrem/yr)	Control Average (mrem/yr)
1984*	8.31E1	7.85E1	7.53E1
1985	1.11E2	1.03E2	1.03E2
1986	9.91E1	9.36E1	8.97E1
1987	9.22E1	8.30E1	8.05E1
1988	7.09E1	6.68E1	6.37E1
1989	6.37E1	5.78E1	5.70E1
1990	4.94E1	4.23E1	3.71E1
1991	5.89E1	5.14E1	4.44E1
1992	7.64E1	6.89E1	6.13E1
1993	6.68E1	5.79E1	5.09E1
1994	7.25E1	6.58E1	6.07E1
1995	9.46E1	8.52E1	7.68E1
1996	8.01E1	7.02E1	6.04E1
1997	7.83E1	6.83E1	5.45E1
1998	8.10E1	7.05E1	6.14E1
1999	7.60E1	6.47E1	5.49E1
2000	7.13E1	5.98E1	4.98E1
2001	7.69E1	6.72E1	5.24E1
2002	7.49E1	6.60E1	5.24E1
2003	7.76E1	6.90E1	5.32E1
2004	7.47E1	7.01E1	5.28E1
2005	7.58E1	7.15E1	5.48E1
2006	7.31E1	6.99E1	5.43E1
2007	7.65E1	7.26E1	5.62E1
2008	7.74E1	7.32E1	5.74E1
2009	7.73E1	6.94E1	5.70E1
2010	7.74E1	6.80E1	5.43E1
2011	7.50E1	6.67E1	5.54E1
2012	7.61E1	6.80E1	5.83E1
2013	7.60E1	6.92E1	5.65E1
2014	7.07E1	6.60E1	5.40E1
2015	7.51E1	7.14E1	6.00E1
2016	7.00E1	6.61E1	5.37E1

* Preoperational Data
(1) 2014 AREOR, tabular results converted from mR/yr to mrem/yr (n * 0.95)

Table 3.9-B Direct Gamma Radiation (TLD) Catawba 2016 Investigation Level

Catawba 2016 MDD_Q: 6	Catawba 2016 MDD_A: 11

	Quarterly (mrem)									Annual(mrem)		
Location	**B_Q**	**M_QQ1**	**M_QQ2**	**M_QQ3**	**M_QQ4**	**L_QQ1**	**L_QQ2**	**L_QQ3**	**L_QQ4**	**B_A**	**M_A***	**L_A**
200	17.1	18.3	15.0	14.5	19.1	ND	ND	ND	ND	69.6	67.0	ND
201	17.2	18.0	16.3	13.4	16.9	ND	ND	ND	ND	69.0	64.6	ND
203	20.1	19.2	15.6	15.8	19.1	ND	ND	ND	ND	78.7	69.6	ND
204	17.0	16.7	14.0	14.3	18.9	ND	ND	ND	ND	70.3	63.9	ND
205	20.4	18.3	16.5	16.7	19.3	ND	ND	ND	ND	81.4	70.9	ND
206	21.1	22.6	19.6	19.4	22.1	ND	ND	ND	ND	85.2	83.7	ND
207	20.9	21.1	17.5	17.2	19.7	ND	ND	ND	ND	84.7	75.4	ND
212	15.9	16.8	14.3	13.9	17.9	ND	ND	ND	ND	64.0	62.8	ND
217	11.3	14.0	--- (1)	10.6	--- (2)	ND	ND	ND	ND	46.1	49.2	ND
222	16.8	17.7	14.4	14.7	17.9	ND	ND	ND	ND	67.3	64.7	ND
223	19.6	20.9	17.5	18.8	20.0	ND	ND	ND	ND	78.6	77.1	ND
225	18.7	20.0	--- (3)	17.9	18.6	ND	ND	ND	ND	74.8	75.2	ND
226	17.0	17.4	15.2	17.4	16.8	ND	ND	ND	ND	70.6	66.8	ND
227	17.9	17.7	16.4	16.2	18.0	ND	ND	ND	ND	72.2	68.2	ND
228	17.5	18.4	17.1	16.2	18.4	ND	ND	ND	ND	70.0	70.1	ND
229	22.0	24.0	21.6	20.0	21.8	ND	ND	ND	ND	88.6	87.4	ND
230	12.4	13.1	11.6	11.1	12.4	ND	ND	ND	ND	50.5	48.2	ND
231	19.3	16.3	15.2	16.0	19.2	ND	ND	ND	ND	77.1	66.7	ND
232	21.3	22.2	20.6	20.9	25.8	ND	ND	ND	ND	86.2	89.6	ND
233	14.5	15.5	13.0	12.4	15.3	ND	ND	ND	ND	58.3	56.1	ND
234	17.0	17.4	15.2	15.8	18.4	ND	ND	ND	ND	67.9	66.8	ND
235	16.2	17.0	15.8	14.9	18.0	ND	ND	ND	ND	64.8	65.6	ND
236	21.2	21.9	20.1	18.5	22.4	ND	ND	ND	ND	85.5	83.0	ND
237	21.0	22.2	21.1	19.2	22.8	ND	ND	ND	ND	90.1	85.3	ND
238	16.2	17.6	16.8	15.1	17.3	ND	ND	ND	ND	64.5	66.8	ND
239	17.9	19.7	16.2	16.1	19.0	ND	ND	ND	ND	72.2	70.9	ND
240	12.3	13.1	10.9	10.5	13.3	ND	ND	ND	ND	50.1	47.9	ND
241	13.1	12.8	11.9	11.4	12.4	ND	ND	ND	ND	52.6	48.5	ND
242	16.2	16.7	15.8	14.1	16.9	ND	ND	ND	ND	65.0	63.5	ND
243	16.2	15.9	15.5	13.8	16.5	ND	ND	ND	ND	65.1	61.7	ND
244	16.7	19.4	17.3	17.6	21.0	ND	ND	ND	ND	68.9	75.2	ND
245	16.3	16.3	15.1	12.9	17.0	ND	ND	ND	ND	66.4	61.4	ND
246	14.6	15.3	13.7	11.4	15.9	ND	ND	ND	ND	59.4	56.2	ND
247	12.9	13.1	11.4	10.7	13.3	ND	ND	ND	ND	51.9	48.5	ND
248	14.2	15.3	13.0	11.3	14.6	ND	ND	ND	ND	56.9	54.2	ND
249	17.1	16.2	17.2	13.2	15.9	ND	ND	ND	ND	68.2	62.5	ND
250	16.2	16.6	16.3	14.3	15.4	ND	ND	ND	ND	65.0	62.7	ND
251	16.6	17.5	14.8	14.5	14.3	ND	ND	ND	ND	66.0	61.2	ND
255	20.0	20.3	18.6	19.7	20.5	ND	ND	ND	ND	80.1	79.1	ND
256	19.9	20.0	20.4	19.0	21.5	ND	ND	ND	ND	79.7	80.8	ND
258	18.9	20.5	17.2	16.1	18.6	ND	ND	ND	ND	76.9	72.4	ND

* M_A determined by normalizing available quarterly data to 4 full quarters

(1) Location 217 16Q2 unavailable at time of collection (NCR # 02038698)

(2) Location 217 16Q4 unavailable at time of collection (NCR # 02087109)

(3) Location 225 16Q2 unavailable at time of collection (NCR # 02038809), but secondary TLD location was collected.

' --- ' indicates no data resulting from missing TLD, erroneous TLD reading, or omitted after investigation [Note]

Note: Data may be omitted after investigation considering the following: (1) Other TLD locations' data from upwind, downwind, and adjacent sectors (2) Review of documentation on location's characteristics, geography, topography, etc. (3) Comparison with other radiological data (i.e. gaseous effluent releases, direct radiation reports, surveys, dose calculations, Area TLDs, etc.).

Table 3.9-B definition of terms

- MDD_Q = minimum differential dose, quarterly, 3 times 90^{th} percentile s_Q determined from analysis in mrem
- MDD_A = minimum differential dose, annual, 3 times 90^{th} percentile s_A determined from analysis in mrem
- B_Q = Quarterly baseline (mrem)
- M_Q = location's 91 day standard quarter normalized dose (mrem per standard quarter)
- L_Q = quarterly investigation level dose (mrem)
- B_A = baseline background dose (mrem) (annual)
- M_A = annual monitoring data - Ma determined by normalizing available quarterly data to 4 full quarters
- L_A = annual investigation level dose (mrem)
- ND = not detected

3.10 LAND USE CENSUS

The 2016 Annual Land Use Census was conducted July 13, July 14, and July 20, 2016 as required by SLC 16.11-14. Table 3.10 summarizes census results. A map indicating identified locations is shown in Figure 3.10.

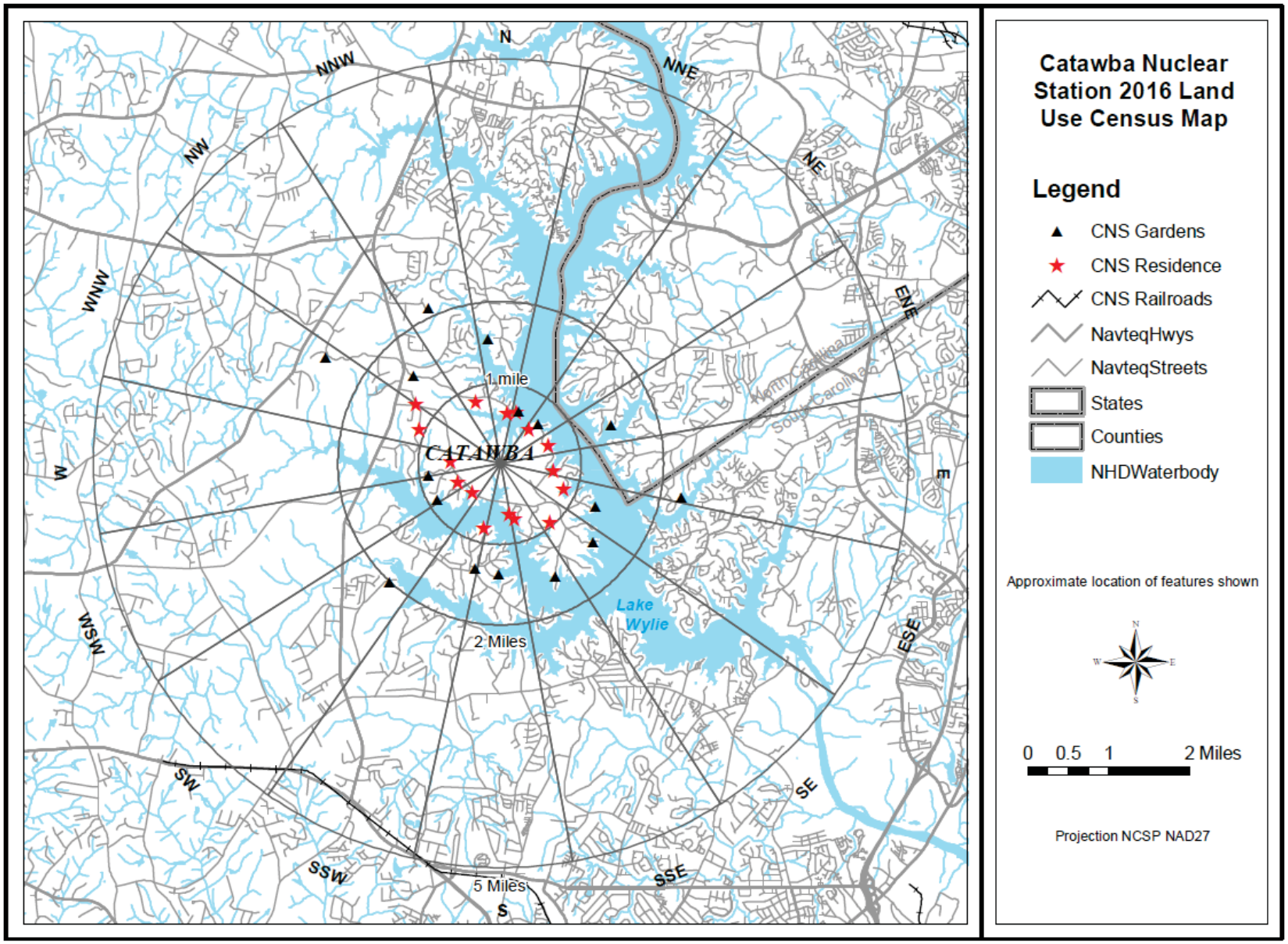
During the 2016 census no irrigated gardens (superior to existing gardens) or milk locations were identified. The nearest residence is located in the NE sector at 0.56 miles. No environmental program changes were required as a result of the 2016 land use census.

Table 3.10 Catawba 2016 Land Use Census Results

Sector		Distance (Miles)	Sector		Distance (Miles)
N	Nearest Residence	0.63	S	Nearest Residence	0.63
	Nearest Garden (Irr.)	1.55		Nearest Garden	1.25
	Nearest Milk Animal	-		Nearest Milk Animal	-
NNE	Nearest Residence	0.66	SSW	Nearest Residence	0.83
	Nearest Garden	0.69		Nearest Garden	1.33
	Nearest Milk Animal	-		Nearest Milk Animal	-
NE	Nearest Residence	0.56	SW	Nearest Residence	0.63
	Nearest Garden (Irr.)	0.67		Nearest Garden	2.02
	Nearest Milk Animal	-		Nearest Milk Animal	-
ENE	Nearest Residence	0.61	WSW	Nearest Residence	0.57
	Nearest Garden (Irr.)	1.44		Nearest Garden	0.91
	Nearest Milk Animal	-		Nearest Milk Animal	-
E	Nearest Residence	0.65	W	Nearest Residence	0.68
	Nearest Garden (Irr.)	2.26		Nearest Garden	0.96
	Nearest Milk Animal	-		Nearest Milk Animal	-
ESE	Nearest Residence	0.84	WNW	Nearest Residence	1.10
	Nearest Garden	1.29		Nearest Garden	2.53
	Nearest Milk Animal	-		Nearest Milk Animal	-
SE	Nearest Residence	0.97	NW	Nearest Residence	1.27
	Nearest Garden (Irr.)	1.50		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
"(Irr.)" indicates irrigated garden

Figure 3.10


N
NNW
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1 mile
2 Miles
5 Miles
CATAWBA
Lake Wylie
North Carolina
South Carolina
Catawba Nuclear Station 2016 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 2016 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 REMP 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, after subtracting the applicable average background concentration (as measured at the corresponding control location). Regulatory Guide 1.109 consumption rates for the maximum exposed individual were used in the calculations. A dose factor of zero was assumed when the guide listed "NO DATA" as the dose factor for a given radionuclide and organ.

Maximum dose estimates (Highest Annual Mean Concentration) based on 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 3.9.

The maximum environmental organ dose estimate for any single sample type (excluding TLD results) collected during 2016 was 2.92E-2 mrem to the child liver, total body, thyroid, kidney, lung, and GI-LLI from the consumption of drinking water.

4.2 ESTIMATED DOSE FROM RELEASES

Throughout the year, dose estimates were calculated based on actual 2016 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.

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 easily measured in the environment and therefore, environmental and effluent doses from C-14 cannot be compared directly.

In calculations based on environmental data, the liquid release pathways of drinking water, fish, and shoreline sediment were the predominant dose pathways. Liquid effluent release data indicated drinking water, fish, and shoreline sediment as the predominant dose pathways. The maximum total organ dose based on 2016 environmental sample results was 3.71E-2 mrem to the child total body. The maximum total organ dose of 8.43E-2 mrem for liquid effluent-based estimates was to the child liver.

In calculations based on gaseous release pathways, vegetation was the predominant dose pathway based on effluent data. The maximum total organ dose based on 2016 gaseous effluent estimates was 5.91E0 mrem to the child bone, with C-14 being the primary dose contributor. 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 and are described in the Annual Radiological Effluent Release Report (ARERR).

TABLE 4.1-A

CATAWBA NUCLEAR STATION
2016 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)	1.40E-03
Skin	Effluent	Teen	Shoreline Sediment	Discharge Pt.	1.63E-03
Bone	Environmental	-	-	-	0.00E+00
Bone	Effluent	Child	Fresh Water Fish	Discharge Pt.	1.46E-02
Liver	Environmental	Child	Drinking Water	214 (7.30 mi SSE)	3.68E-02
Liver	Effluent	Child	Drinking Water	7.30 mi SSE	8.43E-02
T. Body	Environmental	Child	Drinking Water	214 (7.30 mi SSE)	3.71E-02
T. Body	Effluent	Child	Drinking Water	7.30 mi SSE	8.25E-02
Thyroid	Environmental	Child	Drinking Water	214 (7.30 mi SSE)	3.68E-02
Thyroid	Effluent	Child	Drinking Water	7.30 mi SSE	8.15E-02
Kidney	Environmental	Child	Drinking Water	214 (7.30 mi SSE)	3.68E-02
Kidney	Effluent	Child	Drinking Water	7.30 mi SSE	8.21E-02
Lung	Environmental	Child	Drinking Water	214 (7.30 mi SSE)	3.68E-02
Lung	Effluent	Child	Drinking Water	7.30 mi SSE	8.18E-02
GI-LLI	Environmental	Child	Drinking Water	214 (7.30 mi SSE)	3.68E-02
GI-LLI	Effluent	Child	Drinking Water	7.30 mi SSE	8.20E-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	All	Ground Plane	0.5 mi NNE	0.00E+00
Bone	Environmental	-	-	-	0.00E+00
Bone	Effluent	Child	Vegetation	0.5 mi NNE	5.91E+00
Liver	Environmental	-	-	-	0.00E+00
Liver	Effluent	Child	Vegetation	0.5 mi NNE	2.26E+00
T. Body	Environmental	-	-	-	0.00E+00
T. Body	Effluent	Child	Vegetation	0.5 mi NNE	2.26E+00
Thyroid	Environmental	-	-	-	0.00E+00
Thyroid	Effluent	Child	Vegetation	0.5 mi NNE	2.26E+00
Kidney	Environmental	-	-	-	0.00E+00
Kidney	Effluent	Child	Vegetation	0.5 mi NNE	2.26E+00
Lung	Environmental	-	-	-	0.00E+00
Lung	Effluent	Child	Vegetation	0.5 mi NNE	2.26E+00
GI-LLI	Environmental	-	-	-	0.00E+00
GI-LLI	Effluent	Child	Vegetation	0.5 mi NNE	2.26E+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 2016 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	2.87E-02	2.87E-02	2.87E-02	2.87E-02	2.87E-02	2.87E-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	2.87E-02	2.87E-02	2.87E-02	2.87E-02	2.87E-02	2.87E-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	2.92E-02	2.92E-02	2.92E-02	2.92E-02	2.92E-02	2.92E-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	0.00E+00	7.64E-03	7.64E-03	7.64E-03	7.64E-03	7.64E-03	7.64E-03	0.00E+00
	Shoreline Sediment	0.00E+00	0.00E+00	2.49E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-04
	TOTAL	0.00E+00	3.68E-02	3.71E-02	3.68E-02	3.68E-02	3.68E-02	3.68E-02	2.93E-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	1.52E-02	1.52E-02	1.52E-02	1.52E-02	1.52E-02	1.52E-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	0.00E+00	9.24E-03	9.24E-03	9.24E-03	9.24E-03	9.24E-03	9.24E-03	0.00E+00
	Shoreline Sediment	0.00E+00	0.00E+00	1.19E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-03
	TOTAL	0.00E+00	2.44E-02	2.56E-02	2.44E-02	2.44E-02	2.44E-02	2.44E-02	1.40E-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	2.16E-02	2.16E-02	2.16E-02	2.16E-02	2.16E-02	2.16E-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	0.00E+00	1.20E-02	1.20E-02	1.20E-02	1.20E-02	1.20E-02	1.20E-02	0.00E+00
	Shoreline Sediment	0.00E+00	0.00E+00	2.14E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.52E-04
	TOTAL	0.00E+00	3.36E-02	3.38E-02	3.36E-02	3.36E-02	3.36E-02	3.36E-02	2.52E-04

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

Catawba Nuclear Station
Dose from Drinking Water Pathway for 2016 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	282	0.00E+00	2.87E-02	2.87E-02	2.87E-02	2.87E-02	2.87E-02	2.87E-02
						Dose Commitment (mrem) =				0.00E+00	2.87E-02	2.87E-02	2.87E-02	2.87E-02	2.87E-02	2.87E-02

Catawba Nuclear Station
Dose from Drinking Water Pathway for 2016 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	282	0.00E+00	2.92E-02	2.92E-02	2.92E-02	2.92E-02	2.92E-02	2.92E-02
						Dose Commitment (mrem) =				0.00E+00	2.92E-02	2.92E-02	2.92E-02	2.92E-02	2.92E-02	2.92E-02

Catawba Nuclear Station
Dose from Fish Pathway for 2016 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 = 6057 pCi/l x 0.9 = 5451 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	ALL	0.0	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	208	5451	0.00E+00	7.64E-03	7.64E-03	7.64E-03	7.64E-03	7.64E-03	7.64E-03
						Dose Commitment (mrem) =				0.00E+00	7.64E-03	7.64E-03	7.64E-03	7.64E-03	7.64E-03	7.64E-03

Catawba Nuclear Station
Dose from Shoreline Sediment Pathway for 2016 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-58	**7.00E-09**	**8.20E-09**	**ALL**	**0.00**	**0.00E+00**	**0.00E+00**
Co-60	**1.70E-08**	**2.00E-08**	**208**	**131**	**2.49E-04**	**2.93E-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**	**ALL**	**0.00**	**0.00E+00**	**0.00E+00**
		Dose Commitment (mrem) =			**2.49E-04**	**2.93E-04**

Catawba Nuclear Station
Dose from Drinking Water Pathway for 2016 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	282	0.00E+00	1.52E-02	1.52E-02	1.52E-02	1.52E-02	1.52E-02	1.52E-02
						Dose Commitment (mrem)=				0.00E+00	1.52E-02	1.52E-02	1.52E-02	1.52E-02	1.52E-02	1.52E-02

Catawba Nuclear Station

Dose from Fish Pathway for 2016 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 = 6057 pCi/l x 0.9 = 5451 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	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	208	5451	0.00E+00	9.24E-03	9.24E-03	9.24E-03	9.24E-03	9.24E-03	9.24E-03
						Dose Commitment (mrem) =				0.00E+00	9.24E-03	9.24E-03	9.24E-03	9.24E-03	9.24E-03	9.24E-03

Catawba Nuclear Station
Dose from Shoreline Sediment Pathway for 2016 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-58	7.00E-09	8.20E-09	ALL	0.00	0.00E+00	0.00E+00
Co-60	1.70E-08	2.00E-08	208	131	1.19E-03	1.40E-03
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	ALL	0.00	0.00E+00	0.00E+00
	Dose Commitment (mrem) =				1.19E-03	1.40E-03

Catawba Nuclear Station
Dose from Drinking Water Pathway for 2016 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	282	0.00E+00	2.16E-02	2.16E-02	2.16E-02	2.16E-02	2.16E-02	2.16E-02
						Dose Commitment (mrem) =				0.00E+00	2.16E-02	2.16E-02	2.16E-02	2.16E-02	2.16E-02	2.16E-02

Catawba Nuclear Station
Dose from Fish Pathway for 2016 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 = 6057 pCi/l x 0.9 = 5451 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	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	208	5451	0.00E+00	1.20E-02	1.20E-02	1.20E-02	1.20E-02	1.20E-02	1.20E-02
						Dose Commitment (mrem) =				0.00E+00	1.20E-02	1.20E-02	1.20E-02	1.20E-02	1.20E-02	1.20E-02

Catawba Nuclear Station
Dose from Shoreline Sediment Pathway for 2016 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 (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-58	7.00E-09	8.20E-09	ALL	0.00	0.00E+00	0.00E+00
Co-60	1.70E-08	2.00E-08	208	131	2.14E-04	2.52E-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	ALL	0.00	0.00E+00	0.00E+00
Dose Commitment (mrem) =					2.14E-04	2.52E-04

5.0 QUALITY ASSURANCE

5.1 SAMPLE COLLECTION

EnRad Laboratories and the Environmental Water Resources Group 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's Environmental Center.

5.3 DOSIMETRY ANALYSIS

The Radiation Dosimetry and Records group performed the 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 outside of the acceptable limits.

5.4.3 BATCH PROCESSING

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

5.5 DUKE ENERGY INTERLABORATORY COMPARISON PROGRAM

In 2016 Duke Energy Environmental Laboratory (EnRad) participated in interlaboratory programs to satisfy Radiological Environmental Monitoring Program requirements in

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

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

5.5.1 DUKE ENERGY INTERLABORATORY PROGRAM

EnRad Laboratories participated in the Duke Energy Fleet Scientific Services (FSS) Interlaboratory Program during 2016. Interlaboratory cross check samples including mixed gamma in water (Marinelli beakers), low-level I-131 in water, gross beta in water, and tritium in water samples were analyzed during 2016. A summary of the EnRad Laboratory program results for 2016 is documented in Table 5.0-A.

Interlaboratory cross checks were distributed by Fleet Scientific Services (FSS) staff in accordance with SRPMP 9-2. One media type, water, was analyzed for mixed gamma, tritium, beta, and LLI-131. Table 5.0-A lists results for specific analyses. One-hundred and seventy-four results were reported of which 164 (94.3%) were in agreement.

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

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

5.5.2 ECKERT & ZIEGLER ANALYTICS CROSS CHECK PROGRAM

EnRad Laboratories participated in the Eckert & Ziegler Analytics Cross Check Program during 2016. Cross check samples including air filters (single and composites), air cartridges, gross beta in water, various mixed gamma samples in Marinelli beakers (soil, vegetation, milk, and water), tritium in water, and Iodine in milk and water samples were analyzed at various times of the year. A summary of the EnRad Laboratory program results for 2016 is documented in Table 5.0-B.

Interlaboratory cross check samples from EZA were received and analyzed in all four quarters of 2016. Table 5.0-B lists the performance for specific samples.

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

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

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

5.5.3 ERA PROFICIENCY TESTING

EnRad Laboratories performed method proficiency testing through a program administered by Environmental Resource Associates (ERA) of Arvada, CO. ERA supplied requested method proficiency samples for analysis and nuclide concentration determination. ERA reported proficiency test results to the North Carolina Department of Health and Human Services, North Carolina Public Health Drinking Water Laboratory Certification Program. A summary of these proficiency test data for 2016 is documented in Table 5.0-C.

Proficiency samples were distributed in the second and fourth quarters. Table 5.0-C summarizes the results and evaluation. Fourteen results were reported of which 14 (100%) were in agreement.

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

so NCR # 02103716 was generated to better document the possible cause of the I-131 bias.

5.6 INTERCOMPARISON PROGRAM

Catawba Nuclear Station routinely participates in an environmental sample intercomparison program. Program elements include sampling frequency and analysis parameters for drinking water, surface water, milk, fish, broadleaf vegetation, and shoreline sediment samples that have been collected. Samples are routinely split with a vendor laboratory for intercomparison analysis.

5.7 TLD INTERCOMPARISON PROGRAM

5.7.1 NUCLEAR TECHNOLOGY SERVICES INTERCOMPARISON PROGRAM

Radiation Dosimetry and Records participates in a quarterly TLD intercomparison program administered by Nuclear Technology Services, Inc. of Roswell, GA. Nuclear Technology Services irradiates environmental dosimeters quarterly and sends them to the Radiation Dosimetry and Records group for analysis of the unknown estimated delivered exposure. A summary of the 2016 Nuclear Technology Services Intercomparison Report is documented in Table 5.0-D.

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

TABLE 5.0-A

DUKE ENERGY

INTERLABORATORY COMPARISON PROGRAM

2016 EnRad Fleet Scientific Services Cross Check Performance Summary

Interlaboratory cross checks were distributed by Fleet Scientific Services (FSS) staff in accordance with SRPMP 9-2. One media type, water, was analyzed for mixed gamma, tritium, beta, and LLI-131. Table 5.0-A lists results for specific analyses. One-hundred and seventy-four results were reported of which 164 (94.3%) were in agreement.

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

TABLE 5.0-A (Cont.)

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

TABLE 5.0-A (Cont.)

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

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

TABLE 5.0-A (Cont.)

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

TABLE 5.0-A (Cont.)

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

TABLE 5.0-A (Cont.)

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

2) NCR # 02074856

TABLE 5.0-A (Cont.)

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

3) NCR # 02072622

TABLE 5.0-B

ECKERT & ZIEGLER ANALYTICS

CROSS CHECK PROGRAM

2016 Cross Check Results for EnRad Laboratories

Interlaboratory cross check samples from EZA were received and analyzed in all four quarters of 2016. Results are reported directly to Eckert & Ziegler Analytics. Environmental cross check samples were analyzed in replicate, and the result closest to the mean is reported to Eckert & Ziegler Analytics. The acceptance criteria for the program was based on the NRC Inspection Manual Procedure 84750 (IP 84750). Table 5.0-B lists the performance for specific samples. Seventy-nine results were reported of which 79 (100%) met the acceptance criteria based on IP 84750.

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

1) NCR # 02045683
2) NCR # 02052857

TABLE 5.0-B (Cont.)

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

3) NCR # 02080821
4) NCR # 02074444

TABLE 5.0-B (Cont.)

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

5) NCR # 02027474

TABLE 5.0-C

ENVIRONMENTAL RESOURCE ASSOCIATES (ERA)

PROFICIENCY TESTING

2016 Proficiency Test Results for EnRad Laboratories

North Carolina Department of Health and Human Services Laboratory Certification

EnRad Laboratories

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

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

1) NCR # 02032824
2) NCR # 02081918

TABLE 5.0-D

2016 ENVIRONMENTAL DOSIMETER

CROSS-CHECK RESULTS

Nuclear Technology Services

Radiation Dosimetry and Records participates in a quarterly TLD intercomparison program administered by Nuclear Technology Services, Inc. of Roswell, GA. Nuclear Techno1ogy Services irradiates environmental dosimeters quarterly and sends them to Radiation Dosimetry and Records group for analysis of the unknown estimated delivered exposure. The individual measurements were evaluated and results falling outside the acceptable ratio criteria had an evaluation performed to identify any recommended remedial actions and to reduce anomalous errors. Complete documentation of any evaluation will be available and provided to the NRC upon request.

1st Quarter 2016

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
102234	90.33	88.74	1.79	<+/-15%	Pass
102082	87.38	88.74	-1.53	<+/-15%	Pass
103299	90.78	88.74	2.30	<+/-15%	Pass
103287	95.55	88.74	7.67	<+/-15%	Pass
103752	92.49	88.74	4.23	<+/-15%	Pass
		Average Bias (B)	2.89		
		Standard Deviation (S)	3.38		
		Measure Performance |B|+S	6.27	<15%	Pass

2nd Quarter 2016

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
103685	16.86	15.90	6.04	<+/-15%	Pass
103686	17.24	15.90	8.43	<+/-15%	Pass
103704	15.76	15.90	-0.88	<+/-15%	Pass
103705	16.21	15.90	1.95	<+/-15%	Pass
103714	17.45	15.90	9.75	<+/-15%	Pass
		Average Bias (B)	5.06		
		Standard Deviation (S)	4.45		
		Measure Performance |B|+S	9.51	<15%	Pass

3rd Quarter 2016

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
102058	73.65	69.8	5.58	<+/-15%	Pass
103540	76.65	69.8	9.88	<+/-15%	Pass
103523	82.05	69.8	17.62	<+/-15%	Fail[1]
100795	74.03	69.8	6.12	<+/-15%	Pass
100355	71.79	69.8	2.91	<+/-15%	Pass
		Average Bias (B)	8.42		
		Standard Deviation (S)	5.71		
		Measure Performance |B|+S	14.13	<15%	Pass

4th Quarter 2016

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
100527	81.50	75.3	8.23	<+/-15%	Pass
100345	80.56	75.3	6.99	<+/-15%	Pass
101386	82.55	75.3	9.63	<+/-15%	Pass
100123	81.17	75.3	7.80	<+/-15%	Pass
103511	87.26	75.3	15.88	<+/-15%	Fail[1]
		Average Bias (B)	9.71		
		Standard Deviation (S)	3.58		
		Measure Performance |B|+S	13.29	<15%	Pass

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

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

Telemetric REMP air location equipment monitoring was implemented during 2016 and dual air sampler placement discontinued (NCR # 01993671).

REMP air filter orientation was changed during 2016 by inward facing the scrim side (shiny side or fuzzy side) and outward facing the crosshatch side (dull side or paper side) as indicated by manufacturer recommendation (NCR # 02026783, 02088361).

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-measured 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 Perkin-Elmer 2900TR liquid scintillation system or Perkin-Elmer 3100TR liquid scintillation system. Tritium samples are distilled and

batch processed with a laboratory fortified blank, matrix spike, matrix spike duplicate, and blank to verify instrument performance and sample preparation technique are acceptable.

Gross beta analysis is performed 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

REMP air filter orientation was changed during 2016 by inward facing the scrim side (shiny side or fuzzy side) and outward facing the crosshatch side (dull side or paper side) as indicated by manufacturer recommendation (NCR # 02026783, 02088361). Calibration standards using the new configuration were implemented during 2016.

IV. SAMPLING AND ANALYSIS PROCEDURES

A.1 AIRBORNE PARTICULATE AND RADIOIODINE

Airborne particulate and radioiodine samples at each of six 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. A weekly gross beta analysis was performed on each filter. A quarterly gamma analysis was performed on the quarterly filter composite (by location). 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 208 = Discharge Canal (0.45 mi. S)
Location 212 = Tega Cay (3.32 mi. E)
Location 258 = Fairhope Road (9.84 mi. W)(Control)
Location 261 = Site Boundary (0.72 mi. N)

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)(Control)

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)(Control)

A.4 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)(Control)

A.5 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)(Control)

A.6 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.7 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)(Control)

A.8 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)(Control)

A.9 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.10 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 on 7/13, 7/14, and 7/20/2016. Results are shown in Table 3.11. No changes were made to the sampling procedures during 2016 as a result of the 2016 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

CATAWBA NUCLEAR STATION
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY

Catawba Nuclear Station
York County, South Carolina

Docket Numbers 50-413, 414
Calendar Year 2016

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Lower Limit of Detection (LLD)[1]	All Indicator Locations[2][3] Mean Range	Location w/Highest Annual Mean		Control Locations Mean Range[2][3]	No. of Non-Routine Report Meas.
				Name, Distance, and Direction	Mean Range[2][3]		
Air Particulate (pCi/m^3)	Gross Beta 312	See Table 2.2-C	2.14E-2 (260/260) 7.53E-3 – 4.62E-2	208 (0.45 mi S)	2.24E-2 (52/52) 1.04E-2 – 4.60E-2	258 (9.84 mi W) 2.07E-2 (52/52) 9.11E-3 – 4.56E-2	0
	Gamma 24	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
Air Radioiodine (pCi/m^3)	Gamma 312	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
Drinking Water (pCi/l)	Gross Beta 26	4	1.80 (13/13) 0.71 – 2.70	214 (7.30 mi SSE)	1.80 (13/13) 0.71 – 2.70	218 (13.5 mi NNE) 1.75 (11/13) 0.96 – 2.95	0
	Gamma 26	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
	Tritium 8	2000	688 (4/4) 392 - 1150	214 (7.30 mi SSE)	688 (4/4) 392 - 1150	218 (13.5 mi NNE) 406 (4/4) 258 – 463	0
Surface Water (pCi/l)	Gamma 39	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
	Tritium 12	2000	3484 (8/8) 238 - 8270	208 (0.45 mi S)	6338 (4/4) 4370 - 8270	215 (4.21 mi NNE) 281 (4/4) 227 – 387	0
Milk (pCi/l)	Gamma 26	See Table 2.2-C	No Indicator Location	-----	-----	All less than LLD	0
	I-131 26	See Table 2.2-C	No Indicator Location	-----	-----	All less than LLD	0

CATAWBA NUCLEAR STATION
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY

Catawba Nuclear Station
York County, South Carolina

Docket Numbers 50-413, 414
Calendar Year 2016

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Lower Limit of Detection (LLD)[1]	All Indicator Locations[2][3] Mean Range	Location w/Highest Annual Mean		Control Locations Mean Range[2][3]	No. of Non-Routine Report Meas.
				Name, Distance, and Direction	Mean Range[2][3]		
Broadleaf Vegetation (pCi/kg, wet)	Gamma 60	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
Food Products (pCi/kg, wet)	Gamma 9 [4]	See Table 2.2-C	All less than LLD	-----	-----	No Control Location	0
Fish (pCi/kg, wet)	Gamma 12	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
Sediments--Shoreline (pCi/kg, dry)	Gamma 6 Co-60	See Table 2.2-C	131 (2/4) 59.2 – 203	208 (0.45 mi S)	131 (2/2) 59.2 – 203	All less than LLD	0
TLD (mR per quarter) [5]	TLD Readout 162 [4]	-----	18.0 (152/152) 11.1 – 27.2	232 (4.18 mi NE)	23.6 (4/4) 21.7 – 27.2	217 (10.3 mi SSE) 247 (7.33 mi ESE) 251 (9.72 mi WNW) 14.1 (10/10) 11.2 – 18.4	0

Footnotes to Appendix B

1. The Lower Limit of Detection (LLD) is the smallest concentration of radioactive material in a sample that will yield a net count above system background which will be detected with 95 percent probability and with only 5 percent probability of falsely concluding that a blank observation represents a "real" signal. Due to counting statistics and varying volumes, occasionally lower LLDs are achieved. Refer to Section 2.3.2 for an explanation of how LLD values were derived.

2. Mean and range are based on detectable measurements only.

3. The fractions of all samples with detectable activities at specific locations are indicated in parentheses.

4. Missing samples or surveillances are discussed in Appendix C or Appendix D.

5. TLD exposure is reported in milliroentgen (mR) per standard quarter (91 days). TLD data indicated in section 3.10 (Direct Gamma Radiation) are reported in mrem /yr (n * 0.95).

APPENDIX C

SAMPLING DEVIATIONS
&
UNAVAILABLE ANALYSES

APPENDIX C

CATAWBA NUCLEAR STATION
SAMPLING DEVIATIONS & UNAVAILABLE ANALYSES

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

C.1 SAMPLING DEVIATIONS

Air Particulate and Air Radioiodine

REMP weekly air samples (Air Particulate (AP) or Air Radioiodine (AR)) that experience any downtime during a surveillance period are reported as a Deviation and classified as a "Sampling Deviation." However, the sample is counted and the data reported, whereas a Deviation with no available sample is classified as an "Unavailable Analyses" and does not have any data reported. The Catawba REMP air samplers operated for a total of 99.9% availability in 2016.

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
208	1/26 – 2/2/2016	PI	1.28 hours downtime, tree removal from power line.	NCR # 01997774
200	2/23 – 3/1/2016	PI	0.48 hours downtime due to severe thunderstorm.	NCR # 02006802
261	2/23 – 3/1/2016	PI	0.47 hours downtime due to severe thunderstorm.	NCR # 02006804
201	6/28 – 7/6/2016	PI	1.43 hours downtime due to power interruption.	NCR # 02043705
201	7/26 – 8/2/2016	PI	0.16 hours downtime due to severe thunderstorm.	NCR # 02050516
212	10/11 – 10/18/2016	PI	7.86 hours downtime due to electrical work.	NCR # 02071210
212	12/6 – 12/13/2016	PI	0.62 hours downtime due to electrical work.	NCR # 02086131

Drinking Water and Surface Water

REMP monthly drinking water samples (Drinking Water (DW)) that experience any downtime during a surveillance period are reported as a deviation and classified as a "Sampling Deviation." However, the sample is counted and the data reported, whereas a Deviation with no available sample is classified as an "Unavailable Analyses" and does not have any data reported. The water samplers operated for a total of 98.4% availability in 2016.

Drinking Water

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
214	3/29 – 4/26/2016	PO	15.6 days downtime due to power outage to sampling equipment. Power outage was attributed to defective AC power outlet which caused sampling equipment malfunction. Alternative AC outlet was located and normal sampling resumed. The defective AC outlet was replaced to prevent recurrence.	NCR # 02023964
214	4/26 – 5/24/2016	IV	Insufficient volume available for sampling due to pinched intake tubing. A grab sample was taken, sampler tubing replaced, equipment was verified operational and normal sampling resumed.	NCR # 02032764
218	10/11 – 11/18/2016	OT	Sampling equipment was found operating beyond the required calibration due date. Sampling equipment was calibrated, normal sampling was resumed. Procedures and laboratory calibration update processes were enhanced to prevent recurrence.	NCR # 02077015

Surface Water

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
211	3/29 – 4/26/2016	OT	Fourteen days of downtime were incurred due to sampler's water supply being turned off despite valve signage. Follow up with Wylie Dam management was performed to prevent recurrence and increase awareness that sampling equipment water supply is not to be interrupted.	NCR # 02023829

C.2 UNAVAILABLE ANALYSES

Food Products / Crops

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
260	1/6/2016	SU	Sample seasonally unavailable at time of collection.	NCR # 01988903
260	2/2/2016	SU	Sample seasonally unavailable at time of collection.	NCR # 01997122
260	3/1/2016	SU	Sample seasonally unavailable at time of collection.	NCR # 02006338

TLD

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
217	3/17 – 6/6/2016	CN	TLD missing due to construction.	NCR # 02038698
217	9/15 – 12/15/2016	CN	TLD missing due to construction.	NCR # 02087109

APPENDIX D

ANALYTICAL DEVIATIONS

No Analytical deviations were incurred for the
2016 Radiological Environmental Monitoring Program

APPENDIX E

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM RESULTS

2016

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

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398666	12/29/2015 - 1/6/2016	Beta	1.46E-02	2.25E-03	2.41E-03
398919	1/6/2016 - 1/12/2016	Beta	7.53E-03	2.30E-03	3.12E-03
399237	1/12/2016 - 1/19/2016	Beta	2.05E-02	2.66E-03	2.49E-03
399983	1/19/2016 - 1/26/2016	Beta	1.52E-02	2.57E-03	2.90E-03
400336	1/26/2016 - 2/2/2016	Beta	2.01E-02	2.63E-03	2.52E-03
400966	2/2/2016 - 2/9/2016	Beta	1.47E-02	2.61E-03	3.04E-03
401332	2/9/2016 - 2/16/2016	Beta	1.76E-02	2.49E-03	2.37E-03
401782	2/16/2016 - 2/23/2016	Beta	1.23E-02	2.28E-03	2.57E-03
402293	2/23/2016 - 3/1/2016	Beta	1.57E-02	2.48E-03	2.62E-03
403021	3/1/2016 - 3/8/2016	Beta	1.43E-02	2.38E-03	2.54E-03
404502	3/8/2016 - 3/15/2016	Beta	1.52E-02	2.50E-03	2.75E-03
405385	3/15/2016 - 3/22/2016	Beta	1.87E-02	2.70E-03	2.85E-03
406002	3/22/2016 - 3/29/2016	Beta	1.73E-02	2.68E-03	2.91E-03
406347	12/29/2015 - 3/29/2016	Cs-134	<6.27E-04	0.00E+00	6.27E-04
		Cs-137	<3.83E-04	0.00E+00	3.83E-04
		Be-7	1.32E-01	2.28E-02	1.55E-02
		K-40	9.34E-03	5.25E-03	1.95E-03
406341	3/29/2016 - 4/5/2016	Beta	1.52E-02	2.44E-03	2.57E-03
407533	4/5/2016 - 4/12/2016	Beta	1.28E-02	2.42E-03	2.87E-03
408110	4/12/2016 - 4/19/2016	Beta	1.76E-02	2.64E-03	2.81E-03
409423	4/19/2016 - 4/26/2016	Beta	2.22E-02	2.86E-03	2.78E-03
409758	4/26/2016 - 5/3/2016	Beta	1.98E-02	2.76E-03	2.83E-03
410913	5/3/2016 - 5/10/2016	Beta	1.74E-02	2.54E-03	2.52E-03
411410	5/10/2016 - 5/17/2016	Beta	1.63E-02	2.59E-03	2.81E-03
411734	5/17/2016 - 5/24/2016	Beta	1.46E-02	2.39E-03	2.53E-03
412197	5/24/2016 - 6/1/2016	Beta	2.11E-02	2.59E-03	2.54E-03

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
412716	6/1/2016 - 6/7/2016	Beta	1.58E-02	2.75E-03	2.97E-03
413316	6/7/2016 - 6/14/2016	Beta	2.60E-02	3.06E-03	2.88E-03
413863	6/14/2016 - 6/21/2016	Beta	2.06E-02	2.77E-03	2.76E-03
415004	6/21/2016 - 6/28/2016	Beta	2.19E-02	2.85E-03	2.77E-03
415384	3/29/2016 - 6/28/2016	Cs-134	<7.82E-04	0.00E+00	7.82E-04
		Cs-137	<4.96E-04	0.00E+00	4.96E-04
		Be-7	1.86E-01	2.73E-02	1.20E-02
		K-40	1.53E-02	7.47E-03	7.13E-03
415378	6/28/2016 - 7/6/2016	Beta	2.56E-02	2.69E-03	2.17E-03
416368	7/6/2016 - 7/12/2016	Beta	1.59E-02	2.82E-03	3.15E-03
416992	7/12/2016 - 7/19/2016	Beta	1.67E-02	2.56E-03	2.67E-03
417386	7/19/2016 - 7/26/2016	Beta	2.74E-02	3.03E-03	2.62E-03
417780	7/26/2016 - 8/2/2016	Beta	1.83E-02	2.67E-03	2.76E-03
418241	8/2/2016 - 8/9/2016	Beta	2.00E-02	2.62E-03	2.38E-03
418970	8/9/2016 - 8/16/2016	Beta	9.47E-03	2.33E-03	3.07E-03
419471	8/16/2016 - 8/23/2016	Beta	1.30E-02	2.35E-03	2.63E-03
420001	8/23/2016 - 8/30/2016	Beta	2.55E-02	2.97E-03	2.65E-03
420552	8/30/2016 - 9/7/2016	Beta	2.07E-02	2.45E-03	2.25E-03
421389	9/7/2016 - 9/13/2016	Beta	3.92E-02	3.93E-03	3.42E-03
422547	9/13/2016 - 9/20/2016	Beta	2.29E-02	3.03E-03	3.19E-03
423292	9/20/2016 - 9/27/2016	Beta	2.25E-02	2.89E-03	2.82E-03
424415	6/28/2016 - 9/27/2016	Cs-134	<7.31E-04	0.00E+00	7.31E-04
		Cs-137	<6.17E-04	0.00E+00	6.17E-04
		Be-7	1.50E-01	2.31E-02	7.52E-03
		K-40	7.83E-03	5.25E-03	5.51E-03
424409	9/27/2016 - 10/4/2016	Beta	2.77E-02	3.12E-03	2.89E-03
425401	10/4/2016 - 10/11/2016	Beta	1.84E-02	2.62E-03	2.59E-03
425964	10/11/2016 - 10/18/2016	Beta	2.78E-02	3.07E-03	2.68E-03

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
426339	10/18/2016 - 10/25/2016	Beta	2.22E-02	2.83E-03	2.67E-03
427028	10/25/2016 - 11/1/2016	Beta	3.28E-02	3.34E-03	2.89E-03
427687	11/1/2016 - 11/8/2016	Beta	3.42E-02	3.33E-03	2.68E-03
428182	11/8/2016 - 11/15/2016	Beta	2.25E-02	3.50E-03	3.76E-03
428867	11/15/2016 - 11/21/2016	Beta	4.62E-02	4.21E-03	3.48E-03
429374	11/21/2016 - 11/29/2016	Beta	1.96E-02	2.60E-03	2.56E-03
429925	11/29/2016 - 12/6/2016	Beta	2.05E-02	2.78E-03	2.80E-03
430546	12/6/2016 - 12/13/2016	Beta	2.41E-02	2.95E-03	2.81E-03
431037	12/13/2016 - 12/20/2016	Beta	3.16E-02	3.65E-03	3.39E-03
431441	12/20/2016 - 12/28/2016	Beta	2.36E-02	2.96E-03	2.88E-03
431785	9/27/2016 - 12/28/2016	Cs-134	<4.54E-04	0.00E+00	4.54E-04
		Cs-137	<5.06E-04	0.00E+00	5.06E-04
		Be-7	1.53E-01	2.37E-02	1.23E-02
		K-40	<1.25E-02	0.00E+00	1.25E-02

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398667	12/29/2015 - 1/6/2016	Beta	1.99E-02	2.50E-03	2.42E-03
398920	1/6/2016 - 1/12/2016	Beta	1.03E-02	2.46E-03	3.10E-03
399238	1/12/2016 - 1/19/2016	Beta	2.04E-02	2.67E-03	2.51E-03
399984	1/19/2016 - 1/26/2016	Beta	1.88E-02	2.74E-03	2.88E-03
400337	1/26/2016 - 2/2/2016	Beta	1.81E-02	2.59E-03	2.62E-03
400967	2/2/2016 - 2/9/2016	Beta	1.75E-02	2.67E-03	2.91E-03
401333	2/9/2016 - 2/16/2016	Beta	1.88E-02	2.55E-03	2.37E-03
401783	2/16/2016 - 2/23/2016	Beta	1.39E-02	2.37E-03	2.57E-03
402294	2/23/2016 - 3/1/2016	Beta	1.57E-02	2.49E-03	2.62E-03
403022	3/1/2016 - 3/8/2016	Beta	1.61E-02	2.47E-03	2.53E-03
404503	3/8/2016 - 3/15/2016	Beta	1.40E-02	2.44E-03	2.75E-03

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	405386	Sample Dates: 3/15/2016 - 3/22/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.04E-02	2.79E-03	2.87E-03
Sample ID:	**406003**	**Sample Dates: 3/22/2016 - 3/29/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	1.55E-02	2.58E-03	2.90E-03
Sample ID:	**406348**	**Sample Dates: 12/29/2015 - 3/29/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Cs-134	<3.67E-04	0.00E+00	3.67E-04
			Cs-137	<3.67E-04	0.00E+00	3.67E-04
			Be-7	1.33E-01	2.17E-02	8.64E-03
			K-40	<1.03E-02	0.00E+00	1.03E-02
Sample ID:	**406342**	**Sample Dates: 3/29/2016 - 4/5/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	1.83E-02	2.60E-03	2.57E-03
Sample ID:	**407534**	**Sample Dates: 4/5/2016 - 4/12/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	1.59E-02	2.58E-03	2.87E-03
Sample ID:	**408111**	**Sample Dates: 4/12/2016 - 4/19/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	2.18E-02	2.84E-03	2.81E-03
Sample ID:	**409424**	**Sample Dates: 4/19/2016 - 4/26/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	2.46E-02	2.98E-03	2.79E-03
Sample ID:	**409759**	**Sample Dates: 4/26/2016 - 5/3/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	2.11E-02	2.82E-03	2.83E-03
Sample ID:	**410914**	**Sample Dates: 5/3/2016 - 5/10/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	1.76E-02	2.55E-03	2.52E-03
Sample ID:	**411411**	**Sample Dates: 5/10/2016 - 5/17/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	2.10E-02	2.81E-03	2.80E-03
Sample ID:	**411735**	**Sample Dates: 5/17/2016 - 5/24/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	1.32E-02	2.32E-03	2.54E-03
Sample ID:	**412198**	**Sample Dates: 5/24/2016 - 6/1/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	2.19E-02	2.63E-03	2.54E-03
Sample ID:	**412717**	**Sample Dates: 6/1/2016 - 6/7/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	1.47E-02	2.67E-03	2.95E-03
Sample ID:	**413317**	**Sample Dates: 6/7/2016 - 6/14/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	2.86E-02	3.16E-03	2.88E-03
Sample ID:	**413864**	**Sample Dates: 6/14/2016 - 6/21/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	2.14E-02	2.81E-03	2.76E-03
Sample ID:	**415005**	**Sample Dates: 6/21/2016 - 6/28/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	2.71E-02	3.07E-03	2.78E-03
Sample ID:	**415385**	**Sample Dates: 3/29/2016 - 6/28/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Cs-134	<5.07E-04	0.00E+00	5.07E-04
			Cs-137	<4.48E-04	0.00E+00	4.48E-04
			Be-7	2.20E-01	2.96E-02	8.75E-03
			K-40	<1.25E-02	0.00E+00	1.25E-02
Sample ID:	**415379**	**Sample Dates: 6/28/2016 - 7/6/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	2.27E-02	2.57E-03	2.18E-03
Sample ID:	**416369**	**Sample Dates: 7/6/2016 - 7/12/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	2.01E-02	3.03E-03	3.15E-03
Sample ID:	**416993**	**Sample Dates: 7/12/2016 - 7/19/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	1.59E-02	2.52E-03	2.66E-03
Sample ID:	**417387**	**Sample Dates: 7/19/2016 - 7/26/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	2.62E-02	2.98E-03	2.62E-03
Sample ID:	**417781**	**Sample Dates: 7/26/2016 - 8/2/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	2.01E-02	2.76E-03	2.77E-03

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
418242	8/2/2016 - 8/9/2016	Beta	2.21E-02	2.72E-03	2.38E-03
418971	8/9/2016 - 8/16/2016	Beta	7.79E-03	2.24E-03	3.07E-03
419472	8/16/2016 - 8/23/2016	Beta	1.43E-02	2.43E-03	2.63E-03
420002	8/23/2016 - 8/30/2016	Beta	2.72E-02	3.05E-03	2.65E-03
420553	8/30/2016 - 9/7/2016	Beta	2.25E-02	2.60E-03	2.36E-03
421390	9/7/2016 - 9/13/2016	Beta	3.51E-02	3.77E-03	3.43E-03
422548	9/13/2016 - 9/20/2016	Beta	1.49E-02	2.37E-03	2.71E-03
423293	9/20/2016 - 9/27/2016	Beta	1.90E-02	2.72E-03	2.82E-03
424416	6/28/2016 - 9/27/2016	Cs-134	<4.63E-04	0.00E+00	4.63E-04
		Cs-137	<4.25E-04	0.00E+00	4.25E-04
		Be-7	1.49E-01	2.31E-02	6.66E-03
		K-40	8.23E-03	6.12E-03	8.11E-03
424410	9/27/2016 - 10/4/2016	Beta	2.54E-02	3.03E-03	2.89E-03
425402	10/4/2016 - 10/11/2016	Beta	1.56E-02	2.48E-03	2.60E-03
425965	10/11/2016 - 10/18/2016	Beta	2.72E-02	3.04E-03	2.68E-03
426340	10/18/2016 - 10/25/2016	Beta	1.87E-02	2.67E-03	2.67E-03
427029	10/25/2016 - 11/1/2016	Beta	3.17E-02	3.29E-03	2.89E-03
427688	11/1/2016 - 11/8/2016	Beta	3.11E-02	3.21E-03	2.69E-03
428183	11/8/2016 - 11/15/2016	Beta	2.10E-02	3.42E-03	3.75E-03
428868	11/15/2016 - 11/21/2016	Beta	4.39E-02	4.06E-03	3.39E-03
429375	11/21/2016 - 11/29/2016	Beta	2.58E-02	2.79E-03	2.44E-03
429926	11/29/2016 - 12/6/2016	Beta	1.70E-02	2.63E-03	2.82E-03
430547	12/6/2016 - 12/13/2016	Beta	2.36E-02	2.92E-03	2.79E-03
431038	12/13/2016 - 12/20/2016	Beta	2.97E-02	3.57E-03	3.39E-03
431442	12/20/2016 - 12/28/2016	Beta	3.22E-02	3.32E-03	2.88E-03
431786	9/27/2016 - 12/28/2016	Cs-134	<6.14E-04	0.00E+00	6.14E-04
		Cs-137	<6.39E-04	0.00E+00	6.39E-04

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431786	9/27/2016 - 12/28/2016	Be-7	1.34E-01	2.26E-02	1.35E-02
		K-40	1.28E-02	6.15E-03	1.93E-03

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398668	12/29/2015 - 1/6/2016	Beta	1.94E-02	2.48E-03	2.42E-03
398921	1/6/2016 - 1/12/2016	Beta	1.04E-02	2.47E-03	3.11E-03
399239	1/12/2016 - 1/19/2016	Beta	3.00E-02	3.09E-03	2.50E-03
399985	1/19/2016 - 1/26/2016	Beta	1.72E-02	2.66E-03	2.89E-03
400338	1/26/2016 - 2/2/2016	Beta	1.88E-02	2.62E-03	2.62E-03
400968	2/2/2016 - 2/9/2016	Beta	1.85E-02	2.72E-03	2.92E-03
401334	2/9/2016 - 2/16/2016	Beta	1.75E-02	2.49E-03	2.37E-03
401784	2/16/2016 - 2/23/2016	Beta	1.41E-02	2.38E-03	2.57E-03
402295	2/23/2016 - 3/1/2016	Beta	1.30E-02	2.34E-03	2.62E-03
403023	3/1/2016 - 3/8/2016	Beta	1.45E-02	2.39E-03	2.53E-03
404504	3/8/2016 - 3/15/2016	Beta	1.59E-02	2.54E-03	2.75E-03
405387	3/15/2016 - 3/22/2016	Beta	1.94E-02	2.74E-03	2.87E-03
406004	3/22/2016 - 3/29/2016	Beta	1.81E-02	2.71E-03	2.90E-03
406349	12/29/2015 - 3/29/2016	Cs-134	<5.66E-04	0.00E+00	5.66E-04
		Cs-137	<5.00E-04	0.00E+00	5.00E-04
		Be-7	1.38E-01	2.37E-02	1.41E-02
		K-40	<1.32E-02	0.00E+00	1.32E-02
406343	3/29/2016 - 4/5/2016	Beta	1.85E-02	2.61E-03	2.56E-03
407535	4/5/2016 - 4/12/2016	Beta	1.44E-02	2.50E-03	2.87E-03
408112	4/12/2016 - 4/19/2016	Beta	1.94E-02	2.73E-03	2.81E-03
409425	4/19/2016 - 4/26/2016	Beta	2.62E-02	3.04E-03	2.79E-03
409760	4/26/2016 - 5/3/2016	Beta	2.09E-02	2.81E-03	2.83E-03
410915	5/3/2016 - 5/10/2016	Beta	1.61E-02	2.47E-03	2.52E-03
411412	5/10/2016 - 5/17/2016	Beta	2.15E-02	2.83E-03	2.80E-03

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	411736	Sample Dates: 5/17/2016 - 5/24/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.49E-02	2.41E-03	2.54E-03
Sample ID:	412199	Sample Dates: 5/24/2016 - 6/1/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.14E-02	2.61E-03	2.54E-03
Sample ID:	412718	Sample Dates: 6/1/2016 - 6/7/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.66E-02	2.79E-03	2.95E-03
Sample ID:	413318	Sample Dates: 6/7/2016 - 6/14/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.34E-02	2.94E-03	2.88E-03
Sample ID:	413865	Sample Dates: 6/14/2016 - 6/21/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.32E-02	2.89E-03	2.76E-03
Sample ID:	415006	Sample Dates: 6/21/2016 - 6/28/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.62E-02	3.04E-03	2.78E-03
Sample ID:	415386	Sample Dates: 3/29/2016 - 6/28/2016	Nuclide	Activity	2 Sigma Error	MDA
			Cs-134	<6.83E-04	0.00E+00	6.83E-04
			Cs-137	<4.96E-04	0.00E+00	4.96E-04
			Be-7	1.88E-01	2.75E-02	1.13E-02
			K-40	1.06E-02	6.13E-03	6.03E-03
Sample ID:	415380	Sample Dates: 6/28/2016 - 7/6/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.73E-02	2.75E-03	2.16E-03
Sample ID:	416370	Sample Dates: 7/6/2016 - 7/12/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.75E-02	2.90E-03	3.15E-03
Sample ID:	416994	Sample Dates: 7/12/2016 - 7/19/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.87E-02	2.66E-03	2.66E-03
Sample ID:	417388	Sample Dates: 7/19/2016 - 7/26/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.78E-02	3.05E-03	2.62E-03
Sample ID:	417782	Sample Dates: 7/26/2016 - 8/2/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.75E-02	2.63E-03	2.76E-03
Sample ID:	418243	Sample Dates: 8/2/2016 - 8/9/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.03E-02	2.63E-03	2.38E-03
Sample ID:	418972	Sample Dates: 8/9/2016 - 8/16/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.06E-02	2.40E-03	3.07E-03
Sample ID:	419473	Sample Dates: 8/16/2016 - 8/23/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.45E-02	2.44E-03	2.63E-03
Sample ID:	420003	Sample Dates: 8/23/2016 - 8/30/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.86E-02	3.10E-03	2.65E-03
Sample ID:	420554	Sample Dates: 8/30/2016 - 9/7/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.51E-02	2.72E-03	2.36E-03
Sample ID:	421391	Sample Dates: 9/7/2016 - 9/13/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	3.99E-02	3.96E-03	3.43E-03
Sample ID:	422549	Sample Dates: 9/13/2016 - 9/20/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.26E-02	3.02E-03	3.19E-03
Sample ID:	423294	Sample Dates: 9/20/2016 - 9/27/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.62E-02	3.05E-03	2.82E-03
Sample ID:	424417	Sample Dates: 6/28/2016 - 9/27/2016	Nuclide	Activity	2 Sigma Error	MDA
			Cs-134	<4.62E-04	0.00E+00	4.62E-04
			Cs-137	<4.74E-04	0.00E+00	4.74E-04
			Be-7	1.50E-01	2.43E-02	1.47E-02
			K-40	<9.00E-03	0.00E+00	9.00E-03
Sample ID:	424411	Sample Dates: 9/27/2016 - 10/4/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.66E-02	3.07E-03	2.89E-03

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
425403	10/4/2016 - 10/11/2016	Beta	1.81E-02	2.61E-03	2.60E-03
425966	10/11/2016 - 10/18/2016	Beta	2.93E-02	3.13E-03	2.68E-03
426341	10/18/2016 - 10/25/2016	Beta	2.44E-02	2.93E-03	2.67E-03
427030	10/25/2016 - 11/1/2016	Beta	3.43E-02	3.39E-03	2.89E-03
427689	11/1/2016 - 11/8/2016	Beta	3.31E-02	3.29E-03	2.69E-03
428184	11/8/2016 - 11/15/2016	Beta	2.78E-02	3.60E-03	3.52E-03
428869	11/15/2016 - 11/21/2016	Beta	4.60E-02	4.14E-03	3.39E-03
429376	11/21/2016 - 11/29/2016	Beta	3.02E-02	2.96E-03	2.44E-03
429927	11/29/2016 - 12/6/2016	Beta	2.24E-02	2.88E-03	2.82E-03
430548	12/6/2016 - 12/13/2016	Beta	2.23E-02	2.86E-03	2.79E-03
431039	12/13/2016 - 12/20/2016	Beta	3.13E-02	3.64E-03	3.39E-03
431443	12/20/2016 - 12/28/2016	Beta	3.34E-02	3.36E-03	2.88E-03
431787	9/27/2016 - 12/28/2016	Cs-134	<5.69E-04	0.00E+00	5.69E-04
		Cs-137	<5.60E-04	0.00E+00	5.60E-04
		Be-7	1.59E-01	2.37E-02	8.62E-03
		K-40	<1.22E-02	0.00E+00	1.22E-02

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398669	12/29/2015 - 1/6/2016	Beta	1.76E-02	2.38E-03	2.40E-03
398922	1/6/2016 - 1/12/2016	Beta	8.47E-03	2.38E-03	3.15E-03
399240	1/12/2016 - 1/19/2016	Beta	1.98E-02	2.63E-03	2.49E-03
399986	1/19/2016 - 1/26/2016	Beta	1.85E-02	2.74E-03	2.91E-03
400339	1/26/2016 - 2/2/2016	Beta	2.35E-02	2.83E-03	2.60E-03
400969	2/2/2016 - 2/9/2016	Beta	1.67E-02	2.65E-03	2.94E-03
401335	2/9/2016 - 2/16/2016	Beta	1.73E-02	2.48E-03	2.37E-03
401785	2/16/2016 - 2/23/2016	Beta	1.60E-02	2.48E-03	2.57E-03
402296	2/23/2016 - 3/1/2016	Beta	1.83E-02	2.60E-03	2.60E-03

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

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
403024	3/1/2016 - 3/8/2016	Beta	1.45E-02	2.40E-03	2.55E-03
404505	3/8/2016 - 3/15/2016	Beta	1.61E-02	2.54E-03	2.73E-03
405388	3/15/2016 - 3/22/2016	Beta	1.87E-02	2.70E-03	2.86E-03
406005	3/22/2016 - 3/29/2016	Beta	1.65E-02	2.63E-03	2.91E-03
406350	12/29/2015 - 3/29/2016	Cs-134	<5.17E-04	0.00E+00	5.17E-04
		Cs-137	<4.98E-04	0.00E+00	4.98E-04
		Be-7	1.47E-01	2.26E-02	1.12E-02
		K-40	1.01E-02	5.32E-03	1.83E-03
406344	3/29/2016 - 4/5/2016	Beta	1.86E-02	2.62E-03	2.58E-03
407536	4/5/2016 - 4/12/2016	Beta	1.63E-02	2.60E-03	2.87E-03
408113	4/12/2016 - 4/19/2016	Beta	2.40E-02	2.94E-03	2.81E-03
409426	4/19/2016 - 4/26/2016	Beta	2.25E-02	2.82E-03	2.69E-03
409761	4/26/2016 - 5/3/2016	Beta	1.93E-02	2.75E-03	2.85E-03
410916	5/3/2016 - 5/10/2016	Beta	1.76E-02	2.55E-03	2.52E-03
411413	5/10/2016 - 5/17/2016	Beta	2.23E-02	2.88E-03	2.81E-03
411737	5/17/2016 - 5/24/2016	Beta	1.53E-02	2.42E-03	2.52E-03
412200	5/24/2016 - 6/1/2016	Beta	2.18E-02	2.64E-03	2.54E-03
412719	6/1/2016 - 6/7/2016	Beta	1.69E-02	2.81E-03	2.98E-03
413319	6/7/2016 - 6/14/2016	Beta	2.61E-02	3.06E-03	2.88E-03
413866	6/14/2016 - 6/21/2016	Beta	2.29E-02	2.87E-03	2.75E-03
415007	6/21/2016 - 6/28/2016	Beta	2.53E-02	3.00E-03	2.78E-03
415387	3/29/2016 - 6/28/2016	Cs-134	<4.45E-04	0.00E+00	4.45E-04
		Cs-137	<4.97E-04	0.00E+00	4.97E-04
		Be-7	2.10E-01	2.90E-02	1.48E-02
		K-40	<1.27E-02	0.00E+00	1.27E-02
415381	6/28/2016 - 7/6/2016	Beta	2.11E-02	2.49E-03	2.16E-03
416371	7/6/2016 - 7/12/2016	Beta	1.58E-02	2.81E-03	3.15E-03
416995	7/12/2016 - 7/19/2016	Beta	1.67E-02	2.55E-03	2.65E-03

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

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
417389	7/19/2016 - 7/26/2016	Beta	2.77E-02	3.05E-03	2.63E-03
417783	7/26/2016 - 8/2/2016	Beta	1.70E-02	2.60E-03	2.76E-03
418244	8/2/2016 - 8/9/2016	Beta	1.76E-02	2.50E-03	2.38E-03
418973	8/9/2016 - 8/16/2016	Beta	9.06E-03	2.30E-03	3.05E-03
419474	8/16/2016 - 8/23/2016	Beta	1.57E-02	2.50E-03	2.64E-03
420004	8/23/2016 - 8/30/2016	Beta	2.38E-02	2.90E-03	2.65E-03
420555	8/30/2016 - 9/7/2016	Beta	2.06E-02	2.52E-03	2.36E-03
421392	9/7/2016 - 9/13/2016	Beta	3.36E-02	3.71E-03	3.41E-03
422550	9/13/2016 - 9/20/2016	Beta	1.99E-02	2.91E-03	3.20E-03
423295	9/20/2016 - 9/27/2016	Beta	2.17E-02	2.85E-03	2.82E-03
424418	6/28/2016 - 9/27/2016	Cs-134	<6.25E-04	0.00E+00	6.25E-04
		Cs-137	<3.83E-04	0.00E+00	3.83E-04
		Be-7	1.37E-01	2.26E-02	1.28E-02
		K-40	<1.58E-02	0.00E+00	1.58E-02
424412	9/27/2016 - 10/4/2016	Beta	2.37E-02	2.95E-03	2.89E-03
425404	10/4/2016 - 10/11/2016	Beta	1.38E-02	2.37E-03	2.58E-03
425967	10/11/2016 - 10/18/2016	Beta	2.64E-02	3.11E-03	2.83E-03
426342	10/18/2016 - 10/25/2016	Beta	1.99E-02	2.72E-03	2.67E-03
427031	10/25/2016 - 11/1/2016	Beta	3.20E-02	3.30E-03	2.88E-03
427690	11/1/2016 - 11/8/2016	Beta	3.03E-02	3.17E-03	2.68E-03
428185	11/8/2016 - 11/15/2016	Beta	1.73E-02	2.91E-03	3.23E-03
428870	11/15/2016 - 11/21/2016	Beta	4.48E-02	4.10E-03	3.39E-03
429377	11/21/2016 - 11/29/2016	Beta	2.78E-02	2.87E-03	2.44E-03
429928	11/29/2016 - 12/6/2016	Beta	1.88E-02	2.69E-03	2.79E-03
430549	12/6/2016 - 12/13/2016	Beta	2.16E-02	2.86E-03	2.83E-03
431040	12/13/2016 - 12/20/2016	Beta	3.10E-02	3.63E-03	3.39E-03

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

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431444	12/20/2016 - 12/28/2016	Beta	2.81E-02	3.15E-03	2.88E-03
431788	9/27/2016 - 12/28/2016	Cs-134	<5.11E-04	0.00E+00	5.11E-04
		Cs-137	<4.90E-04	0.00E+00	4.90E-04
		Be-7	1.34E-01	2.16E-02	1.01E-02
		K-40	<1.29E-02	0.00E+00	1.29E-02

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398670	12/29/2015 - 1/6/2016	Beta	1.81E-02	2.43E-03	2.43E-03
398923	1/6/2016 - 1/12/2016	Beta	1.13E-02	2.52E-03	3.09E-03
399241	1/12/2016 - 1/19/2016	Beta	2.07E-02	2.69E-03	2.52E-03
399987	1/19/2016 - 1/26/2016	Beta	1.56E-02	2.57E-03	2.86E-03
400340	1/26/2016 - 2/2/2016	Beta	1.66E-02	2.52E-03	2.63E-03
400970	2/2/2016 - 2/9/2016	Beta	1.56E-02	2.57E-03	2.90E-03
401336	2/9/2016 - 2/16/2016	Beta	1.89E-02	2.56E-03	2.37E-03
401786	2/16/2016 - 2/23/2016	Beta	1.43E-02	2.39E-03	2.56E-03
402297	2/23/2016 - 3/1/2016	Beta	1.57E-02	2.49E-03	2.63E-03
403025	3/1/2016 - 3/8/2016	Beta	1.18E-02	2.24E-03	2.52E-03
404506	3/8/2016 - 3/15/2016	Beta	1.66E-02	2.57E-03	2.75E-03
405389	3/15/2016 - 3/22/2016	Beta	2.01E-02	2.77E-03	2.87E-03
406006	3/22/2016 - 3/29/2016	Beta	1.34E-02	2.47E-03	2.90E-03
406351	12/29/2015 - 3/29/2016	Cs-134	<6.32E-04	0.00E+00	6.32E-04
		Cs-137	<4.48E-04	0.00E+00	4.48E-04
		Be-7	1.24E-01	2.20E-02	1.32E-02
		K-40	8.76E-03	5.12E-03	1.98E-03
406345	3/29/2016 - 4/5/2016	Beta	1.82E-02	2.59E-03	2.57E-03
407537	4/5/2016 - 4/12/2016	Beta	1.41E-02	2.48E-03	2.86E-03
408114	4/12/2016 - 4/19/2016	Beta	1.89E-02	2.70E-03	2.81E-03
409427	4/19/2016 - 4/26/2016	Beta	2.11E-02	2.79E-03	2.76E-03
409762	4/26/2016 - 5/3/2016	Beta	2.00E-02	2.80E-03	2.87E-03

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
410917	5/3/2016 - 5/10/2016	Beta	1.66E-02	2.50E-03	2.51E-03
411414	5/10/2016 - 5/17/2016	Beta	1.87E-02	2.70E-03	2.80E-03
411738	5/17/2016 - 5/24/2016	Beta	1.48E-02	2.41E-03	2.54E-03
412201	5/24/2016 - 6/1/2016	Beta	2.40E-02	2.73E-03	2.54E-03
412720	6/1/2016 - 6/7/2016	Beta	1.72E-02	2.81E-03	2.94E-03
413320	6/7/2016 - 6/14/2016	Beta	2.52E-02	3.02E-03	2.88E-03
413867	6/14/2016 - 6/21/2016	Beta	2.27E-02	2.87E-03	2.77E-03
415008	6/21/2016 - 6/28/2016	Beta	2.55E-02	3.00E-03	2.78E-03
415388	3/29/2016 - 6/28/2016	Cs-134	<6.62E-04	0.00E+00	6.62E-04
		Cs-137	<3.99E-04	0.00E+00	3.99E-04
		Be-7	1.99E-01	2.72E-02	1.03E-02
		K-40	<1.34E-02	0.00E+00	1.34E-02
415382	6/28/2016 - 7/6/2016	Beta	2.29E-02	2.57E-03	2.16E-03
416372	7/6/2016 - 7/12/2016	Beta	1.79E-02	2.92E-03	3.14E-03
416996	7/12/2016 - 7/19/2016	Beta	1.78E-02	2.61E-03	2.67E-03
417390	7/19/2016 - 7/26/2016	Beta	2.64E-02	2.98E-03	2.61E-03
417784	7/26/2016 - 8/2/2016	Beta	1.74E-02	2.63E-03	2.78E-03
418245	8/2/2016 - 8/9/2016	Beta	1.97E-02	2.60E-03	2.37E-03
418974	8/9/2016 - 8/16/2016	Beta	9.11E-03	2.32E-03	3.08E-03
419475	8/16/2016 - 8/23/2016	Beta	1.17E-02	2.28E-03	2.63E-03
420005	8/23/2016 - 8/30/2016	Beta	2.44E-02	2.93E-03	2.66E-03
420556	8/30/2016 - 9/7/2016	Beta	1.98E-02	2.49E-03	2.37E-03
421393	9/7/2016 - 9/13/2016	Beta	3.20E-02	3.64E-03	3.42E-03
422551	9/13/2016 - 9/20/2016	Beta	2.25E-02	3.02E-03	3.19E-03
423296	9/20/2016 - 9/27/2016	Beta	2.29E-02	2.90E-03	2.81E-03
424419	6/28/2016 - 9/27/2016	Cs-134	<5.16E-04	0.00E+00	5.16E-04
		Cs-137	<2.80E-04	0.00E+00	2.80E-04

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
424419	6/28/2016 - 9/27/2016	Be-7	1.42E-01	2.17E-02	9.57E-03
		K-40	1.16E-02	7.50E-03	9.88E-03
424413	9/27/2016 - 10/4/2016	Beta	2.65E-02	3.08E-03	2.90E-03
425405	10/4/2016 - 10/11/2016	Beta	1.76E-02	2.58E-03	2.59E-03
425968	10/11/2016 - 10/18/2016	Beta	2.70E-02	3.03E-03	2.68E-03
426343	10/18/2016 - 10/25/2016	Beta	2.05E-02	2.75E-03	2.68E-03
427032	10/25/2016 - 11/1/2016	Beta	2.30E-02	2.93E-03	2.89E-03
427691	11/1/2016 - 11/8/2016	Beta	3.21E-02	3.25E-03	2.68E-03
428186	11/8/2016 - 11/15/2016	Beta	2.56E-02	3.08E-03	2.89E-03
428871	11/15/2016 - 11/21/2016	Beta	4.56E-02	4.13E-03	3.39E-03
429378	11/21/2016 - 11/29/2016	Beta	2.91E-02	2.92E-03	2.44E-03
429929	11/29/2016 - 12/6/2016	Beta	2.05E-02	2.80E-03	2.83E-03
430550	12/6/2016 - 12/13/2016	Beta	1.75E-02	2.63E-03	2.78E-03
431041	12/13/2016 - 12/20/2016	Beta	3.10E-02	3.63E-03	3.39E-03
431445	12/20/2016 - 12/28/2016	Beta	3.23E-02	3.32E-03	2.88E-03
431789	9/27/2016 - 12/28/2016	Cs-134	<6.23E-04	0.00E+00	6.23E-04
		Cs-137	<3.80E-04	0.00E+00	3.80E-04
		Be-7	1.45E-01	2.35E-02	1.08E-02
		K-40	9.78E-03	5.91E-03	6.07E-03

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
398671	12/29/2015 - 1/6/2016	Beta	1.76E-02	2.39E-03	2.41E-03
398924	1/6/2016 - 1/12/2016	Beta	8.74E-03	2.37E-03	3.12E-03
399242	1/12/2016 - 1/19/2016	Beta	2.62E-02	2.93E-03	2.49E-03
399988	1/19/2016 - 1/26/2016	Beta	1.63E-02	2.62E-03	2.90E-03
400341	1/26/2016 - 2/2/2016	Beta	2.10E-02	2.72E-03	2.61E-03
400971	2/2/2016 - 2/9/2016	Beta	1.74E-02	2.68E-03	2.92E-03
401337	2/9/2016 - 2/16/2016	Beta	1.66E-02	2.44E-03	2.37E-03

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

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID:	401787	Sample Dates: 2/16/2016 - 2/23/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.44E-02	2.39E-03	2.57E-03
Sample ID:	402298	Sample Dates: 2/23/2016 - 3/1/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.59E-02	2.49E-03	2.62E-03
Sample ID:	403026	Sample Dates: 3/1/2016 - 3/8/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.18E-02	2.24E-03	2.54E-03
Sample ID:	404507	Sample Dates: 3/8/2016 - 3/15/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.78E-02	2.63E-03	2.75E-03
Sample ID:	405390	Sample Dates: 3/15/2016 - 3/22/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.13E-02	2.82E-03	2.85E-03
Sample ID:	406007	Sample Dates: 3/22/2016 - 3/29/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.66E-02	2.64E-03	2.91E-03
Sample ID:	406352	Sample Dates: 12/29/2015 - 3/29/2016	Nuclide	Activity	2 Sigma Error	MDA
			Cs-134	<5.37E-04	0.00E+00	5.37E-04
			Cs-137	<4.25E-04	0.00E+00	4.25E-04
			Be-7	1.36E-01	2.22E-02	9.68E-03
			K-40	<1.09E-02	0.00E+00	1.09E-02
Sample ID:	406346	Sample Dates: 3/29/2016 - 4/5/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.75E-02	2.56E-03	2.57E-03
Sample ID:	407538	Sample Dates: 4/5/2016 - 4/12/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.34E-02	2.45E-03	2.87E-03
Sample ID:	408115	Sample Dates: 4/12/2016 - 4/19/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.92E-02	2.72E-03	2.81E-03
Sample ID:	409428	Sample Dates: 4/19/2016 - 4/26/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.44E-02	2.96E-03	2.78E-03
Sample ID:	409763	Sample Dates: 4/26/2016 - 5/3/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.97E-02	2.78E-03	2.87E-03
Sample ID:	410918	Sample Dates: 5/3/2016 - 5/10/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.76E-02	2.54E-03	2.52E-03
Sample ID:	411415	Sample Dates: 5/10/2016 - 5/17/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.85E-02	2.69E-03	2.81E-03
Sample ID:	411739	Sample Dates: 5/17/2016 - 5/24/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.36E-02	2.34E-03	2.53E-03
Sample ID:	412202	Sample Dates: 5/24/2016 - 6/1/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.37E-02	2.71E-03	2.54E-03
Sample ID:	412721	Sample Dates: 6/1/2016 - 6/7/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.78E-02	2.86E-03	2.97E-03
Sample ID:	413321	Sample Dates: 6/7/2016 - 6/14/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.45E-02	2.99E-03	2.88E-03
Sample ID:	413868	Sample Dates: 6/14/2016 - 6/21/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.42E-02	2.94E-03	2.76E-03
Sample ID:	415009	Sample Dates: 6/21/2016 - 6/28/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.40E-02	2.94E-03	2.77E-03
Sample ID:	415389	Sample Dates: 3/29/2016 - 6/28/2016	Nuclide	Activity	2 Sigma Error	MDA
			Cs-134	<6.18E-04	0.00E+00	6.18E-04
			Cs-137	<4.02E-04	0.00E+00	4.02E-04
			Be-7	1.79E-01	2.61E-02	1.32E-02
			K-40	<1.11E-02	0.00E+00	1.11E-02
Sample ID:	415383	Sample Dates: 6/28/2016 - 7/6/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.39E-02	2.62E-03	2.17E-03

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

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
416373	7/6/2016 - 7/12/2016	Beta	1.74E-02	2.89E-03	3.15E-03
416997	7/12/2016 - 7/19/2016	Beta	1.81E-02	2.62E-03	2.66E-03
417391	7/19/2016 - 7/26/2016	Beta	2.75E-02	3.04E-03	2.62E-03
417785	7/26/2016 - 8/2/2016	Beta	2.05E-02	2.77E-03	2.76E-03
418246	8/2/2016 - 8/9/2016	Beta	2.28E-02	2.76E-03	2.38E-03
418975	8/9/2016 - 8/16/2016	Beta	9.84E-03	2.35E-03	3.07E-03
419476	8/16/2016 - 8/23/2016	Beta	1.47E-02	2.45E-03	2.63E-03
420006	8/23/2016 - 8/30/2016	Beta	2.80E-02	3.08E-03	2.65E-03
420557	8/30/2016 - 9/7/2016	Beta	2.27E-02	2.61E-03	2.36E-03
421394	9/7/2016 - 9/13/2016	Beta	3.60E-02	3.80E-03	3.42E-03
422552	9/13/2016 - 9/20/2016	Beta	2.00E-02	2.91E-03	3.19E-03
423297	9/20/2016 - 9/27/2016	Beta	2.03E-02	2.79E-03	2.82E-03
424420	6/28/2016 - 9/27/2016	Cs-134	<9.07E-04	0.00E+00	9.07E-04
		Cs-137	<4.44E-04	0.00E+00	4.44E-04
		Be-7	1.53E-01	2.39E-02	1.11E-02
		K-40	<1.45E-02	0.00E+00	1.45E-02
424414	9/27/2016 - 10/4/2016	Beta	2.66E-02	3.07E-03	2.89E-03
425406	10/4/2016 - 10/11/2016	Beta	1.94E-02	2.67E-03	2.59E-03
425969	10/11/2016 - 10/18/2016	Beta	2.62E-02	3.00E-03	2.68E-03
426344	10/18/2016 - 10/25/2016	Beta	2.03E-02	2.74E-03	2.67E-03
427033	10/25/2016 - 11/1/2016	Beta	2.99E-02	3.22E-03	2.89E-03
427692	11/1/2016 - 11/8/2016	Beta	3.30E-02	3.28E-03	2.68E-03
428187	11/8/2016 - 11/15/2016	Beta	2.56E-02	3.66E-03	3.76E-03
428872	11/15/2016 - 11/21/2016	Beta	4.55E-02	4.12E-03	3.39E-03
429379	11/21/2016 - 11/29/2016	Beta	2.71E-02	2.84E-03	2.44E-03
429930	11/29/2016 - 12/6/2016	Beta	2.17E-02	2.83E-03	2.80E-03

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

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID:	430551	Sample Dates: 12/6/2016 - 12/13/2016	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.61E-02	3.04E-03	2.81E-03
Sample ID:	**431042**	**Sample Dates: 12/13/2016 - 12/20/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	3.20E-02	3.66E-03	3.39E-03
Sample ID:	**431446**	**Sample Dates: 12/20/2016 - 12/28/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Beta	3.35E-02	3.37E-03	2.88E-03
Sample ID:	**431790**	**Sample Dates: 9/27/2016 - 12/28/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			Cs-134	<7.52E-04	0.00E+00	7.52E-04
			Cs-137	<4.24E-04	0.00E+00	4.24E-04
			Be-7	1.55E-01	2.44E-02	9.75E-03
			K-40	<1.30E-02	0.00E+00	1.30E-02

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	398678	Sample Dates: 12/29/2015 - 1/6/2016	Nuclide	Activity	2 Sigma Error	MDA
			I-131	<1.22E-02	0.00E+00	1.22E-02
			Cs-134	<9.28E-03	0.00E+00	9.28E-03
			Cs-137	<1.03E-02	0.00E+00	1.03E-02
			Be-7	<9.41E-02	0.00E+00	9.41E-02
			K-40	5.09E-01	1.82E-01	4.18E-02
Sample ID:	**398925**	**Sample Dates: 1/6/2016 - 1/12/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<8.35E-03	0.00E+00	8.35E-03
			Cs-134	<9.14E-03	0.00E+00	9.14E-03
			Cs-137	<6.65E-03	0.00E+00	6.65E-03
			Be-7	<7.23E-02	0.00E+00	7.23E-02
			K-40	3.58E-01	1.37E-01	3.34E-02
Sample ID:	**399243**	**Sample Dates: 1/12/2016 - 1/19/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<8.28E-03	0.00E+00	8.28E-03
			Cs-134	<6.84E-03	0.00E+00	6.84E-03
			Cs-137	<9.05E-03	0.00E+00	9.05E-03
			Be-7	<5.44E-02	0.00E+00	5.44E-02
			K-40	3.82E-01	1.42E-01	1.18E-01
Sample ID:	**399989**	**Sample Dates: 1/19/2016 - 1/26/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<6.89E-03	0.00E+00	6.89E-03
			Cs-134	<6.47E-03	0.00E+00	6.47E-03
			Cs-137	<5.70E-03	0.00E+00	5.70E-03
			Be-7	<6.21E-02	0.00E+00	6.21E-02
			K-40	<2.65E-01	0.00E+00	2.65E-01
Sample ID:	**400342**	**Sample Dates: 1/26/2016 - 2/2/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<1.74E-02	0.00E+00	1.74E-02
			Cs-134	<9.15E-03	0.00E+00	9.15E-03
			Cs-137	<1.48E-02	0.00E+00	1.48E-02
			Be-7	<9.64E-02	0.00E+00	9.64E-02
			K-40	<4.72E-01	0.00E+00	4.72E-01
Sample ID:	**400972**	**Sample Dates: 2/2/2016 - 2/9/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<8.46E-03	0.00E+00	8.46E-03
			Cs-134	<7.50E-03	0.00E+00	7.50E-03
			Cs-137	<7.45E-03	0.00E+00	7.45E-03
			Be-7	<5.21E-02	0.00E+00	5.21E-02
			K-40	2.76E-01	1.38E-01	1.63E-01
Sample ID:	**401338**	**Sample Dates: 2/9/2016 - 2/16/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<9.71E-03	0.00E+00	9.71E-03
			Cs-134	<7.98E-03	0.00E+00	7.98E-03
			Cs-137	<7.14E-03	0.00E+00	7.14E-03
			Be-7	<5.00E-02	0.00E+00	5.00E-02
			K-40	6.42E-01	1.72E-01	2.76E-02
Sample ID:	**401788**	**Sample Dates: 2/16/2016 - 2/23/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<5.69E-03	0.00E+00	5.69E-03

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID: 401788 Sample Dates: 2/16/2016 - 2/23/2016

Nuclide	Activity	2 Sigma Error	MDA
Cs-134	<5.42E-03	0.00E+00	5.42E-03
Cs-137	<6.75E-03	0.00E+00	6.75E-03
Be-7	<4.27E-02	0.00E+00	4.27E-02
K-40	3.67E-01	1.41E-01	1.26E-01

Sample ID: 402299 Sample Dates: 2/23/2016 - 3/1/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.06E-03	0.00E+00	6.06E-03
Cs-134	<5.82E-03	0.00E+00	5.82E-03
Cs-137	<7.89E-03	0.00E+00	7.89E-03
Be-7	<3.62E-02	0.00E+00	3.62E-02
K-40	4.87E-01	1.49E-01	2.81E-02

Sample ID: 403027 Sample Dates: 3/1/2016 - 3/8/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.44E-03	0.00E+00	7.44E-03
Cs-134	<7.99E-03	0.00E+00	7.99E-03
Cs-137	<8.21E-03	0.00E+00	8.21E-03
Be-7	<5.60E-02	0.00E+00	5.60E-02
K-40	3.35E-01	1.49E-01	1.68E-01

Sample ID: 404508 Sample Dates: 3/8/2016 - 3/15/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.07E-03	0.00E+00	6.07E-03
Cs-134	<5.89E-03	0.00E+00	5.89E-03
Cs-137	<1.10E-02	0.00E+00	1.10E-02
Be-7	<5.16E-02	0.00E+00	5.16E-02
K-40	2.08E-01	1.01E-01	8.22E-02

Sample ID: 405391 Sample Dates: 3/15/2016 - 3/22/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.31E-03	0.00E+00	7.31E-03
Cs-134	<9.47E-03	0.00E+00	9.47E-03
Cs-137	<6.50E-03	0.00E+00	6.50E-03
Be-7	<5.12E-02	0.00E+00	5.12E-02
K-40	2.39E-01	1.02E-01	2.82E-02

Sample ID: 406008 Sample Dates: 3/22/2016 - 3/29/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.60E-03	0.00E+00	7.60E-03
Cs-134	<5.42E-03	0.00E+00	5.42E-03
Cs-137	<8.21E-03	0.00E+00	8.21E-03
Be-7	<5.27E-02	0.00E+00	5.27E-02
K-40	3.68E-01	1.28E-01	2.85E-02

Sample ID: 406353 Sample Dates: 3/29/2016 - 4/5/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.20E-02	0.00E+00	1.20E-02
Cs-134	<3.53E-03	0.00E+00	3.53E-03
Cs-137	<5.52E-03	0.00E+00	5.52E-03
Be-7	<1.06E-02	0.00E+00	1.06E-02
K-40	4.58E-01	1.43E-01	2.76E-02

Sample ID: 407539 Sample Dates: 4/5/2016 - 4/12/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.60E-03	0.00E+00	5.60E-03
Cs-134	<7.25E-03	0.00E+00	7.25E-03
Cs-137	<1.09E-02	0.00E+00	1.09E-02
Be-7	<5.41E-02	0.00E+00	5.41E-02
K-40	3.74E-01	1.54E-01	1.68E-01

Sample ID: 408116 Sample Dates: 4/12/2016 - 4/19/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.50E-03	0.00E+00	9.50E-03
Cs-134	<6.60E-03	0.00E+00	6.60E-03
Cs-137	<8.21E-03	0.00E+00	8.21E-03
Be-7	<5.25E-02	0.00E+00	5.25E-02
K-40	3.99E-01	1.34E-01	2.84E-02

Sample ID: 409429 Sample Dates: 4/19/2016 - 4/26/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.74E-03	0.00E+00	6.74E-03
Cs-134	<8.72E-03	0.00E+00	8.72E-03
Cs-137	<4.39E-03	0.00E+00	4.39E-03
Be-7	<5.46E-02	0.00E+00	5.46E-02
K-40	2.63E-01	1.23E-01	1.29E-01

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID: 409764 Sample Dates: 4/26/2016 - 5/3/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.53E-03	0.00E+00	5.53E-03
Cs-134	<6.25E-03	0.00E+00	6.25E-03
Cs-137	<9.88E-03	0.00E+00	9.88E-03
Be-7	<4.08E-02	0.00E+00	4.08E-02
K-40	2.90E-01	1.29E-01	1.34E-01

Sample ID: 410919 Sample Dates: 5/3/2016 - 5/10/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.99E-03	0.00E+00	8.99E-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	<6.36E-02	0.00E+00	6.36E-02
K-40	3.66E-01	1.56E-01	1.67E-01

Sample ID: 411416 Sample Dates: 5/10/2016 - 5/17/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.87E-03	0.00E+00	7.87E-03
Cs-134	<6.44E-03	0.00E+00	6.44E-03
Cs-137	<1.00E-02	0.00E+00	1.00E-02
Be-7	<6.78E-02	0.00E+00	6.78E-02
K-40	2.86E-01	1.24E-01	1.03E-01

Sample ID: 411740 Sample Dates: 5/17/2016 - 5/24/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.87E-03	0.00E+00	5.87E-03
Cs-134	<7.21E-03	0.00E+00	7.21E-03
Cs-137	<6.42E-03	0.00E+00	6.42E-03
Be-7	<5.42E-02	0.00E+00	5.42E-02
K-40	4.61E-01	1.44E-01	2.78E-02

Sample ID: 412203 Sample Dates: 5/24/2016 - 6/1/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.58E-03	0.00E+00	8.58E-03
Cs-134	<6.99E-03	0.00E+00	6.99E-03
Cs-137	<7.58E-03	0.00E+00	7.58E-03
Be-7	<4.89E-02	0.00E+00	4.89E-02
K-40	3.30E-01	1.27E-01	1.10E-01

Sample ID: 412722 Sample Dates: 6/1/2016 - 6/7/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.60E-03	0.00E+00	8.60E-03
Cs-134	<7.78E-03	0.00E+00	7.78E-03
Cs-137	<1.14E-02	0.00E+00	1.14E-02
Be-7	<6.69E-02	0.00E+00	6.69E-02
K-40	4.21E-01	1.69E-01	1.48E-01

Sample ID: 413322 Sample Dates: 6/7/2016 - 6/14/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.49E-03	0.00E+00	8.49E-03
Cs-134	<6.97E-03	0.00E+00	6.97E-03
Cs-137	<7.12E-03	0.00E+00	7.12E-03
Be-7	<5.52E-02	0.00E+00	5.52E-02
K-40	5.22E-01	1.69E-01	1.23E-01

Sample ID: 413869 Sample Dates: 6/14/2016 - 6/21/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.46E-03	0.00E+00	7.46E-03
Cs-134	<7.02E-03	0.00E+00	7.02E-03
Cs-137	<1.00E-02	0.00E+00	1.00E-02
Be-7	<4.56E-02	0.00E+00	4.56E-02
K-40	4.48E-01	1.47E-01	3.04E-02

Sample ID: 415010 Sample Dates: 6/21/2016 - 6/28/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.79E-03	0.00E+00	7.79E-03
Cs-134	<5.76E-03	0.00E+00	5.76E-03
Cs-137	<7.81E-03	0.00E+00	7.81E-03
Be-7	<5.78E-02	0.00E+00	5.78E-02
K-40	4.02E-01	1.64E-01	1.86E-01

Sample ID: 415390 Sample Dates: 6/28/2016 - 7/6/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.94E-03	0.00E+00	6.94E-03
Cs-134	<6.27E-03	0.00E+00	6.27E-03
Cs-137	<7.79E-03	0.00E+00	7.79E-03
Be-7	<4.10E-02	0.00E+00	4.10E-02
K-40	3.31E-01	1.18E-01	2.72E-02

Sample ID: 416374 **Sample Dates: 7/6/2016 - 7/12/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.87E-03	0.00E+00	7.87E-03
Cs-134	<1.07E-02	0.00E+00	1.07E-02
Cs-137	<1.12E-02	0.00E+00	1.12E-02
Be-7	<5.43E-02	0.00E+00	5.43E-02
K-40	5.90E-01	1.85E-01	3.64E-02

Sample ID: 416998 **Sample Dates: 7/12/2016 - 7/19/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.02E-03	0.00E+00	9.02E-03
Cs-134	<6.76E-03	0.00E+00	6.76E-03
Cs-137	<7.16E-03	0.00E+00	7.16E-03
Be-7	<7.18E-02	0.00E+00	7.18E-02
K-40	4.99E-01	1.60E-01	1.18E-01

Sample ID: 417392 **Sample Dates: 7/19/2016 - 7/26/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.90E-03	0.00E+00	7.90E-03
Cs-134	<7.78E-03	0.00E+00	7.78E-03
Cs-137	<5.66E-03	0.00E+00	5.66E-03
Be-7	<4.68E-02	0.00E+00	4.68E-02
K-40	3.80E-01	1.58E-01	1.73E-01

Sample ID: 417786 **Sample Dates: 7/26/2016 - 8/2/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.20E-03	0.00E+00	6.20E-03
Cs-134	<6.77E-03	0.00E+00	6.77E-03
Cs-137	<7.83E-03	0.00E+00	7.83E-03
Be-7	<5.73E-02	0.00E+00	5.73E-02
K-40	3.24E-01	1.33E-01	1.24E-01

Sample ID: 418247 **Sample Dates: 8/2/2016 - 8/9/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.83E-03	0.00E+00	7.83E-03
Cs-134	<9.06E-03	0.00E+00	9.06E-03
Cs-137	<6.70E-03	0.00E+00	6.70E-03
Be-7	<7.13E-02	0.00E+00	7.13E-02
K-40	4.08E-01	1.50E-01	1.35E-01

Sample ID: 418976 **Sample Dates: 8/9/2016 - 8/16/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.84E-03	0.00E+00	7.84E-03
Cs-134	<5.88E-03	0.00E+00	5.88E-03
Cs-137	<7.30E-03	0.00E+00	7.30E-03
Be-7	<6.54E-02	0.00E+00	6.54E-02
K-40	2.70E-01	1.42E-01	1.78E-01

Sample ID: 419477 **Sample Dates: 8/16/2016 - 8/23/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.89E-03	0.00E+00	9.89E-03
Cs-134	<7.98E-03	0.00E+00	7.98E-03
Cs-137	<7.53E-03	0.00E+00	7.53E-03
Be-7	<4.76E-02	0.00E+00	4.76E-02
K-40	<3.38E-01	0.00E+00	3.38E-01

Sample ID: 420007 **Sample Dates: 8/23/2016 - 8/30/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.77E-03	0.00E+00	6.77E-03
Cs-134	<7.02E-03	0.00E+00	7.02E-03
Cs-137	<8.73E-03	0.00E+00	8.73E-03
Be-7	<5.08E-02	0.00E+00	5.08E-02
K-40	4.03E-01	1.59E-01	1.58E-01

Sample ID: 420558 **Sample Dates: 8/30/2016 - 9/7/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.03E-03	0.00E+00	7.03E-03
Cs-134	<6.80E-03	0.00E+00	6.80E-03
Cs-137	<7.37E-03	0.00E+00	7.37E-03
Be-7	<5.14E-02	0.00E+00	5.14E-02
K-40	3.06E-01	1.35E-01	1.53E-01

Sample ID: 421395 **Sample Dates: 9/7/2016 - 9/13/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.17E-02	0.00E+00	1.17E-02
Cs-134	<6.70E-03	0.00E+00	6.70E-03
Cs-137	<8.32E-03	0.00E+00	8.32E-03
Be-7	<6.30E-02	0.00E+00	6.30E-02
K-40	5.93E-01	1.76E-01	3.22E-02

Sample ID: 422553 **Sample Dates: 9/13/2016 - 9/20/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.47E-03	0.00E+00	7.47E-03
Cs-134	<6.46E-03	0.00E+00	6.46E-03
Cs-137	<1.07E-02	0.00E+00	1.07E-02
Be-7	<5.53E-02	0.00E+00	5.53E-02
K-40	5.08E-01	1.60E-01	1.06E-01

Sample ID: 423298 **Sample Dates: 9/20/2016 - 9/27/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.79E-03	0.00E+00	6.79E-03
Cs-134	<6.27E-03	0.00E+00	6.27E-03
Cs-137	<8.39E-03	0.00E+00	8.39E-03
Be-7	<6.36E-02	0.00E+00	6.36E-02
K-40	2.85E-01	1.50E-01	1.94E-01

Sample ID: 424421 **Sample Dates: 9/27/2016 - 10/4/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.83E-03	0.00E+00	7.83E-03
Cs-134	<7.33E-03	0.00E+00	7.33E-03
Cs-137	<7.95E-03	0.00E+00	7.95E-03
Be-7	<5.13E-02	0.00E+00	5.13E-02
K-40	3.39E-01	1.64E-01	2.07E-01

Sample ID: 425407 **Sample Dates: 10/4/2016 - 10/11/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.09E-03	0.00E+00	6.09E-03
Cs-134	<5.78E-03	0.00E+00	5.78E-03
Cs-137	<7.17E-03	0.00E+00	7.17E-03
Be-7	<4.66E-02	0.00E+00	4.66E-02
K-40	3.03E-01	1.33E-01	1.39E-01

Sample ID: 425970 **Sample Dates: 10/11/2016 - 10/18/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.65E-03	0.00E+00	8.65E-03
Cs-134	<5.79E-03	0.00E+00	5.79E-03
Cs-137	<7.20E-03	0.00E+00	7.20E-03
Be-7	<6.95E-02	0.00E+00	6.95E-02
K-40	4.32E-01	1.39E-01	2.79E-02

Sample ID: 426345 **Sample Dates: 10/18/2016 - 10/25/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.72E-03	0.00E+00	7.72E-03
Cs-134	<8.40E-03	0.00E+00	8.40E-03
Cs-137	<6.46E-03	0.00E+00	6.46E-03
Be-7	<3.55E-02	0.00E+00	3.55E-02
K-40	4.63E-01	1.44E-01	2.79E-02

Sample ID: 427034 **Sample Dates: 10/25/2016 - 11/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.74E-03	0.00E+00	7.74E-03
Cs-134	<5.76E-03	0.00E+00	5.76E-03
Cs-137	<6.42E-03	0.00E+00	6.42E-03
Be-7	<5.72E-02	0.00E+00	5.72E-02
K-40	2.63E-01	1.23E-01	1.29E-01

Sample ID: 427693 **Sample Dates: 11/1/2016 - 11/8/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.70E-03	0.00E+00	8.70E-03
Cs-134	<7.95E-03	0.00E+00	7.95E-03
Cs-137	<6.39E-03	0.00E+00	6.39E-03
Be-7	<6.67E-02	0.00E+00	6.67E-02
K-40	3.19E-01	1.35E-01	1.36E-01

Sample ID: 428188 **Sample Dates: 11/8/2016 - 11/15/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.59E-02	0.00E+00	1.59E-02
Cs-134	<8.63E-03	0.00E+00	8.63E-03
Cs-137	<1.49E-02	0.00E+00	1.49E-02
Be-7	<8.09E-02	0.00E+00	8.09E-02
K-40	5.43E-01	2.00E-01	1.57E-01

Sample ID: 428873 **Sample Dates: 11/15/2016 - 11/21/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.04E-02	0.00E+00	1.04E-02
Cs-134	<8.61E-03	0.00E+00	8.61E-03
Cs-137	<7.67E-03	0.00E+00	7.67E-03
Be-7	<6.45E-02	0.00E+00	6.45E-02
K-40	4.90E-01	1.61E-01	3.32E-02

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID: 429380 Sample Dates: 11/21/2016 - 11/29/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.44E-03	0.00E+00	7.44E-03
Cs-134	<8.53E-03	0.00E+00	8.53E-03
Cs-137	<8.97E-03	0.00E+00	8.97E-03
Be-7	<4.40E-02	0.00E+00	4.40E-02
K-40	3.33E-01	1.23E-01	2.91E-02

Sample ID: 429931 Sample Dates: 11/29/2016 - 12/6/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.73E-03	0.00E+00	7.73E-03
Cs-134	<5.71E-03	0.00E+00	5.71E-03
Cs-137	<7.09E-03	0.00E+00	7.09E-03
Be-7	<5.73E-02	0.00E+00	5.73E-02
K-40	4.16E-01	1.35E-01	2.75E-02

Sample ID: 430552 Sample Dates: 12/6/2016 - 12/13/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.15E-03	0.00E+00	6.15E-03
Cs-134	<9.02E-03	0.00E+00	9.02E-03
Cs-137	<6.25E-03	0.00E+00	6.25E-03
Be-7	<3.97E-02	0.00E+00	3.97E-02
K-40	3.70E-01	1.59E-01	1.72E-01

Sample ID: 431043 Sample Dates: 12/13/2016 - 12/20/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.89E-03	0.00E+00	7.89E-03
Cs-134	<7.58E-03	0.00E+00	7.58E-03
Cs-137	<1.06E-02	0.00E+00	1.06E-02
Be-7	<5.15E-02	0.00E+00	5.15E-02
K-40	3.75E-01	1.52E-01	1.50E-01

Sample ID: 431447 Sample Dates: 12/20/2016 - 12/28/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.27E-03	0.00E+00	8.27E-03
Cs-134	<6.31E-03	0.00E+00	6.31E-03
Cs-137	<7.85E-03	0.00E+00	7.85E-03
Be-7	<5.93E-02	0.00E+00	5.93E-02
K-40	3.99E-01	1.28E-01	2.57E-02

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID: 398679 Sample Dates: 12/29/2015 - 1/6/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.49E-02	0.00E+00	1.49E-02
Cs-134	<1.23E-02	0.00E+00	1.23E-02
Cs-137	<1.26E-02	0.00E+00	1.26E-02
Be-7	<1.14E-01	0.00E+00	1.14E-01
K-40	<3.81E-01	0.00E+00	3.81E-01

Sample ID: 398926 Sample Dates: 1/6/2016 - 1/12/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.51E-03	0.00E+00	9.51E-03
Cs-134	<7.50E-03	0.00E+00	7.50E-03
Cs-137	<1.17E-02	0.00E+00	1.17E-02
Be-7	<4.56E-02	0.00E+00	4.56E-02
K-40	4.55E-01	1.74E-01	1.49E-01

Sample ID: 399244 Sample Dates: 1/12/2016 - 1/19/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.89E-03	0.00E+00	9.89E-03
Cs-134	<1.44E-03	0.00E+00	1.44E-03
Cs-137	<9.96E-03	0.00E+00	9.96E-03
Be-7	<6.70E-02	0.00E+00	6.70E-02
K-40	<3.43E-01	0.00E+00	3.43E-01

Sample ID: 399990 Sample Dates: 1/19/2016 - 1/26/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.67E-03	0.00E+00	9.67E-03
Cs-134	<8.70E-03	0.00E+00	8.70E-03
Cs-137	<7.33E-03	0.00E+00	7.33E-03
Be-7	<6.12E-02	0.00E+00	6.12E-02
K-40	2.80E-01	1.37E-01	1.53E-01

Sample ID: 400343 Sample Dates: 1/26/2016 - 2/2/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.22E-02	0.00E+00	1.22E-02
Cs-134	<1.60E-02	0.00E+00	1.60E-02
Cs-137	<1.01E-02	0.00E+00	1.01E-02

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
400343	1/26/2016 - 2/2/2016	Be-7	<9.33E-02	0.00E+00	9.33E-02
		K-40	5.39E-01	2.11E-01	1.56E-01
400973	2/2/2016 - 2/9/2016	I-131	<8.39E-03	0.00E+00	8.39E-03
		Cs-134	<6.91E-03	0.00E+00	6.91E-03
		Cs-137	<8.59E-03	0.00E+00	8.59E-03
		Be-7	<5.50E-02	0.00E+00	5.50E-02
		K-40	2.98E-01	1.23E-01	9.91E-02
401339	2/9/2016 - 2/16/2016	I-131	<7.88E-03	0.00E+00	7.88E-03
		Cs-134	<7.07E-03	0.00E+00	7.07E-03
		Cs-137	<5.80E-03	0.00E+00	5.80E-03
		Be-7	<5.17E-02	0.00E+00	5.17E-02
		K-40	3.52E-01	1.49E-01	1.62E-01
401789	2/16/2016 - 2/23/2016	I-131	<7.01E-03	0.00E+00	7.01E-03
		Cs-134	<8.23E-03	0.00E+00	8.23E-03
		Cs-137	<6.32E-03	0.00E+00	6.32E-03
		Be-7	<7.24E-02	0.00E+00	7.24E-02
		K-40	3.91E-01	1.38E-01	3.11E-02
402300	2/23/2016 - 3/1/2016	I-131	<1.09E-02	0.00E+00	1.09E-02
		Cs-134	<7.67E-03	0.00E+00	7.67E-03
		Cs-137	<9.53E-03	0.00E+00	9.53E-03
		Be-7	<6.15E-02	0.00E+00	6.15E-02
		K-40	4.45E-01	1.57E-01	1.21E-01
403028	3/1/2016 - 3/8/2016	I-131	<6.81E-03	0.00E+00	6.81E-03
		Cs-134	<6.45E-03	0.00E+00	6.45E-03
		Cs-137	<1.00E-02	0.00E+00	1.00E-02
		Be-7	<5.10E-02	0.00E+00	5.10E-02
		K-40	3.95E-01	1.47E-01	1.17E-01
404509	3/8/2016 - 3/15/2016	I-131	<8.46E-03	0.00E+00	8.46E-03
		Cs-134	<7.07E-03	0.00E+00	7.07E-03
		Cs-137	<5.80E-03	0.00E+00	5.80E-03
		Be-7	<6.33E-02	0.00E+00	6.33E-02
		K-40	3.17E-01	1.36E-01	1.40E-01
405392	3/15/2016 - 3/22/2016	I-131	<9.72E-03	0.00E+00	9.72E-03
		Cs-134	<6.85E-03	0.00E+00	6.85E-03
		Cs-137	<7.25E-03	0.00E+00	7.25E-03
		Be-7	<5.50E-02	0.00E+00	5.50E-02
		K-40	3.53E-01	1.35E-01	1.12E-01
406009	3/22/2016 - 3/29/2016	I-131	<1.01E-02	0.00E+00	1.01E-02
		Cs-134	<5.25E-03	0.00E+00	5.25E-03
		Cs-137	<7.28E-03	0.00E+00	7.28E-03
		Be-7	<6.24E-02	0.00E+00	6.24E-02
		K-40	<2.76E-01	0.00E+00	2.76E-01
406354	3/29/2016 - 4/5/2016	I-131	<9.91E-03	0.00E+00	9.91E-03
		Cs-134	<8.15E-03	0.00E+00	8.15E-03
		Cs-137	<8.56E-03	0.00E+00	8.56E-03
		Be-7	<4.29E-02	0.00E+00	4.29E-02
		K-40	4.46E-01	1.62E-01	1.56E-01
407540	4/5/2016 - 4/12/2016	I-131	<1.14E-02	0.00E+00	1.14E-02

Sample ID: 407540 **Sample Dates: 4/5/2016 - 4/12/2016**

Nuclide	Activity	2 Sigma Error	MDA
Cs-134	<6.44E-03	0.00E+00	6.44E-03
Cs-137	<8.00E-03	0.00E+00	8.00E-03
Be-7	<5.56E-02	0.00E+00	5.56E-02
K-40	4.18E-01	1.50E-01	1.14E-01

Sample ID: 408117 **Sample Dates: 4/12/2016 - 4/19/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.00E-02	0.00E+00	1.00E-02
Cs-134	<5.90E-03	0.00E+00	5.90E-03
Cs-137	<8.92E-03	0.00E+00	8.92E-03
Be-7	<5.76E-02	0.00E+00	5.76E-02
K-40	4.40E-01	1.54E-01	1.10E-01

Sample ID: 409430 **Sample Dates: 4/19/2016 - 4/26/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.93E-03	0.00E+00	8.93E-03
Cs-134	<7.76E-03	0.00E+00	7.76E-03
Cs-137	<7.36E-03	0.00E+00	7.36E-03
Be-7	<5.30E-02	0.00E+00	5.30E-02
K-40	3.46E-01	1.41E-01	1.23E-01

Sample ID: 409765 **Sample Dates: 4/26/2016 - 5/3/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.29E-03	0.00E+00	7.29E-03
Cs-134	<7.12E-03	0.00E+00	7.12E-03
Cs-137	<7.72E-03	0.00E+00	7.72E-03
Be-7	<4.07E-02	0.00E+00	4.07E-02
K-40	3.55E-01	1.32E-01	1.03E-01

Sample ID: 410920 **Sample Dates: 5/3/2016 - 5/10/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.94E-03	0.00E+00	6.94E-03
Cs-134	<9.12E-03	0.00E+00	9.12E-03
Cs-137	<4.61E-03	0.00E+00	4.61E-03
Be-7	<4.76E-02	0.00E+00	4.76E-02
K-40	3.41E-01	1.40E-01	1.40E-01

Sample ID: 411417 **Sample Dates: 5/10/2016 - 5/17/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.16E-02	0.00E+00	1.16E-02
Cs-134	<7.53E-03	0.00E+00	7.53E-03
Cs-137	<8.18E-03	0.00E+00	8.18E-03
Be-7	<5.61E-02	0.00E+00	5.61E-02
K-40	2.51E-01	1.05E-01	2.83E-02

Sample ID: 411741 **Sample Dates: 5/17/2016 - 5/24/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.23E-03	0.00E+00	7.23E-03
Cs-134	<7.21E-03	0.00E+00	7.21E-03
Cs-137	<7.81E-03	0.00E+00	7.81E-03
Be-7	<4.64E-02	0.00E+00	4.64E-02
K-40	3.78E-01	1.38E-01	1.08E-01

Sample ID: 412204 **Sample Dates: 5/24/2016 - 6/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.37E-03	0.00E+00	8.37E-03
Cs-134	<5.12E-03	0.00E+00	5.12E-03
Cs-137	<7.74E-03	0.00E+00	7.74E-03
Be-7	<3.55E-02	0.00E+00	3.55E-02
K-40	3.94E-01	1.58E-01	1.77E-01

Sample ID: 412723 **Sample Dates: 6/1/2016 - 6/7/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.27E-03	0.00E+00	9.27E-03
Cs-134	<9.00E-03	0.00E+00	9.00E-03
Cs-137	<9.25E-03	0.00E+00	9.25E-03
Be-7	<6.73E-02	0.00E+00	6.73E-02
K-40	5.81E-01	1.76E-01	3.28E-02

Sample ID: 413323 **Sample Dates: 6/7/2016 - 6/14/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.90E-03	0.00E+00	7.90E-03
Cs-134	<8.31E-03	0.00E+00	8.31E-03
Cs-137	<8.14E-03	0.00E+00	8.14E-03
Be-7	<6.24E-02	0.00E+00	6.24E-02
K-40	3.05E-01	1.24E-01	1.04E-01

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID: 413870 Sample Dates: 6/14/2016 - 6/21/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.70E-03	0.00E+00	8.70E-03
Cs-134	<6.33E-03	0.00E+00	6.33E-03
Cs-137	<7.21E-03	0.00E+00	7.21E-03
Be-7	<5.03E-02	0.00E+00	5.03E-02
K-40	4.53E-01	1.60E-01	1.46E-01

Sample ID: 415011 Sample Dates: 6/21/2016 - 6/28/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.21E-03	0.00E+00	7.21E-03
Cs-134	<7.21E-03	0.00E+00	7.21E-03
Cs-137	<6.43E-03	0.00E+00	6.43E-03
Be-7	<6.71E-02	0.00E+00	6.71E-02
K-40	3.92E-01	1.39E-01	1.04E-01

Sample ID: 415391 Sample Dates: 6/28/2016 - 7/6/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.56E-03	0.00E+00	7.56E-03
Cs-134	<6.71E-03	0.00E+00	6.71E-03
Cs-137	<4.89E-03	0.00E+00	4.89E-03
Be-7	<5.37E-02	0.00E+00	5.37E-02
K-40	2.15E-01	1.20E-01	1.54E-01

Sample ID: 416375 Sample Dates: 7/6/2016 - 7/12/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<4.82E-03	0.00E+00	4.82E-03
Cs-134	<8.38E-03	0.00E+00	8.38E-03
Cs-137	<1.04E-02	0.00E+00	1.04E-02
Be-7	<5.43E-02	0.00E+00	5.43E-02
K-40	5.36E-01	1.75E-01	3.63E-02

Sample ID: 416999 Sample Dates: 7/12/2016 - 7/19/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.96E-03	0.00E+00	7.96E-03
Cs-134	<8.15E-03	0.00E+00	8.15E-03
Cs-137	<7.97E-03	0.00E+00	7.97E-03
Be-7	<5.85E-02	0.00E+00	5.85E-02
K-40	4.81E-01	1.48E-01	2.83E-02

Sample ID: 417393 Sample Dates: 7/19/2016 - 7/26/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.78E-03	0.00E+00	7.78E-03
Cs-134	<7.60E-03	0.00E+00	7.60E-03
Cs-137	<8.39E-03	0.00E+00	8.39E-03
Be-7	<5.00E-02	0.00E+00	5.00E-02
K-40	3.68E-01	1.45E-01	1.44E-01

Sample ID: 417787 Sample Dates: 7/26/2016 - 8/2/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.91E-03	0.00E+00	6.91E-03
Cs-134	<3.69E-03	0.00E+00	3.69E-03
Cs-137	<8.19E-03	0.00E+00	8.19E-03
Be-7	<4.75E-02	0.00E+00	4.75E-02
K-40	4.03E-01	1.41E-01	9.64E-02

Sample ID: 418248 Sample Dates: 8/2/2016 - 8/9/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.60E-03	0.00E+00	9.60E-03
Cs-134	<7.12E-03	0.00E+00	7.12E-03
Cs-137	<1.07E-02	0.00E+00	1.07E-02
Be-7	<1.17E-02	0.00E+00	1.17E-02
K-40	4.57E-01	1.58E-01	1.18E-01

Sample ID: 418977 Sample Dates: 8/9/2016 - 8/16/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.58E-03	0.00E+00	6.58E-03
Cs-134	<6.31E-03	0.00E+00	6.31E-03
Cs-137	<7.85E-03	0.00E+00	7.85E-03
Be-7	<2.84E-02	0.00E+00	2.84E-02
K-40	3.92E-01	1.40E-01	1.06E-01

Sample ID: 419478 Sample Dates: 8/16/2016 - 8/23/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<4.80E-03	0.00E+00	4.80E-03
Cs-134	<6.79E-03	0.00E+00	6.79E-03
Cs-137	<9.00E-03	0.00E+00	9.00E-03
Be-7	<5.75E-02	0.00E+00	5.75E-02
K-40	3.66E-01	1.40E-01	1.25E-01

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID: 420008 Sample Dates: 8/23/2016 - 8/30/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.39E-03	0.00E+00	9.39E-03
Cs-134	<6.80E-03	0.00E+00	6.80E-03
Cs-137	<1.09E-02	0.00E+00	1.09E-02
Be-7	<2.82E-02	0.00E+00	2.82E-02
K-40	5.35E-01	1.56E-01	2.79E-02

Sample ID: 420559 Sample Dates: 8/30/2016 - 9/7/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.53E-03	0.00E+00	5.53E-03
Cs-134	<6.16E-03	0.00E+00	6.16E-03
Cs-137	<7.67E-03	0.00E+00	7.67E-03
Be-7	<5.83E-02	0.00E+00	5.83E-02
K-40	3.83E-01	1.22E-01	2.47E-02

Sample ID: 421396 Sample Dates: 9/7/2016 - 9/13/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.11E-02	0.00E+00	1.11E-02
Cs-134	<9.53E-03	0.00E+00	9.53E-03
Cs-137	<8.53E-03	0.00E+00	8.53E-03
Be-7	<5.99E-02	0.00E+00	5.99E-02
K-40	4.89E-01	1.61E-01	3.31E-02

Sample ID: 422554 Sample Dates: 9/13/2016 - 9/20/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.11E-03	0.00E+00	6.11E-03
Cs-134	<7.03E-03	0.00E+00	7.03E-03
Cs-137	<8.01E-03	0.00E+00	8.01E-03
Be-7	<6.37E-02	0.00E+00	6.37E-02
K-40	3.44E-01	1.49E-01	1.55E-01

Sample ID: 423299 Sample Dates: 9/20/2016 - 9/27/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.43E-03	0.00E+00	9.43E-03
Cs-134	<6.41E-03	0.00E+00	6.41E-03
Cs-137	<8.70E-03	0.00E+00	8.70E-03
Be-7	<1.14E-02	0.00E+00	1.14E-02
K-40	4.25E-01	1.63E-01	1.58E-01

Sample ID: 424422 Sample Dates: 9/27/2016 - 10/4/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.11E-03	0.00E+00	9.11E-03
Cs-134	<7.61E-03	0.00E+00	7.61E-03
Cs-137	<5.54E-03	0.00E+00	5.54E-03
Be-7	<4.14E-02	0.00E+00	4.14E-02
K-40	4.25E-01	1.58E-01	1.56E-01

Sample ID: 425408 Sample Dates: 10/4/2016 - 10/11/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.13E-03	0.00E+00	8.13E-03
Cs-134	<7.58E-03	0.00E+00	7.58E-03
Cs-137	<7.19E-03	0.00E+00	7.19E-03
Be-7	<6.47E-02	0.00E+00	6.47E-02
K-40	4.50E-01	1.58E-01	1.23E-01

Sample ID: 425971 Sample Dates: 10/11/2016 - 10/18/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.25E-03	0.00E+00	6.25E-03
Cs-134	<5.15E-03	0.00E+00	5.15E-03
Cs-137	<4.38E-03	0.00E+00	4.38E-03
Be-7	<4.11E-02	0.00E+00	4.11E-02
K-40	4.73E-01	1.59E-01	1.36E-01

Sample ID: 426346 Sample Dates: 10/18/2016 - 10/25/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.21E-03	0.00E+00	6.21E-03
Cs-134	<7.21E-03	0.00E+00	7.21E-03
Cs-137	<6.42E-03	0.00E+00	6.42E-03
Be-7	<4.59E-02	0.00E+00	4.59E-02
K-40	3.55E-01	1.37E-01	1.19E-01

Sample ID: 427035 Sample Dates: 10/25/2016 - 11/1/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.91E-03	0.00E+00	6.91E-03
Cs-134	<8.51E-03	0.00E+00	8.51E-03
Cs-137	<7.29E-03	0.00E+00	7.29E-03
Be-7	<6.48E-02	0.00E+00	6.48E-02
K-40	4.80E-01	1.48E-01	2.83E-02

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID: 427694 Sample Dates: 11/1/2016 - 11/8/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.04E-03	0.00E+00	9.04E-03
Cs-134	<6.39E-03	0.00E+00	6.39E-03
Cs-137	<9.32E-03	0.00E+00	9.32E-03
Be-7	<7.40E-02	0.00E+00	7.40E-02
K-40	3.88E-01	1.48E-01	1.25E-01

Sample ID: 428189 Sample Dates: 11/8/2016 - 11/15/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.32E-02	0.00E+00	1.32E-02
Cs-134	<1.10E-02	0.00E+00	1.10E-02
Cs-137	<1.28E-02	0.00E+00	1.28E-02
Be-7	<5.44E-02	0.00E+00	5.44E-02
K-40	4.95E-01	1.91E-01	1.52E-01

Sample ID: 428874 Sample Dates: 11/15/2016 - 11/21/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.65E-03	0.00E+00	8.65E-03
Cs-134	<6.71E-03	0.00E+00	6.71E-03
Cs-137	<8.34E-03	0.00E+00	8.34E-03
Be-7	<5.84E-02	0.00E+00	5.84E-02
K-40	4.94E-01	1.77E-01	1.60E-01

Sample ID: 429381 Sample Dates: 11/21/2016 - 11/29/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.80E-03	0.00E+00	5.80E-03
Cs-134	<7.74E-03	0.00E+00	7.74E-03
Cs-137	<5.70E-03	0.00E+00	5.70E-03
Be-7	<5.43E-02	0.00E+00	5.43E-02
K-40	4.39E-01	1.38E-01	8.84E-02

Sample ID: 429932 Sample Dates: 11/29/2016 - 12/6/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.01E-02	0.00E+00	1.01E-02
Cs-134	<5.72E-03	0.00E+00	5.72E-03
Cs-137	<9.32E-03	0.00E+00	9.32E-03
Be-7	<6.38E-02	0.00E+00	6.38E-02
K-40	4.78E-01	1.52E-01	3.01E-02

Sample ID: 430553 Sample Dates: 12/6/2016 - 12/13/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.47E-03	0.00E+00	9.47E-03
Cs-134	<7.57E-03	0.00E+00	7.57E-03
Cs-137	<1.11E-02	0.00E+00	1.11E-02
Be-7	<6.38E-02	0.00E+00	6.38E-02
K-40	<3.36E-01	0.00E+00	3.36E-01

Sample ID: 431044 Sample Dates: 12/13/2016 - 12/20/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.43E-03	0.00E+00	7.43E-03
Cs-134	<5.10E-03	0.00E+00	5.10E-03
Cs-137	<9.61E-03	0.00E+00	9.61E-03
Be-7	<4.72E-02	0.00E+00	4.72E-02
K-40	<2.94E-01	0.00E+00	2.94E-01

Sample ID: 431448 Sample Dates: 12/20/2016 - 12/28/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.06E-03	0.00E+00	8.06E-03
Cs-134	<7.46E-03	0.00E+00	7.46E-03
Cs-137	<7.99E-03	0.00E+00	7.99E-03
Be-7	<4.50E-02	0.00E+00	4.50E-02
K-40	3.02E-01	1.08E-01	2.48E-02

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID: 398680 Sample Dates: 12/29/2015 - 1/6/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.49E-02	0.00E+00	1.49E-02
Cs-134	<1.41E-02	0.00E+00	1.41E-02
Cs-137	<1.15E-02	0.00E+00	1.15E-02
Be-7	<7.57E-02	0.00E+00	7.57E-02
K-40	3.17E-01	1.96E-01	2.65E-01

Sample ID: 398927 Sample Dates: 1/6/2016 - 1/12/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.07E-02	0.00E+00	1.07E-02
Cs-134	<9.73E-03	0.00E+00	9.73E-03
Cs-137	<7.82E-03	0.00E+00	7.82E-03

Sample ID: 398927 **Sample Dates: 1/6/2016 - 1/12/2016**

Nuclide	Activity	2 Sigma Error	MDA
Be-7	<6.88E-02	0.00E+00	6.88E-02
K-40	<1.14E-01	0.00E+00	1.14E-01

Sample ID: 399245 **Sample Dates: 1/12/2016 - 1/19/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.63E-03	0.00E+00	5.63E-03
Cs-134	<5.82E-03	0.00E+00	5.82E-03
Cs-137	<7.24E-03	0.00E+00	7.24E-03
Be-7	<6.99E-02	0.00E+00	6.99E-02
K-40	3.63E-01	1.27E-01	2.81E-02

Sample ID: 399991 **Sample Dates: 1/19/2016 - 1/26/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.59E-03	0.00E+00	9.59E-03
Cs-134	<6.48E-03	0.00E+00	6.48E-03
Cs-137	<8.66E-03	0.00E+00	8.66E-03
Be-7	<5.15E-02	0.00E+00	5.15E-02
K-40	<2.94E-01	0.00E+00	2.94E-01

Sample ID: 400344 **Sample Dates: 1/26/2016 - 2/2/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.33E-02	0.00E+00	1.33E-02
Cs-134	<1.47E-02	0.00E+00	1.47E-02
Cs-137	<1.31E-02	0.00E+00	1.31E-02
Be-7	<1.07E-01	0.00E+00	1.07E-01
K-40	5.94E-01	2.50E-01	2.69E-01

Sample ID: 400974 **Sample Dates: 2/2/2016 - 2/9/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.65E-03	0.00E+00	5.65E-03
Cs-134	<7.33E-03	0.00E+00	7.33E-03
Cs-137	<8.56E-03	0.00E+00	8.56E-03
Be-7	<6.46E-02	0.00E+00	6.46E-02
K-40	3.26E-01	1.30E-01	1.09E-01

Sample ID: 401340 **Sample Dates: 2/9/2016 - 2/16/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.62E-03	0.00E+00	5.62E-03
Cs-134	<7.73E-03	0.00E+00	7.73E-03
Cs-137	<7.94E-03	0.00E+00	7.94E-03
Be-7	<3.59E-02	0.00E+00	3.59E-02
K-40	3.99E-01	1.42E-01	1.06E-01

Sample ID: 401790 **Sample Dates: 2/16/2016 - 2/23/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.67E-03	0.00E+00	5.67E-03
Cs-134	<6.89E-03	0.00E+00	6.89E-03
Cs-137	<7.97E-03	0.00E+00	7.97E-03
Be-7	<6.48E-02	0.00E+00	6.48E-02
K-40	4.02E-01	1.41E-01	1.00E-01

Sample ID: 402301 **Sample Dates: 2/23/2016 - 3/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.41E-03	0.00E+00	8.41E-03
Cs-134	<5.73E-03	0.00E+00	5.73E-03
Cs-137	<7.11E-03	0.00E+00	7.11E-03
Be-7	<5.43E-02	0.00E+00	5.43E-02
K-40	3.06E-01	1.24E-01	1.04E-01

Sample ID: 403029 **Sample Dates: 3/1/2016 - 3/8/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.87E-03	0.00E+00	6.87E-03
Cs-134	<8.52E-03	0.00E+00	8.52E-03
Cs-137	<6.55E-03	0.00E+00	6.55E-03
Be-7	<5.09E-02	0.00E+00	5.09E-02
K-40	2.99E-01	1.33E-01	1.39E-01

Sample ID: 404510 **Sample Dates: 3/8/2016 - 3/15/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.74E-03	0.00E+00	6.74E-03
Cs-134	<8.13E-03	0.00E+00	8.13E-03
Cs-137	<9.62E-03	0.00E+00	9.62E-03
Be-7	<5.88E-02	0.00E+00	5.88E-02
K-40	4.59E-01	1.44E-01	2.83E-02

Sample ID: 405393 **Sample Dates: 3/15/2016 - 3/22/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.95E-03	0.00E+00	8.95E-03

Sample ID: 405393 **Sample Dates: 3/15/2016 - 3/22/2016**

Nuclide	Activity	2 Sigma Error	MDA
Cs-134	<6.37E-03	0.00E+00	6.37E-03
Cs-137	<7.91E-03	0.00E+00	7.91E-03
Be-7	<5.12E-02	0.00E+00	5.12E-02
K-40	3.30E-01	1.34E-01	1.23E-01

Sample ID: 406010 **Sample Dates: 3/22/2016 - 3/29/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.90E-03	0.00E+00	6.90E-03
Cs-134	<5.89E-03	0.00E+00	5.89E-03
Cs-137	<8.90E-03	0.00E+00	8.90E-03
Be-7	<4.08E-02	0.00E+00	4.08E-02
K-40	4.45E-01	1.59E-01	1.30E-01

Sample ID: 406355 **Sample Dates: 3/29/2016 - 4/5/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.80E-03	0.00E+00	8.80E-03
Cs-134	<7.52E-03	0.00E+00	7.52E-03
Cs-137	<8.16E-03	0.00E+00	8.16E-03
Be-7	<4.85E-02	0.00E+00	4.85E-02
K-40	2.69E-01	1.14E-01	8.69E-02

Sample ID: 407541 **Sample Dates: 4/5/2016 - 4/12/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.60E-03	0.00E+00	6.60E-03
Cs-134	<5.80E-03	0.00E+00	5.80E-03
Cs-137	<9.52E-03	0.00E+00	9.52E-03
Be-7	<6.44E-02	0.00E+00	6.44E-02
K-40	3.67E-01	1.49E-01	1.54E-01

Sample ID: 408118 **Sample Dates: 4/12/2016 - 4/19/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.32E-03	0.00E+00	5.32E-03
Cs-134	<8.19E-03	0.00E+00	8.19E-03
Cs-137	<8.61E-03	0.00E+00	8.61E-03
Be-7	<4.26E-02	0.00E+00	4.26E-02
K-40	4.56E-01	1.68E-01	1.70E-01

Sample ID: 409431 **Sample Dates: 4/19/2016 - 4/26/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.00E-02	0.00E+00	1.00E-02
Cs-134	<6.07E-03	0.00E+00	6.07E-03
Cs-137	<7.55E-03	0.00E+00	7.55E-03
Be-7	<4.84E-02	0.00E+00	4.84E-02
K-40	4.16E-01	1.43E-01	9.86E-02

Sample ID: 409766 **Sample Dates: 4/26/2016 - 5/3/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.65E-03	0.00E+00	5.65E-03
Cs-134	<8.44E-03	0.00E+00	8.44E-03
Cs-137	<1.05E-02	0.00E+00	1.05E-02
Be-7	<5.80E-02	0.00E+00	5.80E-02
K-40	3.24E-01	1.54E-01	1.89E-01

Sample ID: 410921 **Sample Dates: 5/3/2016 - 5/10/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.01E-03	0.00E+00	7.01E-03
Cs-134	<7.18E-03	0.00E+00	7.18E-03
Cs-137	<7.33E-03	0.00E+00	7.33E-03
Be-7	<6.89E-02	0.00E+00	6.89E-02
K-40	3.90E-01	1.38E-01	3.11E-02

Sample ID: 411418 **Sample Dates: 5/10/2016 - 5/17/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.71E-03	0.00E+00	5.71E-03
Cs-134	<6.55E-03	0.00E+00	6.55E-03
Cs-137	<1.07E-02	0.00E+00	1.07E-02
Be-7	<3.21E-02	0.00E+00	3.21E-02
K-40	3.77E-01	1.56E-01	1.62E-01

Sample ID: 411742 **Sample Dates: 5/17/2016 - 5/24/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.42E-03	0.00E+00	8.42E-03
Cs-134	<6.44E-03	0.00E+00	6.44E-03
Cs-137	<9.16E-03	0.00E+00	9.16E-03
Be-7	<5.17E-02	0.00E+00	5.17E-02
K-40	3.46E-01	1.24E-01	2.84E-02

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID: 412205 **Sample Dates: 5/24/2016 - 6/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.16E-03	0.00E+00	7.16E-03
Cs-134	<6.02E-03	0.00E+00	6.02E-03
Cs-137	<5.70E-03	0.00E+00	5.70E-03
Be-7	<4.13E-02	0.00E+00	4.13E-02
K-40	4.01E-01	1.26E-01	2.47E-02

Sample ID: 412724 **Sample Dates: 6/1/2016 - 6/7/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.68E-03	0.00E+00	7.68E-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	<5.87E-02	0.00E+00	5.87E-02
K-40	6.63E-01	1.97E-01	1.26E-01

Sample ID: 413324 **Sample Dates: 6/7/2016 - 6/14/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.96E-03	0.00E+00	6.96E-03
Cs-134	<7.66E-03	0.00E+00	7.66E-03
Cs-137	<9.52E-03	0.00E+00	9.52E-03
Be-7	<4.64E-02	0.00E+00	4.64E-02
K-40	2.73E-01	1.32E-01	1.40E-01

Sample ID: 413871 **Sample Dates: 6/14/2016 - 6/21/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<4.92E-03	0.00E+00	4.92E-03
Cs-134	<7.56E-03	0.00E+00	7.56E-03
Cs-137	<6.74E-03	0.00E+00	6.74E-03
Be-7	<5.59E-02	0.00E+00	5.59E-02
K-40	2.70E-01	1.26E-01	1.32E-01

Sample ID: 415012 **Sample Dates: 6/21/2016 - 6/28/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.61E-03	0.00E+00	6.61E-03
Cs-134	<6.30E-03	0.00E+00	6.30E-03
Cs-137	<8.42E-03	0.00E+00	8.42E-03
Be-7	<6.42E-02	0.00E+00	6.42E-02
K-40	4.05E-01	1.40E-01	9.42E-02

Sample ID: 415392 **Sample Dates: 6/28/2016 - 7/6/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.51E-03	0.00E+00	7.51E-03
Cs-134	<6.64E-03	0.00E+00	6.64E-03
Cs-137	<7.32E-03	0.00E+00	7.32E-03
Be-7	<4.03E-02	0.00E+00	4.03E-02
K-40	3.65E-01	1.27E-01	9.77E-02

Sample ID: 416376 **Sample Dates: 7/6/2016 - 7/12/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.79E-03	0.00E+00	8.79E-03
Cs-134	<9.39E-03	0.00E+00	9.39E-03
Cs-137	<9.19E-03	0.00E+00	9.19E-03
Be-7	<5.84E-02	0.00E+00	5.84E-02
K-40	4.81E-01	1.58E-01	3.26E-02

Sample ID: 417000 **Sample Dates: 7/12/2016 - 7/19/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.01E-02	0.00E+00	1.01E-02
Cs-134	<8.01E-03	0.00E+00	8.01E-03
Cs-137	<9.36E-03	0.00E+00	9.36E-03
Be-7	<3.92E-02	0.00E+00	3.92E-02
K-40	5.47E-01	1.64E-01	3.03E-02

Sample ID: 417394 **Sample Dates: 7/19/2016 - 7/26/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.47E-03	0.00E+00	8.47E-03
Cs-134	<5.75E-03	0.00E+00	5.75E-03
Cs-137	<9.98E-03	0.00E+00	9.98E-03
Be-7	<7.04E-02	0.00E+00	7.04E-02
K-40	3.09E-01	1.68E-01	2.22E-01

Sample ID: 417788 **Sample Dates: 7/26/2016 - 8/2/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.60E-03	0.00E+00	7.60E-03
Cs-134	<7.69E-03	0.00E+00	7.69E-03
Cs-137	<8.89E-03	0.00E+00	8.89E-03
Be-7	<6.10E-02	0.00E+00	6.10E-02
K-40	4.46E-01	1.48E-01	3.10E-02

Sample ID: 418249 **Sample Dates: 8/2/2016 - 8/9/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.00E-02	0.00E+00	1.00E-02
Cs-134	<7.16E-03	0.00E+00	7.16E-03
Cs-137	<7.12E-03	0.00E+00	7.12E-03
Be-7	<4.98E-02	0.00E+00	4.98E-02
K-40	4.11E-01	1.63E-01	1.80E-01

Sample ID: 418978 **Sample Dates: 8/9/2016 - 8/16/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.71E-03	0.00E+00	8.71E-03
Cs-134	<7.61E-03	0.00E+00	7.61E-03
Cs-137	<4.38E-03	0.00E+00	4.38E-03
Be-7	<5.05E-02	0.00E+00	5.05E-02
K-40	5.51E-01	1.58E-01	2.76E-02

Sample ID: 419479 **Sample Dates: 8/16/2016 - 8/23/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.70E-03	0.00E+00	8.70E-03
Cs-134	<8.67E-03	0.00E+00	8.67E-03
Cs-137	<6.31E-03	0.00E+00	6.31E-03
Be-7	<4.66E-02	0.00E+00	4.66E-02
K-40	3.21E-01	1.52E-01	1.75E-01

Sample ID: 420009 **Sample Dates: 8/23/2016 - 8/30/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.88E-03	0.00E+00	6.88E-03
Cs-134	<8.37E-03	0.00E+00	8.37E-03
Cs-137	<5.81E-03	0.00E+00	5.81E-03
Be-7	<6.27E-02	0.00E+00	6.27E-02
K-40	3.77E-01	1.40E-01	1.15E-01

Sample ID: 420560 **Sample Dates: 8/30/2016 - 9/7/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.03E-02	0.00E+00	1.03E-02
Cs-134	<6.24E-03	0.00E+00	6.24E-03
Cs-137	<7.09E-03	0.00E+00	7.09E-03
Be-7	<5.02E-02	0.00E+00	5.02E-02
K-40	3.79E-01	1.36E-01	1.06E-01

Sample ID: 421397 **Sample Dates: 9/7/2016 - 9/13/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.41E-03	0.00E+00	8.41E-03
Cs-134	<9.57E-03	0.00E+00	9.57E-03
Cs-137	<9.51E-03	0.00E+00	9.51E-03
Be-7	<7.16E-02	0.00E+00	7.16E-02
K-40	4.68E-01	1.75E-01	1.43E-01

Sample ID: 422555 **Sample Dates: 9/13/2016 - 9/20/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.45E-03	0.00E+00	7.45E-03
Cs-134	<5.42E-03	0.00E+00	5.42E-03
Cs-137	<6.74E-03	0.00E+00	6.74E-03
Be-7	<5.20E-02	0.00E+00	5.20E-02
K-40	5.15E-01	1.53E-01	2.85E-02

Sample ID: 423300 **Sample Dates: 9/20/2016 - 9/27/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.89E-03	0.00E+00	7.89E-03
Cs-134	<6.56E-03	0.00E+00	6.56E-03
Cs-137	<7.49E-03	0.00E+00	7.49E-03
Be-7	<5.92E-02	0.00E+00	5.92E-02
K-40	3.47E-01	1.45E-01	1.51E-01

Sample ID: 424423 **Sample Dates: 9/27/2016 - 10/4/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.18E-03	0.00E+00	7.18E-03
Cs-134	<6.73E-03	0.00E+00	6.73E-03
Cs-137	<7.12E-03	0.00E+00	7.12E-03
Be-7	<5.03E-02	0.00E+00	5.03E-02
K-40	3.96E-01	1.32E-01	2.75E-02

Sample ID: 425409 **Sample Dates: 10/4/2016 - 10/11/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.01E-03	0.00E+00	9.01E-03
Cs-134	<7.68E-03	0.00E+00	7.68E-03
Cs-137	<1.00E-02	0.00E+00	1.00E-02
Be-7	<5.15E-02	0.00E+00	5.15E-02
K-40	4.00E-01	1.56E-01	1.62E-01

Sample ID: 425972 **Sample Dates: 10/11/2016 - 10/18/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.35E-03	0.00E+00	6.35E-03
Cs-134	<7.35E-03	0.00E+00	7.35E-03
Cs-137	<7.31E-03	0.00E+00	7.31E-03
Be-7	<3.62E-02	0.00E+00	3.62E-02
K-40	4.71E-01	1.47E-01	2.84E-02

Sample ID: 426347 **Sample Dates: 10/18/2016 - 10/25/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.93E-03	0.00E+00	8.93E-03
Cs-134	<5.77E-03	0.00E+00	5.77E-03
Cs-137	<7.17E-03	0.00E+00	7.17E-03
Be-7	<5.09E-02	0.00E+00	5.09E-02
K-40	2.98E-01	1.56E-01	1.98E-01

Sample ID: 427036 **Sample Dates: 10/25/2016 - 11/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.62E-03	0.00E+00	8.62E-03
Cs-134	<5.16E-03	0.00E+00	5.16E-03
Cs-137	<8.96E-03	0.00E+00	8.96E-03
Be-7	<5.00E-02	0.00E+00	5.00E-02
K-40	3.18E-01	1.27E-01	1.08E-01

Sample ID: 427695 **Sample Dates: 11/1/2016 - 11/8/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.73E-03	0.00E+00	5.73E-03
Cs-134	<7.66E-03	0.00E+00	7.66E-03
Cs-137	<8.84E-03	0.00E+00	8.84E-03
Be-7	<6.53E-02	0.00E+00	6.53E-02
K-40	2.21E-01	1.12E-01	1.07E-01

Sample ID: 428190 **Sample Dates: 11/8/2016 - 11/15/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.39E-03	0.00E+00	8.39E-03
Cs-134	<7.92E-03	0.00E+00	7.92E-03
Cs-137	<8.09E-03	0.00E+00	8.09E-03
Be-7	<7.28E-02	0.00E+00	7.28E-02
K-40	6.25E-01	2.16E-01	2.09E-01

Sample ID: 428875 **Sample Dates: 11/15/2016 - 11/21/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.09E-02	0.00E+00	1.09E-02
Cs-134	<8.67E-03	0.00E+00	8.67E-03
Cs-137	<7.30E-03	0.00E+00	7.30E-03
Be-7	<7.28E-02	0.00E+00	7.28E-02
K-40	4.77E-01	1.55E-01	3.15E-02

Sample ID: 429382 **Sample Dates: 11/21/2016 - 11/29/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.78E-03	0.00E+00	5.78E-03
Cs-134	<5.62E-03	0.00E+00	5.62E-03
Cs-137	<6.99E-03	0.00E+00	6.99E-03
Be-7	<5.71E-02	0.00E+00	5.71E-02
K-40	<2.58E-01	0.00E+00	2.58E-01

Sample ID: 429933 **Sample Dates: 11/29/2016 - 12/6/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.06E-03	0.00E+00	9.06E-03
Cs-134	<6.97E-03	0.00E+00	6.97E-03
Cs-137	<9.92E-03	0.00E+00	9.92E-03
Be-7	<5.57E-02	0.00E+00	5.57E-02
K-40	1.69E-01	1.50E-01	2.31E-01

Sample ID: 430554 **Sample Dates: 12/6/2016 - 12/13/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.24E-03	0.00E+00	9.24E-03
Cs-134	<7.20E-03	0.00E+00	7.20E-03
Cs-137	<7.34E-03	0.00E+00	7.34E-03
Be-7	<5.23E-02	0.00E+00	5.23E-02
K-40	4.03E-01	1.61E-01	1.63E-01

Sample ID: 431045 **Sample Dates: 12/13/2016 - 12/20/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.00E-02	0.00E+00	1.00E-02
Cs-134	<7.67E-03	0.00E+00	7.67E-03
Cs-137	<1.00E-02	0.00E+00	1.00E-02
Be-7	<4.65E-02	0.00E+00	4.65E-02
K-40	3.70E-01	1.39E-01	1.18E-01

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID: 431449 Sample Dates: 12/20/2016 - 12/28/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.31E-03	0.00E+00	7.31E-03
Cs-134	<6.12E-03	0.00E+00	6.12E-03
Cs-137	<7.61E-03	0.00E+00	7.61E-03
Be-7	<5.59E-02	0.00E+00	5.59E-02
K-40	4.06E-01	1.58E-01	1.72E-01

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID: 398681 Sample Dates: 12/29/2015 - 1/6/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.39E-02	0.00E+00	1.39E-02
Cs-134	<1.34E-02	0.00E+00	1.34E-02
Cs-137	<1.43E-02	0.00E+00	1.43E-02
Be-7	<8.17E-02	0.00E+00	8.17E-02
K-40	2.24E-01	1.94E-01	2.93E-01

Sample ID: 398928 Sample Dates: 1/6/2016 - 1/12/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.15E-03	0.00E+00	7.15E-03
Cs-134	<8.71E-03	0.00E+00	8.71E-03
Cs-137	<8.67E-03	0.00E+00	8.67E-03
Be-7	<5.51E-02	0.00E+00	5.51E-02
K-40	4.05E-01	1.53E-01	1.09E-01

Sample ID: 399246 Sample Dates: 1/12/2016 - 1/19/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.52E-03	0.00E+00	9.52E-03
Cs-134	<9.40E-03	0.00E+00	9.40E-03
Cs-137	<8.79E-03	0.00E+00	8.79E-03
Be-7	<3.14E-02	0.00E+00	3.14E-02
K-40	3.24E-01	1.62E-01	2.01E-01

Sample ID: 399992 Sample Dates: 1/19/2016 - 1/26/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.68E-03	0.00E+00	5.68E-03
Cs-134	<5.46E-03	0.00E+00	5.46E-03
Cs-137	<8.27E-03	0.00E+00	8.27E-03
Be-7	<6.96E-02	0.00E+00	6.96E-02
K-40	5.21E-01	1.66E-01	1.19E-01

Sample ID: 400345 Sample Dates: 1/26/2016 - 2/2/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.67E-02	0.00E+00	1.67E-02
Cs-134	<1.76E-02	0.00E+00	1.76E-02
Cs-137	<1.30E-02	0.00E+00	1.30E-02
Be-7	<1.17E-01	0.00E+00	1.17E-01
K-40	6.11E-01	2.13E-01	4.73E-02

Sample ID: 400975 Sample Dates: 2/2/2016 - 2/9/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.81E-03	0.00E+00	8.81E-03
Cs-134	<7.10E-03	0.00E+00	7.10E-03
Cs-137	<8.21E-03	0.00E+00	8.21E-03
Be-7	<6.63E-02	0.00E+00	6.63E-02
K-40	4.91E-01	1.65E-01	1.37E-01

Sample ID: 401341 Sample Dates: 2/9/2016 - 2/16/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.28E-03	0.00E+00	7.28E-03
Cs-134	<5.16E-03	0.00E+00	5.16E-03
Cs-137	<5.53E-03	0.00E+00	5.53E-03
Be-7	<6.06E-02	0.00E+00	6.06E-02
K-40	3.37E-01	1.41E-01	1.46E-01

Sample ID: 401791 Sample Dates: 2/16/2016 - 2/23/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.92E-03	0.00E+00	6.92E-03
Cs-134	<6.57E-03	0.00E+00	6.57E-03
Cs-137	<5.79E-03	0.00E+00	5.79E-03
Be-7	<6.28E-02	0.00E+00	6.28E-02
K-40	4.11E-01	1.55E-01	1.49E-01

Sample ID: 402302 Sample Dates: 2/23/2016 - 3/1/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.33E-03	0.00E+00	7.33E-03
Cs-134	<8.21E-03	0.00E+00	8.21E-03
Cs-137	<8.63E-03	0.00E+00	8.63E-03

Sample ID: 402302 **Sample Dates: 2/23/2016 - 3/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
Be-7	<6.24E-02	0.00E+00	6.24E-02
K-40	<2.80E-02	0.00E+00	2.80E-02

Sample ID: 403030 **Sample Dates: 3/1/2016 - 3/8/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.93E-03	0.00E+00	6.93E-03
Cs-134	<6.11E-03	0.00E+00	6.11E-03
Cs-137	<9.52E-03	0.00E+00	9.52E-03
Be-7	<4.81E-02	0.00E+00	4.81E-02
K-40	4.36E-01	1.59E-01	1.51E-01

Sample ID: 404511 **Sample Dates: 3/8/2016 - 3/15/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.66E-03	0.00E+00	8.66E-03
Cs-134	<5.85E-03	0.00E+00	5.85E-03
Cs-137	<6.27E-03	0.00E+00	6.27E-03
Be-7	<6.13E-02	0.00E+00	6.13E-02
K-40	2.45E-01	1.16E-01	1.03E-01

Sample ID: 405394 **Sample Dates: 3/15/2016 - 3/22/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.47E-03	0.00E+00	8.47E-03
Cs-134	<6.38E-03	0.00E+00	6.38E-03
Cs-137	<6.51E-03	0.00E+00	6.51E-03
Be-7	<4.70E-02	0.00E+00	4.70E-02
K-40	4.01E-01	1.49E-01	1.36E-01

Sample ID: 406011 **Sample Dates: 3/22/2016 - 3/29/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.63E-03	0.00E+00	5.63E-03
Cs-134	<6.90E-03	0.00E+00	6.90E-03
Cs-137	<5.64E-03	0.00E+00	5.64E-03
Be-7	<5.20E-02	0.00E+00	5.20E-02
K-40	3.87E-01	1.32E-01	2.83E-02

Sample ID: 406356 **Sample Dates: 3/29/2016 - 4/5/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.62E-03	0.00E+00	6.62E-03
Cs-134	<5.77E-03	0.00E+00	5.77E-03
Cs-137	<9.93E-03	0.00E+00	9.93E-03
Be-7	<4.22E-02	0.00E+00	4.22E-02
K-40	4.19E-01	1.36E-01	2.77E-02

Sample ID: 407542 **Sample Dates: 4/5/2016 - 4/12/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<4.90E-03	0.00E+00	4.90E-03
Cs-134	<6.05E-03	0.00E+00	6.05E-03
Cs-137	<8.22E-03	0.00E+00	8.22E-03
Be-7	<5.20E-02	0.00E+00	5.20E-02
K-40	4.00E-01	1.34E-01	2.85E-02

Sample ID: 408119 **Sample Dates: 4/12/2016 - 4/19/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.35E-03	0.00E+00	7.35E-03
Cs-134	<8.01E-03	0.00E+00	8.01E-03
Cs-137	<8.41E-03	0.00E+00	8.41E-03
Be-7	<5.46E-02	0.00E+00	5.46E-02
K-40	3.84E-01	1.43E-01	1.26E-01

Sample ID: 409432 **Sample Dates: 4/19/2016 - 4/26/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.35E-03	0.00E+00	9.35E-03
Cs-134	<8.24E-03	0.00E+00	8.24E-03
Cs-137	<7.76E-03	0.00E+00	7.76E-03
Be-7	<3.85E-02	0.00E+00	3.85E-02
K-40	3.91E-01	1.35E-01	2.95E-02

Sample ID: 409767 **Sample Dates: 4/26/2016 - 5/3/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.76E-03	0.00E+00	6.76E-03
Cs-134	<7.52E-03	0.00E+00	7.52E-03
Cs-137	<9.96E-03	0.00E+00	9.96E-03
Be-7	<5.06E-02	0.00E+00	5.06E-02
K-40	4.15E-01	1.69E-01	1.83E-01

Sample ID: 410922 **Sample Dates: 5/3/2016 - 5/10/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.09E-03	0.00E+00	9.09E-03

Sample ID: 410922 **Sample Dates: 5/3/2016 - 5/10/2016**

Nuclide	Activity	2 Sigma Error	MDA
Cs-134	<6.80E-03	0.00E+00	6.80E-03
Cs-137	<8.45E-03	0.00E+00	8.45E-03
Be-7	<6.12E-02	0.00E+00	6.12E-02
K-40	3.70E-01	1.28E-01	2.79E-02

Sample ID: 411419 **Sample Dates: 5/10/2016 - 5/17/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.62E-03	0.00E+00	6.62E-03
Cs-134	<8.72E-03	0.00E+00	8.72E-03
Cs-137	<7.17E-03	0.00E+00	7.17E-03
Be-7	<5.80E-02	0.00E+00	5.80E-02
K-40	4.03E-01	1.63E-01	1.82E-01

Sample ID: 411743 **Sample Dates: 5/17/2016 - 5/24/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.21E-03	0.00E+00	7.21E-03
Cs-134	<6.53E-03	0.00E+00	6.53E-03
Cs-137	<7.45E-03	0.00E+00	7.45E-03
Be-7	<5.18E-02	0.00E+00	5.18E-02
K-40	4.96E-01	1.60E-01	1.23E-01

Sample ID: 412206 **Sample Dates: 5/24/2016 - 6/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.08E-03	0.00E+00	7.08E-03
Cs-134	<5.26E-03	0.00E+00	5.26E-03
Cs-137	<5.86E-03	0.00E+00	5.86E-03
Be-7	<4.19E-02	0.00E+00	4.19E-02
K-40	3.77E-01	1.28E-01	8.87E-02

Sample ID: 412725 **Sample Dates: 6/1/2016 - 6/7/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.41E-03	0.00E+00	8.41E-03
Cs-134	<9.71E-03	0.00E+00	9.71E-03
Cs-137	<8.70E-03	0.00E+00	8.70E-03
Be-7	<5.53E-02	0.00E+00	5.53E-02
K-40	4.74E-01	1.59E-01	3.38E-02

Sample ID: 413325 **Sample Dates: 6/7/2016 - 6/14/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.89E-03	0.00E+00	7.89E-03
Cs-134	<5.85E-03	0.00E+00	5.85E-03
Cs-137	<8.54E-03	0.00E+00	8.54E-03
Be-7	<3.60E-02	0.00E+00	3.60E-02
K-40	3.38E-01	1.30E-01	9.83E-02

Sample ID: 413872 **Sample Dates: 6/14/2016 - 6/21/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.19E-03	0.00E+00	9.19E-03
Cs-134	<5.87E-03	0.00E+00	5.87E-03
Cs-137	<8.88E-03	0.00E+00	8.88E-03
Be-7	<6.10E-02	0.00E+00	6.10E-02
K-40	3.12E-01	1.54E-01	1.85E-01

Sample ID: 415013 **Sample Dates: 6/21/2016 - 6/28/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.20E-03	0.00E+00	7.20E-03
Cs-134	<5.78E-03	0.00E+00	5.78E-03
Cs-137	<7.84E-03	0.00E+00	7.84E-03
Be-7	<4.63E-02	0.00E+00	4.63E-02
K-40	3.15E-01	1.40E-01	1.53E-01

Sample ID: 415393 **Sample Dates: 6/28/2016 - 7/6/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.21E-03	0.00E+00	7.21E-03
Cs-134	<6.80E-03	0.00E+00	6.80E-03
Cs-137	<5.74E-03	0.00E+00	5.74E-03
Be-7	<4.12E-02	0.00E+00	4.12E-02
K-40	3.67E-01	1.20E-01	2.48E-02

Sample ID: 416377 **Sample Dates: 7/6/2016 - 7/12/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.28E-03	0.00E+00	9.28E-03
Cs-134	<1.13E-02	0.00E+00	1.13E-02
Cs-137	<1.11E-02	0.00E+00	1.11E-02
Be-7	<5.84E-02	0.00E+00	5.84E-02
K-40	4.95E-01	1.78E-01	1.61E-01

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

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID: 417001 Sample Dates: 7/12/2016 - 7/19/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.31E-03	0.00E+00	7.31E-03
Cs-134	<7.66E-03	0.00E+00	7.66E-03
Cs-137	<1.12E-02	0.00E+00	1.12E-02
Be-7	<3.19E-02	0.00E+00	3.19E-02
K-40	4.63E-01	1.63E-01	1.35E-01

Sample ID: 417395 Sample Dates: 7/19/2016 - 7/26/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.30E-03	0.00E+00	6.30E-03
Cs-134	<4.67E-03	0.00E+00	4.67E-03
Cs-137	<1.70E-03	0.00E+00	1.70E-03
Be-7	<5.19E-02	0.00E+00	5.19E-02
K-40	4.52E-01	1.43E-01	2.85E-02

Sample ID: 417789 Sample Dates: 7/26/2016 - 8/2/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.00E-02	0.00E+00	1.00E-02
Cs-134	<8.66E-03	0.00E+00	8.66E-03
Cs-137	<5.51E-03	0.00E+00	5.51E-03
Be-7	<6.34E-02	0.00E+00	6.34E-02
K-40	4.47E-01	1.41E-01	2.75E-02

Sample ID: 418250 Sample Dates: 8/2/2016 - 8/9/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.58E-03	0.00E+00	8.58E-03
Cs-134	<8.33E-03	0.00E+00	8.33E-03
Cs-137	<5.52E-03	0.00E+00	5.52E-03
Be-7	<4.10E-02	0.00E+00	4.10E-02
K-40	2.56E-01	1.15E-01	1.05E-01

Sample ID: 418979 Sample Dates: 8/9/2016 - 8/16/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.87E-03	0.00E+00	8.87E-03
Cs-134	<5.72E-03	0.00E+00	5.72E-03
Cs-137	<7.11E-03	0.00E+00	7.11E-03
Be-7	<3.93E-02	0.00E+00	3.93E-02
K-40	5.23E-01	1.59E-01	3.01E-02

Sample ID: 419480 Sample Dates: 8/16/2016 - 8/23/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<3.81E-03	0.00E+00	3.81E-03
Cs-134	<8.74E-03	0.00E+00	8.74E-03
Cs-137	<8.44E-03	0.00E+00	8.44E-03
Be-7	<5.41E-02	0.00E+00	5.41E-02
K-40	2.78E-01	1.20E-01	1.08E-01

Sample ID: 420010 Sample Dates: 8/23/2016 - 8/30/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.77E-03	0.00E+00	6.77E-03
Cs-134	<7.21E-03	0.00E+00	7.21E-03
Cs-137	<7.17E-03	0.00E+00	7.17E-03
Be-7	<4.60E-02	0.00E+00	4.60E-02
K-40	5.40E-01	1.66E-01	1.17E-01

Sample ID: 420561 Sample Dates: 8/30/2016 - 9/7/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.13E-03	0.00E+00	6.13E-03
Cs-134	<4.70E-03	0.00E+00	4.70E-03
Cs-137	<5.04E-03	0.00E+00	5.04E-03
Be-7	<5.54E-02	0.00E+00	5.54E-02
K-40	2.89E-01	1.25E-01	1.35E-01

Sample ID: 421398 Sample Dates: 9/7/2016 - 9/13/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.18E-02	0.00E+00	1.18E-02
Cs-134	<9.25E-03	0.00E+00	9.25E-03
Cs-137	<8.72E-03	0.00E+00	8.72E-03
Be-7	<7.32E-02	0.00E+00	7.32E-02
K-40	<3.33E-01	0.00E+00	3.33E-01

Sample ID: 422556 Sample Dates: 9/13/2016 - 9/20/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.80E-03	0.00E+00	8.80E-03
Cs-134	<7.59E-03	0.00E+00	7.59E-03
Cs-137	<5.84E-03	0.00E+00	5.84E-03
Be-7	<4.78E-02	0.00E+00	4.78E-02
K-40	3.14E-01	1.34E-01	1.33E-01

Sample ID: 423301 **Sample Dates: 9/20/2016 - 9/27/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.58E-03	0.00E+00	8.58E-03
Cs-134	<7.63E-03	0.00E+00	7.63E-03
Cs-137	<7.19E-03	0.00E+00	7.19E-03
Be-7	<5.39E-02	0.00E+00	5.39E-02
K-40	3.77E-01	1.50E-01	1.53E-01

Sample ID: 424424 **Sample Dates: 9/27/2016 - 10/4/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.43E-03	0.00E+00	6.43E-03
Cs-134	<7.99E-03	0.00E+00	7.99E-03
Cs-137	<7.95E-03	0.00E+00	7.95E-03
Be-7	<5.99E-02	0.00E+00	5.99E-02
K-40	5.48E-01	1.71E-01	1.13E-01

Sample ID: 425410 **Sample Dates: 10/4/2016 - 10/11/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.87E-03	0.00E+00	6.87E-03
Cs-134	<7.78E-03	0.00E+00	7.78E-03
Cs-137	<8.58E-03	0.00E+00	8.58E-03
Be-7	<5.56E-02	0.00E+00	5.56E-02
K-40	3.11E-01	1.33E-01	1.31E-01

Sample ID: 425973 **Sample Dates: 10/11/2016 - 10/18/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.92E-03	0.00E+00	9.92E-03
Cs-134	<6.78E-03	0.00E+00	6.78E-03
Cs-137	<7.55E-03	0.00E+00	7.55E-03
Be-7	<5.85E-02	0.00E+00	5.85E-02
K-40	4.26E-01	1.58E-01	1.28E-01

Sample ID: 426348 **Sample Dates: 10/18/2016 - 10/25/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.54E-03	0.00E+00	7.54E-03
Cs-134	<6.57E-03	0.00E+00	6.57E-03
Cs-137	<9.59E-03	0.00E+00	9.59E-03
Be-7	<5.20E-02	0.00E+00	5.20E-02
K-40	4.20E-01	1.49E-01	1.02E-01

Sample ID: 427037 **Sample Dates: 10/25/2016 - 11/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<4.24E-03	0.00E+00	4.24E-03
Cs-134	<7.67E-03	0.00E+00	7.67E-03
Cs-137	<8.86E-03	0.00E+00	8.86E-03
Be-7	<6.47E-02	0.00E+00	6.47E-02
K-40	2.90E-01	1.26E-01	1.08E-01

Sample ID: 427696 **Sample Dates: 11/1/2016 - 11/8/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.16E-03	0.00E+00	7.16E-03
Cs-134	<8.26E-03	0.00E+00	8.26E-03
Cs-137	<7.07E-03	0.00E+00	7.07E-03
Be-7	<6.05E-02	0.00E+00	6.05E-02
K-40	<3.05E-01	0.00E+00	3.05E-01

Sample ID: 428191 **Sample Dates: 11/8/2016 - 11/15/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.02E-02	0.00E+00	1.02E-02
Cs-134	<7.25E-03	0.00E+00	7.25E-03
Cs-137	<1.20E-02	0.00E+00	1.20E-02
Be-7	<6.28E-02	0.00E+00	6.28E-02
K-40	4.19E-01	1.81E-01	2.10E-01

Sample ID: 428876 **Sample Dates: 11/15/2016 - 11/21/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.86E-03	0.00E+00	7.86E-03
Cs-134	<7.20E-03	0.00E+00	7.20E-03
Cs-137	<8.20E-03	0.00E+00	8.20E-03
Be-7	<5.73E-02	0.00E+00	5.73E-02
K-40	4.30E-01	1.64E-01	1.51E-01

Sample ID: 429383 **Sample Dates: 11/21/2016 - 11/29/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.14E-03	0.00E+00	9.14E-03
Cs-134	<6.24E-03	0.00E+00	6.24E-03
Cs-137	<7.76E-03	0.00E+00	7.76E-03
Be-7	<5.34E-02	0.00E+00	5.34E-02
K-40	5.38E-01	1.54E-01	2.70E-02

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

Sample Point 212 [INDICATOR - E @ 3.32 miles]

Sample ID: 429934 Sample Dates: 11/29/2016 - 12/6/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.23E-03	0.00E+00	9.23E-03
Cs-134	<8.38E-03	0.00E+00	8.38E-03
Cs-137	<5.55E-03	0.00E+00	5.55E-03
Be-7	<6.13E-02	0.00E+00	6.13E-02
K-40	4.22E-01	1.37E-01	2.79E-02

Sample ID: 430555 Sample Dates: 12/6/2016 - 12/13/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.41E-03	0.00E+00	7.41E-03
Cs-134	<5.90E-03	0.00E+00	5.90E-03
Cs-137	<8.01E-03	0.00E+00	8.01E-03
Be-7	<6.19E-02	0.00E+00	6.19E-02
K-40	5.14E-01	1.54E-01	2.84E-02

Sample ID: 431046 Sample Dates: 12/13/2016 - 12/20/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.18E-03	0.00E+00	9.18E-03
Cs-134	<7.23E-03	0.00E+00	7.23E-03
Cs-137	<9.49E-03	0.00E+00	9.49E-03
Be-7	<4.65E-02	0.00E+00	4.65E-02
K-40	4.71E-01	1.45E-01	2.78E-02

Sample ID: 431450 Sample Dates: 12/20/2016 - 12/28/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.22E-03	0.00E+00	7.22E-03
Cs-134	<4.70E-03	0.00E+00	4.70E-03
Cs-137	<5.05E-03	0.00E+00	5.05E-03
Be-7	<4.55E-02	0.00E+00	4.55E-02
K-40	3.05E-01	1.24E-01	1.22E-01

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID: 398682 Sample Dates: 12/29/2015 - 1/6/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.34E-02	0.00E+00	1.34E-02
Cs-134	<1.52E-02	0.00E+00	1.52E-02
Cs-137	<1.60E-02	0.00E+00	1.60E-02
Be-7	<8.30E-02	0.00E+00	8.30E-02
K-40	5.26E-01	1.93E-01	1.24E-01

Sample ID: 398929 Sample Dates: 1/6/2016 - 1/12/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.06E-02	0.00E+00	1.06E-02
Cs-134	<7.47E-03	0.00E+00	7.47E-03
Cs-137	<1.23E-02	0.00E+00	1.23E-02
Be-7	<5.88E-02	0.00E+00	5.88E-02
K-40	5.08E-01	1.69E-01	3.53E-02

Sample ID: 399247 Sample Dates: 1/12/2016 - 1/19/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.76E-03	0.00E+00	6.76E-03
Cs-134	<5.90E-03	0.00E+00	5.90E-03
Cs-137	<9.17E-03	0.00E+00	9.17E-03
Be-7	<5.92E-02	0.00E+00	5.92E-02
K-40	4.05E-01	1.50E-01	1.36E-01

Sample ID: 399993 Sample Dates: 1/19/2016 - 1/26/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.37E-03	0.00E+00	8.37E-03
Cs-134	<7.49E-03	0.00E+00	7.49E-03
Cs-137	<8.75E-03	0.00E+00	8.75E-03
Be-7	<7.42E-02	0.00E+00	7.42E-02
K-40	2.59E-01	1.55E-01	2.13E-01

Sample ID: 400346 Sample Dates: 1/26/2016 - 2/2/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.79E-02	0.00E+00	1.79E-02
Cs-134	<1.33E-02	0.00E+00	1.33E-02
Cs-137	<1.02E-02	0.00E+00	1.02E-02
Be-7	<9.38E-02	0.00E+00	9.38E-02
K-40	5.84E-01	2.26E-01	1.91E-01

Sample ID: 400976 Sample Dates: 2/2/2016 - 2/9/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.97E-03	0.00E+00	6.97E-03
Cs-134	<7.13E-03	0.00E+00	7.13E-03
Cs-137	<8.86E-03	0.00E+00	8.86E-03

Sample ID:	400976	Sample Dates: 2/2/2016 - 2/9/2016	Nuclide	Activity	2 Sigma Error	MDA
			Be-7	<5.18E-02	0.00E+00	5.18E-02
			K-40	3.76E-01	1.35E-01	3.09E-02
Sample ID:	**401342**	**Sample Dates: 2/9/2016 - 2/16/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<4.90E-03	0.00E+00	4.90E-03
			Cs-134	<6.04E-03	0.00E+00	6.04E-03
			Cs-137	<4.60E-03	0.00E+00	4.60E-03
			Be-7	<5.19E-02	0.00E+00	5.19E-02
			K-40	4.19E-01	1.37E-01	2.84E-02
Sample ID:	**401792**	**Sample Dates: 2/16/2016 - 2/23/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<1.02E-02	0.00E+00	1.02E-02
			Cs-134	<7.24E-03	0.00E+00	7.24E-03
			Cs-137	<9.99E-03	0.00E+00	9.99E-03
			Be-7	<6.08E-02	0.00E+00	6.08E-02
			K-40	3.16E-01	1.30E-01	1.21E-01
Sample ID:	**402303**	**Sample Dates: 2/23/2016 - 3/1/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<9.58E-03	0.00E+00	9.58E-03
			Cs-134	<7.36E-03	0.00E+00	7.36E-03
			Cs-137	<8.58E-03	0.00E+00	8.58E-03
			Be-7	<4.25E-02	0.00E+00	4.25E-02
			K-40	3.73E-01	1.52E-01	1.60E-01
Sample ID:	**403031**	**Sample Dates: 3/1/2016 - 3/8/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<9.21E-03	0.00E+00	9.21E-03
			Cs-134	<6.56E-03	0.00E+00	6.56E-03
			Cs-137	<8.15E-03	0.00E+00	8.15E-03
			Be-7	<5.20E-02	0.00E+00	5.20E-02
			K-40	1.71E-01	1.24E-01	1.72E-01
Sample ID:	**404512**	**Sample Dates: 3/8/2016 - 3/15/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<6.10E-03	0.00E+00	6.10E-03
			Cs-134	<7.09E-03	0.00E+00	7.09E-03
			Cs-137	<8.20E-03	0.00E+00	8.20E-03
			Be-7	<5.64E-02	0.00E+00	5.64E-02
			K-40	<2.41E-01	0.00E+00	2.41E-01
Sample ID:	**405395**	**Sample Dates: 3/15/2016 - 3/22/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<8.55E-03	0.00E+00	8.55E-03
			Cs-134	<5.23E-03	0.00E+00	5.23E-03
			Cs-137	<9.07E-03	0.00E+00	9.07E-03
			Be-7	<4.70E-02	0.00E+00	4.70E-02
			K-40	3.33E-01	1.45E-01	1.59E-01
Sample ID:	**406012**	**Sample Dates: 3/22/2016 - 3/29/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<1.07E-02	0.00E+00	1.07E-02
			Cs-134	<8.68E-03	0.00E+00	8.68E-03
			Cs-137	<8.89E-03	0.00E+00	8.89E-03
			Be-7	<6.65E-02	0.00E+00	6.65E-02
			K-40	<3.64E-01	0.00E+00	3.64E-01
Sample ID:	**406357**	**Sample Dates: 3/29/2016 - 4/5/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<9.44E-03	0.00E+00	9.44E-03
			Cs-134	<8.88E-03	0.00E+00	8.88E-03
			Cs-137	<7.29E-03	0.00E+00	7.29E-03
			Be-7	<3.71E-02	0.00E+00	3.71E-02
			K-40	3.76E-01	1.40E-01	1.13E-01
Sample ID:	**407543**	**Sample Dates: 4/5/2016 - 4/12/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<9.27E-03	0.00E+00	9.27E-03
			Cs-134	<4.03E-03	0.00E+00	4.03E-03
			Cs-137	<1.13E-02	0.00E+00	1.13E-02
			Be-7	<4.67E-02	0.00E+00	4.67E-02
			K-40	3.84E-01	1.44E-01	1.08E-01
Sample ID:	**408120**	**Sample Dates: 4/12/2016 - 4/19/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<1.16E-02	0.00E+00	1.16E-02

Sample ID: 408120 **Sample Dates: 4/12/2016 - 4/19/2016**

Nuclide	Activity	2 Sigma Error	MDA
Cs-134	<6.43E-03	0.00E+00	6.43E-03
Cs-137	<9.38E-03	0.00E+00	9.38E-03
Be-7	<7.46E-02	0.00E+00	7.46E-02
K-40	4.59E-01	1.49E-01	3.04E-02

Sample ID: 409433 **Sample Dates: 4/19/2016 - 4/26/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.30E-03	0.00E+00	7.30E-03
Cs-134	<9.32E-03	0.00E+00	9.32E-03
Cs-137	<8.39E-03	0.00E+00	8.39E-03
Be-7	<5.77E-02	0.00E+00	5.77E-02
K-40	3.10E-01	1.34E-01	1.37E-01

Sample ID: 409768 **Sample Dates: 4/26/2016 - 5/3/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.39E-03	0.00E+00	6.39E-03
Cs-134	<7.57E-03	0.00E+00	7.57E-03
Cs-137	<6.76E-03	0.00E+00	6.76E-03
Be-7	<7.21E-02	0.00E+00	7.21E-02
K-40	3.68E-01	1.28E-01	2.85E-02

Sample ID: 410923 **Sample Dates: 5/3/2016 - 5/10/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.74E-03	0.00E+00	8.74E-03
Cs-134	<5.16E-03	0.00E+00	5.16E-03
Cs-137	<7.14E-03	0.00E+00	7.14E-03
Be-7	<5.43E-02	0.00E+00	5.43E-02
K-40	3.26E-01	1.19E-01	2.76E-02

Sample ID: 411420 **Sample Dates: 5/10/2016 - 5/17/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.94E-03	0.00E+00	7.94E-03
Cs-134	<5.88E-03	0.00E+00	5.88E-03
Cs-137	<9.14E-03	0.00E+00	9.14E-03
Be-7	<4.73E-02	0.00E+00	4.73E-02
K-40	4.29E-01	1.39E-01	2.84E-02

Sample ID: 411744 **Sample Dates: 5/17/2016 - 5/24/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.25E-03	0.00E+00	7.25E-03
Cs-134	<8.41E-03	0.00E+00	8.41E-03
Cs-137	<9.52E-03	0.00E+00	9.52E-03
Be-7	<5.07E-02	0.00E+00	5.07E-02
K-40	4.94E-01	1.50E-01	2.79E-02

Sample ID: 412207 **Sample Dates: 5/24/2016 - 6/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.07E-03	0.00E+00	7.07E-03
Cs-134	<6.30E-03	0.00E+00	6.30E-03
Cs-137	<7.35E-03	0.00E+00	7.35E-03
Be-7	<4.77E-02	0.00E+00	4.77E-02
K-40	3.85E-01	1.22E-01	2.42E-02

Sample ID: 412726 **Sample Dates: 6/1/2016 - 6/7/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.59E-03	0.00E+00	9.59E-03
Cs-134	<8.24E-03	0.00E+00	8.24E-03
Cs-137	<1.03E-02	0.00E+00	1.03E-02
Be-7	<5.94E-02	0.00E+00	5.94E-02
K-40	4.06E-01	1.69E-01	1.64E-01

Sample ID: 413326 **Sample Dates: 6/7/2016 - 6/14/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.80E-03	0.00E+00	7.80E-03
Cs-134	<6.27E-03	0.00E+00	6.27E-03
Cs-137	<6.40E-03	0.00E+00	6.40E-03
Be-7	<6.03E-02	0.00E+00	6.03E-02
K-40	4.08E-01	1.34E-01	2.76E-02

Sample ID: 413873 **Sample Dates: 6/14/2016 - 6/21/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.52E-03	0.00E+00	7.52E-03
Cs-134	<7.11E-03	0.00E+00	7.11E-03
Cs-137	<7.54E-03	0.00E+00	7.54E-03
Be-7	<6.30E-02	0.00E+00	6.30E-02
K-40	3.61E-01	1.44E-01	1.42E-01

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID: 415014 Sample Dates: 6/21/2016 - 6/28/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.26E-03	0.00E+00	7.26E-03
Cs-134	<8.00E-03	0.00E+00	8.00E-03
Cs-137	<7.82E-03	0.00E+00	7.82E-03
Be-7	<5.43E-02	0.00E+00	5.43E-02
K-40	4.20E-01	1.61E-01	1.69E-01

Sample ID: 415394 Sample Dates: 6/28/2016 - 7/6/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.32E-03	0.00E+00	7.32E-03
Cs-134	<7.02E-03	0.00E+00	7.02E-03
Cs-137	<5.40E-03	0.00E+00	5.40E-03
Be-7	<4.47E-02	0.00E+00	4.47E-02
K-40	<2.92E-01	0.00E+00	2.92E-01

Sample ID: 416378 Sample Dates: 7/6/2016 - 7/12/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.47E-03	0.00E+00	9.47E-03
Cs-134	<8.07E-03	0.00E+00	8.07E-03
Cs-137	<9.33E-03	0.00E+00	9.33E-03
Be-7	<3.34E-02	0.00E+00	3.34E-02
K-40	4.86E-01	1.74E-01	1.46E-01

Sample ID: 417002 Sample Dates: 7/12/2016 - 7/19/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.36E-03	0.00E+00	7.36E-03
Cs-134	<8.54E-03	0.00E+00	8.54E-03
Cs-137	<6.56E-03	0.00E+00	6.56E-03
Be-7	<5.16E-02	0.00E+00	5.16E-02
K-40	4.71E-01	1.47E-01	2.84E-02

Sample ID: 417396 Sample Dates: 7/19/2016 - 7/26/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.69E-03	0.00E+00	8.69E-03
Cs-134	<8.64E-03	0.00E+00	8.64E-03
Cs-137	<4.98E-03	0.00E+00	4.98E-03
Be-7	<5.66E-02	0.00E+00	5.66E-02
K-40	<3.32E-01	0.00E+00	3.32E-01

Sample ID: 417790 Sample Dates: 7/26/2016 - 8/2/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.50E-03	0.00E+00	7.50E-03
Cs-134	<6.94E-03	0.00E+00	6.94E-03
Cs-137	<7.34E-03	0.00E+00	7.34E-03
Be-7	<4.22E-02	0.00E+00	4.22E-02
K-40	3.79E-01	1.31E-01	2.85E-02

Sample ID: 418251 Sample Dates: 8/2/2016 - 8/9/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.38E-03	0.00E+00	7.38E-03
Cs-134	<7.29E-03	0.00E+00	7.29E-03
Cs-137	<8.51E-03	0.00E+00	8.51E-03
Be-7	<3.59E-02	0.00E+00	3.59E-02
K-40	4.36E-01	1.40E-01	2.81E-02

Sample ID: 418980 Sample Dates: 8/9/2016 - 8/16/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.68E-03	0.00E+00	8.68E-03
Cs-134	<8.21E-03	0.00E+00	8.21E-03
Cs-137	<1.18E-02	0.00E+00	1.18E-02
Be-7	<5.25E-02	0.00E+00	5.25E-02
K-40	3.78E-01	1.35E-01	3.10E-02

Sample ID: 419481 Sample Dates: 8/16/2016 - 8/23/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.92E-03	0.00E+00	6.92E-03
Cs-134	<6.43E-03	0.00E+00	6.43E-03
Cs-137	<9.67E-03	0.00E+00	9.67E-03
Be-7	<4.69E-02	0.00E+00	4.69E-02
K-40	4.19E-01	1.38E-01	2.84E-02

Sample ID: 420011 Sample Dates: 8/23/2016 - 8/30/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<4.92E-03	0.00E+00	4.92E-03
Cs-134	<6.93E-03	0.00E+00	6.93E-03
Cs-137	<8.62E-03	0.00E+00	8.62E-03
Be-7	<3.63E-02	0.00E+00	3.63E-02
K-40	3.67E-01	1.39E-01	1.17E-01

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID: 420562 Sample Dates: 8/30/2016 - 9/7/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.30E-03	0.00E+00	7.30E-03
Cs-134	<5.02E-03	0.00E+00	5.02E-03
Cs-137	<8.70E-03	0.00E+00	8.70E-03
Be-7	<5.29E-02	0.00E+00	5.29E-02
K-40	2.41E-01	1.25E-01	1.50E-01

Sample ID: 421399 Sample Dates: 9/7/2016 - 9/13/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.54E-03	0.00E+00	7.54E-03
Cs-134	<7.31E-03	0.00E+00	7.31E-03
Cs-137	<9.08E-03	0.00E+00	9.08E-03
Be-7	<6.71E-02	0.00E+00	6.71E-02
K-40	6.43E-01	2.08E-01	1.91E-01

Sample ID: 422557 Sample Dates: 9/13/2016 - 9/20/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.82E-03	0.00E+00	7.82E-03
Cs-134	<6.79E-03	0.00E+00	6.79E-03
Cs-137	<8.98E-03	0.00E+00	8.98E-03
Be-7	<4.65E-02	0.00E+00	4.65E-02
K-40	4.83E-01	1.63E-01	1.42E-01

Sample ID: 423302 Sample Dates: 9/20/2016 - 9/27/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.77E-03	0.00E+00	7.77E-03
Cs-134	<8.34E-03	0.00E+00	8.34E-03
Cs-137	<6.41E-03	0.00E+00	6.41E-03
Be-7	<4.99E-02	0.00E+00	4.99E-02
K-40	4.60E-01	1.43E-01	2.77E-02

Sample ID: 424425 Sample Dates: 9/27/2016 - 10/4/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.30E-03	0.00E+00	9.30E-03
Cs-134	<9.09E-03	0.00E+00	9.09E-03
Cs-137	<6.71E-03	0.00E+00	6.71E-03
Be-7	<5.98E-02	0.00E+00	5.98E-02
K-40	3.10E-01	1.42E-01	1.62E-01

Sample ID: 425411 Sample Dates: 10/4/2016 - 10/11/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.64E-03	0.00E+00	9.64E-03
Cs-134	<8.92E-03	0.00E+00	8.92E-03
Cs-137	<7.34E-03	0.00E+00	7.34E-03
Be-7	<5.20E-02	0.00E+00	5.20E-02
K-40	3.57E-01	1.27E-01	2.85E-02

Sample ID: 425974 Sample Dates: 10/11/2016 - 10/18/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.39E-03	0.00E+00	8.39E-03
Cs-134	<9.09E-03	0.00E+00	9.09E-03
Cs-137	<8.18E-03	0.00E+00	8.18E-03
Be-7	<4.25E-02	0.00E+00	4.25E-02
K-40	2.64E-01	1.17E-01	1.06E-01

Sample ID: 426349 Sample Dates: 10/18/2016 - 10/25/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.33E-03	0.00E+00	6.33E-03
Cs-134	<6.45E-03	0.00E+00	6.45E-03
Cs-137	<8.01E-03	0.00E+00	8.01E-03
Be-7	<4.70E-02	0.00E+00	4.70E-02
K-40	4.62E-01	1.45E-01	2.85E-02

Sample ID: 427038 Sample Dates: 10/25/2016 - 11/1/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.08E-03	0.00E+00	9.08E-03
Cs-134	<7.59E-03	0.00E+00	7.59E-03
Cs-137	<8.92E-03	0.00E+00	8.92E-03
Be-7	<5.73E-02	0.00E+00	5.73E-02
K-40	3.76E-01	1.28E-01	2.76E-02

Sample ID: 427697 Sample Dates: 11/1/2016 - 11/8/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.43E-03	0.00E+00	8.43E-03
Cs-134	<8.47E-03	0.00E+00	8.47E-03
Cs-137	<7.92E-03	0.00E+00	7.92E-03
Be-7	<4.69E-02	0.00E+00	4.69E-02
K-40	3.65E-01	1.37E-01	1.10E-01

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID: 428192 Sample Dates: 11/8/2016 - 11/15/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.30E-03	0.00E+00	6.30E-03
Cs-134	<7.13E-03	0.00E+00	7.13E-03
Cs-137	<8.23E-03	0.00E+00	8.23E-03
Be-7	<3.77E-02	0.00E+00	3.77E-02
K-40	4.97E-01	1.53E-01	2.93E-02

Sample ID: 428877 Sample Dates: 11/15/2016 - 11/21/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.92E-03	0.00E+00	7.92E-03
Cs-134	<8.23E-03	0.00E+00	8.23E-03
Cs-137	<1.08E-02	0.00E+00	1.08E-02
Be-7	<7.28E-02	0.00E+00	7.28E-02
K-40	3.90E-01	1.48E-01	1.13E-01

Sample ID: 429384 Sample Dates: 11/21/2016 - 11/29/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.94E-03	0.00E+00	6.94E-03
Cs-134	<5.24E-03	0.00E+00	5.24E-03
Cs-137	<6.52E-03	0.00E+00	6.52E-03
Be-7	<4.93E-02	0.00E+00	4.93E-02
K-40	4.21E-01	1.38E-01	9.70E-02

Sample ID: 429935 Sample Dates: 11/29/2016 - 12/6/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.42E-03	0.00E+00	7.42E-03
Cs-134	<5.26E-03	0.00E+00	5.26E-03
Cs-137	<5.63E-03	0.00E+00	5.63E-03
Be-7	<5.54E-02	0.00E+00	5.54E-02
K-40	3.34E-01	1.22E-01	2.83E-02

Sample ID: 430556 Sample Dates: 12/6/2016 - 12/13/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.71E-03	0.00E+00	8.71E-03
Cs-134	<7.62E-03	0.00E+00	7.62E-03
Cs-137	<8.41E-03	0.00E+00	8.41E-03
Be-7	<4.13E-02	0.00E+00	4.13E-02
K-40	4.40E-01	1.40E-01	2.77E-02

Sample ID: 431047 Sample Dates: 12/13/2016 - 12/20/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.80E-03	0.00E+00	8.80E-03
Cs-134	<7.67E-03	0.00E+00	7.67E-03
Cs-137	<1.00E-02	0.00E+00	1.00E-02
Be-7	<4.66E-02	0.00E+00	4.66E-02
K-40	4.33E-01	1.39E-01	2.80E-02

Sample ID: 431451 Sample Dates: 12/20/2016 - 12/28/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.88E-03	0.00E+00	8.88E-03
Cs-134	<5.13E-03	0.00E+00	5.13E-03
Cs-137	<5.50E-03	0.00E+00	5.50E-03
Be-7	<5.37E-02	0.00E+00	5.37E-02
K-40	<2.78E-01	0.00E+00	2.78E-01

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID: 398683 Sample Dates: 12/29/2015 - 1/6/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.49E-02	0.00E+00	1.49E-02
Cs-134	<9.30E-03	0.00E+00	9.30E-03
Cs-137	<1.35E-02	0.00E+00	1.35E-02
Be-7	<8.25E-02	0.00E+00	8.25E-02
K-40	5.30E-01	2.59E-01	3.38E-01

Sample ID: 398930 Sample Dates: 1/6/2016 - 1/12/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.03E-02	0.00E+00	1.03E-02
Cs-134	<8.79E-03	0.00E+00	8.79E-03
Cs-137	<8.75E-03	0.00E+00	8.75E-03
Be-7	<6.90E-02	0.00E+00	6.90E-02
K-40	<1.48E-01	0.00E+00	1.48E-01

Sample ID: 399248 Sample Dates: 1/12/2016 - 1/19/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.76E-03	0.00E+00	7.76E-03
Cs-134	<6.95E-03	0.00E+00	6.95E-03
Cs-137	<8.64E-03	0.00E+00	8.64E-03

Sample ID:	399248	Sample Dates: 1/12/2016 - 1/19/2016	Nuclide	Activity	2 Sigma Error	MDA
			Be-7	<5.96E-02	0.00E+00	5.96E-02
			K-40	3.31E-01	1.58E-01	1.89E-01
Sample ID:	**399994**	**Sample Dates: 1/19/2016 - 1/26/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<6.38E-03	0.00E+00	6.38E-03
			Cs-134	<8.63E-03	0.00E+00	8.63E-03
			Cs-137	<6.63E-03	0.00E+00	6.63E-03
			Be-7	<4.73E-02	0.00E+00	4.73E-02
			K-40	4.65E-01	1.56E-01	1.17E-01
Sample ID:	**400347**	**Sample Dates: 1/26/2016 - 2/2/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<1.91E-02	0.00E+00	1.91E-02
			Cs-134	<1.60E-02	0.00E+00	1.60E-02
			Cs-137	<1.53E-02	0.00E+00	1.53E-02
			Be-7	<1.07E-01	0.00E+00	1.07E-01
			K-40	6.55E-01	2.64E-01	2.85E-01
Sample ID:	**400977**	**Sample Dates: 2/2/2016 - 2/9/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<7.43E-03	0.00E+00	7.43E-03
			Cs-134	<4.68E-03	0.00E+00	4.68E-03
			Cs-137	<7.53E-03	0.00E+00	7.53E-03
			Be-7	<4.27E-02	0.00E+00	4.27E-02
			K-40	3.27E-01	1.31E-01	1.11E-01
Sample ID:	**401343**	**Sample Dates: 2/9/2016 - 2/16/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<8.16E-03	0.00E+00	8.16E-03
			Cs-134	<9.10E-03	0.00E+00	9.10E-03
			Cs-137	<8.89E-03	0.00E+00	8.89E-03
			Be-7	<4.66E-02	0.00E+00	4.66E-02
			K-40	4.23E-01	1.44E-01	3.10E-02
Sample ID:	**401793**	**Sample Dates: 2/16/2016 - 2/23/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<7.49E-03	0.00E+00	7.49E-03
			Cs-134	<7.38E-03	0.00E+00	7.38E-03
			Cs-137	<8.01E-03	0.00E+00	8.01E-03
			Be-7	<4.21E-02	0.00E+00	4.21E-02
			K-40	3.28E-01	1.30E-01	1.07E-01
Sample ID:	**402304**	**Sample Dates: 2/23/2016 - 3/1/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<9.65E-03	0.00E+00	9.65E-03
			Cs-134	<3.91E-03	0.00E+00	3.91E-03
			Cs-137	<1.05E-02	0.00E+00	1.05E-02
			Be-7	<6.38E-02	0.00E+00	6.38E-02
			K-40	4.28E-01	1.50E-01	1.04E-01
Sample ID:	**403032**	**Sample Dates: 3/1/2016 - 3/8/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<9.91E-03	0.00E+00	9.91E-03
			Cs-134	<7.60E-03	0.00E+00	7.60E-03
			Cs-137	<8.79E-03	0.00E+00	8.79E-03
			Be-7	<3.96E-02	0.00E+00	3.96E-02
			K-40	3.64E-01	1.62E-01	1.84E-01
Sample ID:	**404513**	**Sample Dates: 3/8/2016 - 3/15/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<7.92E-03	0.00E+00	7.92E-03
			Cs-134	<8.49E-03	0.00E+00	8.49E-03
			Cs-137	<5.63E-03	0.00E+00	5.63E-03
			Be-7	<5.52E-02	0.00E+00	5.52E-02
			K-40	3.65E-01	1.28E-01	2.83E-02
Sample ID:	**405396**	**Sample Dates: 3/15/2016 - 3/22/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<6.77E-03	0.00E+00	6.77E-03
			Cs-134	<6.33E-03	0.00E+00	6.33E-03
			Cs-137	<8.46E-03	0.00E+00	8.46E-03
			Be-7	<5.48E-02	0.00E+00	5.48E-02
			K-40	4.86E-01	1.48E-01	2.80E-02
Sample ID:	**406013**	**Sample Dates: 3/22/2016 - 3/29/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			I-131	<8.03E-03	0.00E+00	8.03E-03

Sample ID: 406013 **Sample Dates: 3/22/2016 - 3/29/2016**

Nuclide	Activity	2 Sigma Error	MDA
Cs-134	<6.61E-03	0.00E+00	6.61E-03
Cs-137	<5.82E-03	0.00E+00	5.82E-03
Be-7	<7.06E-02	0.00E+00	7.06E-02
K-40	3.92E-01	1.40E-01	1.05E-01

Sample ID: 406358 **Sample Dates: 3/29/2016 - 4/5/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.20E-02	0.00E+00	1.20E-02
Cs-134	<7.16E-03	0.00E+00	7.16E-03
Cs-137	<8.14E-03	0.00E+00	8.14E-03
Be-7	<4.12E-02	0.00E+00	4.12E-02
K-40	4.45E-01	1.59E-01	1.28E-01

Sample ID: 407544 **Sample Dates: 4/5/2016 - 4/12/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.34E-03	0.00E+00	7.34E-03
Cs-134	<7.39E-03	0.00E+00	7.39E-03
Cs-137	<7.34E-03	0.00E+00	7.34E-03
Be-7	<5.17E-02	0.00E+00	5.17E-02
K-40	3.89E-01	1.33E-01	2.85E-02

Sample ID: 408121 **Sample Dates: 4/12/2016 - 4/19/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.76E-03	0.00E+00	6.76E-03
Cs-134	<8.69E-03	0.00E+00	8.69E-03
Cs-137	<8.92E-03	0.00E+00	8.92E-03
Be-7	<6.19E-02	0.00E+00	6.19E-02
K-40	4.35E-01	1.60E-01	1.41E-01

Sample ID: 409434 **Sample Dates: 4/19/2016 - 4/26/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.74E-03	0.00E+00	9.74E-03
Cs-134	<7.57E-03	0.00E+00	7.57E-03
Cs-137	<1.21E-02	0.00E+00	1.21E-02
Be-7	<6.81E-02	0.00E+00	6.81E-02
K-40	4.17E-01	1.51E-01	1.18E-01

Sample ID: 409769 **Sample Dates: 4/26/2016 - 5/3/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.04E-03	0.00E+00	7.04E-03
Cs-134	<7.20E-03	0.00E+00	7.20E-03
Cs-137	<1.14E-02	0.00E+00	1.14E-02
Be-7	<5.71E-02	0.00E+00	5.71E-02
K-40	3.11E-01	1.22E-01	3.12E-02

Sample ID: 410924 **Sample Dates: 5/3/2016 - 5/10/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.43E-03	0.00E+00	8.43E-03
Cs-134	<6.43E-03	0.00E+00	6.43E-03
Cs-137	<9.38E-03	0.00E+00	9.38E-03
Be-7	<5.12E-02	0.00E+00	5.12E-02
K-40	5.51E-01	1.72E-01	1.12E-01

Sample ID: 411421 **Sample Dates: 5/10/2016 - 5/17/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.50E-03	0.00E+00	8.50E-03
Cs-134	<8.50E-03	0.00E+00	8.50E-03
Cs-137	<1.00E-02	0.00E+00	1.00E-02
Be-7	<6.78E-02	0.00E+00	6.78E-02
K-40	3.59E-01	1.31E-01	3.04E-02

Sample ID: 411745 **Sample Dates: 5/17/2016 - 5/24/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.19E-03	0.00E+00	7.19E-03
Cs-134	<1.05E-02	0.00E+00	1.05E-02
Cs-137	<9.89E-03	0.00E+00	9.89E-03
Be-7	<4.62E-02	0.00E+00	4.62E-02
K-40	4.07E-01	1.34E-01	2.75E-02

Sample ID: 412208 **Sample Dates: 5/24/2016 - 6/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.29E-03	0.00E+00	8.29E-03
Cs-134	<5.47E-03	0.00E+00	5.47E-03
Cs-137	<6.79E-03	0.00E+00	6.79E-03
Be-7	<3.13E-02	0.00E+00	3.13E-02
K-40	3.09E-01	1.18E-01	1.00E-01

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

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID: 412727 **Sample Dates: 6/1/2016 - 6/7/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.94E-03	0.00E+00	8.94E-03
Cs-134	<6.40E-03	0.00E+00	6.40E-03
Cs-137	<1.05E-02	0.00E+00	1.05E-02
Be-7	<6.56E-02	0.00E+00	6.56E-02
K-40	2.58E-01	1.23E-01	1.04E-01

Sample ID: 413327 **Sample Dates: 6/7/2016 - 6/14/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.80E-03	0.00E+00	7.80E-03
Cs-134	<5.72E-03	0.00E+00	5.72E-03
Cs-137	<9.39E-03	0.00E+00	9.39E-03
Be-7	<4.98E-02	0.00E+00	4.98E-02
K-40	4.49E-01	1.48E-01	1.01E-01

Sample ID: 413874 **Sample Dates: 6/14/2016 - 6/21/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.34E-03	0.00E+00	7.34E-03
Cs-134	<7.23E-03	0.00E+00	7.23E-03
Cs-137	<8.45E-03	0.00E+00	8.45E-03
Be-7	<7.46E-02	0.00E+00	7.46E-02
K-40	3.49E-01	1.60E-01	1.94E-01

Sample ID: 415015 **Sample Dates: 6/21/2016 - 6/28/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.94E-03	0.00E+00	5.94E-03
Cs-134	<7.61E-03	0.00E+00	7.61E-03
Cs-137	<5.54E-03	0.00E+00	5.54E-03
Be-7	<5.04E-02	0.00E+00	5.04E-02
K-40	3.89E-01	1.31E-01	2.77E-02

Sample ID: 415395 **Sample Dates: 6/28/2016 - 7/6/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.17E-03	0.00E+00	5.17E-03
Cs-134	<4.73E-03	0.00E+00	4.73E-03
Cs-137	<5.08E-03	0.00E+00	5.08E-03
Be-7	<5.23E-02	0.00E+00	5.23E-02
K-40	<2.81E-01	0.00E+00	2.81E-01

Sample ID: 416379 **Sample Dates: 7/6/2016 - 7/12/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.39E-03	0.00E+00	8.39E-03
Cs-134	<6.33E-03	0.00E+00	6.33E-03
Cs-137	<1.03E-02	0.00E+00	1.03E-02
Be-7	<7.31E-02	0.00E+00	7.31E-02
K-40	4.26E-01	1.75E-01	1.83E-01

Sample ID: 417003 **Sample Dates: 7/12/2016 - 7/19/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.08E-02	0.00E+00	1.08E-02
Cs-134	<6.99E-03	0.00E+00	6.99E-03
Cs-137	<7.96E-03	0.00E+00	7.96E-03
Be-7	<5.11E-02	0.00E+00	5.11E-02
K-40	5.47E-01	1.72E-01	1.19E-01

Sample ID: 417397 **Sample Dates: 7/19/2016 - 7/26/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.62E-03	0.00E+00	8.62E-03
Cs-134	<6.31E-03	0.00E+00	6.31E-03
Cs-137	<7.19E-03	0.00E+00	7.19E-03
Be-7	<6.07E-02	0.00E+00	6.07E-02
K-40	4.23E-01	1.45E-01	1.04E-01

Sample ID: 417791 **Sample Dates: 7/26/2016 - 8/2/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.41E-03	0.00E+00	9.41E-03
Cs-134	<8.02E-03	0.00E+00	8.02E-03
Cs-137	<7.97E-03	0.00E+00	7.97E-03
Be-7	<5.07E-02	0.00E+00	5.07E-02
K-40	4.47E-01	1.47E-01	3.03E-02

Sample ID: 418252 **Sample Dates: 8/2/2016 - 8/9/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.91E-03	0.00E+00	7.91E-03
Cs-134	<3.92E-03	0.00E+00	3.92E-03
Cs-137	<8.68E-03	0.00E+00	8.68E-03
Be-7	<4.53E-02	0.00E+00	4.53E-02
K-40	3.32E-01	1.39E-01	1.31E-01

Sample ID: 418981 **Sample Dates: 8/9/2016 - 8/16/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.33E-03	0.00E+00	8.33E-03
Cs-134	<7.53E-03	0.00E+00	7.53E-03
Cs-137	<7.49E-03	0.00E+00	7.49E-03
Be-7	<5.22E-02	0.00E+00	5.22E-02
K-40	3.90E-01	1.49E-01	1.41E-01

Sample ID: 419482 **Sample Dates: 8/16/2016 - 8/23/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.67E-03	0.00E+00	5.67E-03
Cs-134	<8.38E-03	0.00E+00	8.38E-03
Cs-137	<8.83E-03	0.00E+00	8.83E-03
Be-7	<4.76E-02	0.00E+00	4.76E-02
K-40	3.15E-01	1.18E-01	2.85E-02

Sample ID: 420012 **Sample Dates: 8/23/2016 - 8/30/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.23E-03	0.00E+00	6.23E-03
Cs-134	<7.17E-03	0.00E+00	7.17E-03
Cs-137	<1.02E-02	0.00E+00	1.02E-02
Be-7	<5.20E-02	0.00E+00	5.20E-02
K-40	4.70E-01	1.52E-01	3.11E-02

Sample ID: 420563 **Sample Dates: 8/30/2016 - 9/7/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.98E-03	0.00E+00	7.98E-03
Cs-134	<6.71E-03	0.00E+00	6.71E-03
Cs-137	<7.09E-03	0.00E+00	7.09E-03
Be-7	<2.82E-02	0.00E+00	2.82E-02
K-40	3.49E-01	1.21E-01	2.70E-02

Sample ID: 421400 **Sample Dates: 9/7/2016 - 9/13/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.96E-03	0.00E+00	8.96E-03
Cs-134	<6.85E-03	0.00E+00	6.85E-03
Cs-137	<7.63E-03	0.00E+00	7.63E-03
Be-7	<4.24E-02	0.00E+00	4.24E-02
K-40	4.75E-01	1.58E-01	3.30E-02

Sample ID: 422558 **Sample Dates: 9/13/2016 - 9/20/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.35E-03	0.00E+00	7.35E-03
Cs-134	<7.23E-03	0.00E+00	7.23E-03
Cs-137	<8.99E-03	0.00E+00	8.99E-03
Be-7	<4.13E-02	0.00E+00	4.13E-02
K-40	4.72E-01	1.54E-01	1.10E-01

Sample ID: 423303 **Sample Dates: 9/20/2016 - 9/27/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.79E-03	0.00E+00	8.79E-03
Cs-134	<9.54E-03	0.00E+00	9.54E-03
Cs-137	<7.98E-03	0.00E+00	7.98E-03
Be-7	<2.87E-02	0.00E+00	2.87E-02
K-40	3.71E-01	1.46E-01	1.40E-01

Sample ID: 424426 **Sample Dates: 9/27/2016 - 10/4/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.63E-03	0.00E+00	9.63E-03
Cs-134	<7.92E-03	0.00E+00	7.92E-03
Cs-137	<4.57E-03	0.00E+00	4.57E-03
Be-7	<6.29E-02	0.00E+00	6.29E-02
K-40	3.52E-01	1.48E-01	1.60E-01

Sample ID: 425412 **Sample Dates: 10/4/2016 - 10/11/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.12E-03	0.00E+00	9.12E-03
Cs-134	<6.94E-03	0.00E+00	6.94E-03
Cs-137	<6.58E-03	0.00E+00	6.58E-03
Be-7	<4.26E-02	0.00E+00	4.26E-02
K-40	3.99E-01	1.34E-01	2.85E-02

Sample ID: 425975 **Sample Dates: 10/11/2016 - 10/18/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.80E-03	0.00E+00	8.80E-03
Cs-134	<4.56E-03	0.00E+00	4.56E-03
Cs-137	<6.57E-03	0.00E+00	6.57E-03
Be-7	<4.69E-02	0.00E+00	4.69E-02
K-40	4.20E-01	1.38E-01	2.84E-02

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

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID: 426350 Sample Dates: 10/18/2016 - 10/25/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.28E-03	0.00E+00	6.28E-03
Cs-134	<6.59E-03	0.00E+00	6.59E-03
Cs-137	<7.52E-03	0.00E+00	7.52E-03
Be-7	<5.19E-02	0.00E+00	5.19E-02
K-40	2.98E-01	1.37E-01	1.51E-01

Sample ID: 427039 Sample Dates: 10/25/2016 - 11/1/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.37E-03	0.00E+00	5.37E-03
Cs-134	<7.67E-03	0.00E+00	7.67E-03
Cs-137	<9.54E-03	0.00E+00	9.54E-03
Be-7	<5.18E-02	0.00E+00	5.18E-02
K-40	4.09E-01	1.53E-01	1.30E-01

Sample ID: 427698 Sample Dates: 11/1/2016 - 11/8/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.11E-02	0.00E+00	1.11E-02
Cs-134	<7.64E-03	0.00E+00	7.64E-03
Cs-137	<4.95E-03	0.00E+00	4.95E-03
Be-7	<5.20E-02	0.00E+00	5.20E-02
K-40	5.39E-01	1.69E-01	1.05E-01

Sample ID: 428193 Sample Dates: 11/8/2016 - 11/15/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.42E-02	0.00E+00	1.42E-02
Cs-134	<1.14E-02	0.00E+00	1.14E-02
Cs-137	<1.34E-02	0.00E+00	1.34E-02
Be-7	<9.57E-02	0.00E+00	9.57E-02
K-40	3.98E-01	1.99E-01	2.38E-01

Sample ID: 428878 Sample Dates: 11/15/2016 - 11/21/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.14E-02	0.00E+00	1.14E-02
Cs-134	<1.15E-02	0.00E+00	1.15E-02
Cs-137	<1.26E-02	0.00E+00	1.26E-02
Be-7	<5.81E-02	0.00E+00	5.81E-02
K-40	4.29E-01	1.70E-01	1.56E-01

Sample ID: 429385 Sample Dates: 11/21/2016 - 11/29/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.06E-02	0.00E+00	1.06E-02
Cs-134	<7.15E-03	0.00E+00	7.15E-03
Cs-137	<9.39E-03	0.00E+00	9.39E-03
Be-7	<4.55E-02	0.00E+00	4.55E-02
K-40	3.69E-01	1.26E-01	2.70E-02

Sample ID: 429936 Sample Dates: 11/29/2016 - 12/6/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.67E-03	0.00E+00	8.67E-03
Cs-134	<7.07E-03	0.00E+00	7.07E-03
Cs-137	<1.81E-03	0.00E+00	1.81E-03
Be-7	<4.01E-02	0.00E+00	4.01E-02
K-40	3.47E-01	1.46E-01	1.44E-01

Sample ID: 430557 Sample Dates: 12/6/2016 - 12/13/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.52E-03	0.00E+00	7.52E-03
Cs-134	<6.50E-03	0.00E+00	6.50E-03
Cs-137	<6.63E-03	0.00E+00	6.63E-03
Be-7	<4.25E-02	0.00E+00	4.25E-02
K-40	4.14E-01	1.38E-01	2.87E-02

Sample ID: 431048 Sample Dates: 12/13/2016 - 12/20/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.66E-03	0.00E+00	6.66E-03
Cs-134	<7.74E-03	0.00E+00	7.74E-03
Cs-137	<9.61E-03	0.00E+00	9.61E-03
Be-7	<6.59E-02	0.00E+00	6.59E-02
K-40	4.48E-01	1.48E-01	3.12E-02

Sample ID: 431452 Sample Dates: 12/20/2016 - 12/28/2016

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.13E-03	0.00E+00	7.13E-03
Cs-134	<5.93E-03	0.00E+00	5.93E-03
Cs-137	<8.29E-03	0.00E+00	8.29E-03
Be-7	<4.04E-02	0.00E+00	4.04E-02
K-40	3.44E-01	1.22E-01	8.85E-02

Media Type: CROPS Concentration (Activity): pCi/kg

Sample Point 260 [INDICATOR - SSE @ 2 miles]

Sample ID:	406160	Sample Dates: 4/5/2016 - 4/5/2016					
				Nuclide	Activity	2 Sigma Error	MDA
				I-131	<4.32E+01	0.00E+00	4.32E+01
				Cs-134	<6.22E+00	0.00E+00	6.22E+00
				Cs-137	<5.97E+00	0.00E+00	5.97E+00
				Be-7	2.05E+02	8.55E+01	1.33E+02
				K-40	4.16E+03	3.80E+02	8.83E+01
Sample ID:	**409607**	**Sample Dates: 5/3/2016 - 5/3/2016**	**MIXEDCROPS**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				I-131	<8.34E+00	0.00E+00	8.34E+00
				Cs-134	<1.46E+01	0.00E+00	1.46E+01
				Cs-137	<1.53E+01	0.00E+00	1.53E+01
				Be-7	6.65E+02	1.36E+02	1.27E+02
				K-40	2.79E+03	3.96E+02	1.53E+02
Sample ID:	**412059**	**Sample Dates: 6/1/2016 - 6/1/2016**	**MIXEDCROPS**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				I-131	<6.65E+00	0.00E+00	6.65E+00
				Cs-134	<7.25E+00	0.00E+00	7.25E+00
				Cs-137	<9.10E+00	0.00E+00	9.10E+00
				Be-7	<1.15E+02	0.00E+00	1.15E+02
				K-40	2.45E+03	3.51E+02	1.56E+02
Sample ID:	**414473**	**Sample Dates: 7/6/2016 - 7/6/2016**	**MIXEDCROPS**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				I-131	<8.99E+00	0.00E+00	8.99E+00
				Cs-134	<8.62E+00	0.00E+00	8.62E+00
				Cs-137	<1.04E+01	0.00E+00	1.04E+01
				Be-7	<6.92E+01	0.00E+00	6.92E+01
				K-40	2.28E+03	3.33E+02	2.03E+02
Sample ID:	**417259**	**Sample Dates: 8/2/2016 - 8/2/2016**	**MIXEDCROPS**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				I-131	<5.94E+00	0.00E+00	5.94E+00
				Cs-134	<9.28E+00	0.00E+00	9.28E+00
				Cs-137	<8.09E+00	0.00E+00	8.09E+00
				Be-7	<6.82E+01	0.00E+00	6.82E+01
				K-40	1.97E+03	2.85E+02	1.62E+02
Sample ID:	**419437**	**Sample Dates: 9/7/2016 - 9/7/2016**	**MIXEDCROPS**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				I-131	<1.65E+01	0.00E+00	1.65E+01
				Cs-134	<1.31E+01	0.00E+00	1.31E+01
				Cs-137	<1.90E+01	0.00E+00	1.90E+01
				Be-7	1.34E+02	9.99E+01	1.53E+02
				K-40	3.58E+03	5.16E+02	2.52E+02
Sample ID:	**422559**	**Sample Dates: 10/4/2016 - 10/4/2016**	**MIXEDCROPS**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				I-131	<8.59E+00	0.00E+00	8.59E+00
				Cs-134	<8.31E+00	0.00E+00	8.31E+00
				Cs-137	<1.03E+01	0.00E+00	1.03E+01
				Be-7	<6.29E+01	0.00E+00	6.29E+01
				K-40	2.40E+03	3.33E+02	2.04E+01
Sample ID:	**426073**	**Sample Dates: 11/1/2016 - 11/1/2016**	**MIXEDCROPS**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				I-131	<8.32E+00	0.00E+00	8.32E+00
				Cs-134	<1.30E+01	0.00E+00	1.30E+01
				Cs-137	<1.04E+01	0.00E+00	1.04E+01
				Be-7	<7.13E+01	0.00E+00	7.13E+01
				K-40	2.50E+03	3.54E+02	1.30E+02
Sample ID:	**428528**	**Sample Dates: 12/6/2016 - 12/6/2016**	**MIXEDCROPS**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				I-131	<7.39E+00	0.00E+00	7.39E+00
				Cs-134	<8.51E+00	0.00E+00	8.51E+00
				Cs-137	<8.53E+00	0.00E+00	8.53E+00
				Be-7	<7.07E+01	0.00E+00	7.07E+01
				K-40	2.21E+03	3.08E+02	1.49E+02

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

Sample Point 214 [INDICATOR - SSE @ 7.3 miles]

Sample ID:	398472	Sample Dates: 12/8/2015 - 1/6/2016				
			Nuclide	Activity	2 Sigma Error	MDA
			Beta	7.10E-01	8.31E-01	1.40E+00
			Mn-54	<3.72E+00	0.00E+00	3.72E+00

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

Sample Point 214 [INDICATOR - SSE @ 7.3 miles]

Sample ID: 398472 **Sample Dates: 12/8/2015 - 1/6/2016**

Nuclide	Activity	2 Sigma Error	MDA
Co-58	<5.16E+00	0.00E+00	5.16E+00
Fe-59	<7.82E+00	0.00E+00	7.82E+00
Co-60	<3.98E+00	0.00E+00	3.98E+00
Zn-65	<6.57E+00	0.00E+00	6.57E+00
Zr-95	<8.81E+00	0.00E+00	8.81E+00
Nb-95	<5.77E+00	0.00E+00	5.77E+00
I-131	<1.16E+01	0.00E+00	1.16E+01
Cs-134	<3.88E+00	0.00E+00	3.88E+00
Cs-137	<4.00E+00	0.00E+00	4.00E+00
BaLa-140	<9.62E+00	0.00E+00	9.62E+00
Be-7	<2.30E+01	0.00E+00	2.30E+01
K-40	<8.37E+01	0.00E+00	8.37E+01

Sample ID: 400154 **Sample Dates: 1/6/2016 - 2/2/2016**

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.64E+00	7.96E-01	1.26E+00
Mn-54	<3.43E+00	0.00E+00	3.43E+00
Co-58	<3.11E+00	0.00E+00	3.11E+00
Fe-59	<6.05E+00	0.00E+00	6.05E+00
Co-60	<3.13E+00	0.00E+00	3.13E+00
Zn-65	<7.52E+00	0.00E+00	7.52E+00
Zr-95	<7.01E+00	0.00E+00	7.01E+00
Nb-95	<3.45E+00	0.00E+00	3.45E+00
I-131	<1.20E+01	0.00E+00	1.20E+01
Cs-134	<3.81E+00	0.00E+00	3.81E+00
Cs-137	<4.22E+00	0.00E+00	4.22E+00
BaLa-140	<9.81E+00	0.00E+00	9.81E+00
Be-7	<2.90E+01	0.00E+00	2.90E+01
K-40	3.83E+01	3.60E+01	5.57E+01

Sample ID: 401959 **Sample Dates: 2/2/2016 - 3/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
Beta	2.07E+00	8.12E-01	1.25E+00
Mn-54	<4.12E+00	0.00E+00	4.12E+00
Co-58	<4.33E+00	0.00E+00	4.33E+00
Fe-59	<8.47E+00	0.00E+00	8.47E+00
Co-60	<4.34E+00	0.00E+00	4.34E+00
Zn-65	<7.32E+00	0.00E+00	7.32E+00
Zr-95	<7.66E+00	0.00E+00	7.66E+00
Nb-95	<4.81E+00	0.00E+00	4.81E+00
I-131	<1.15E+01	0.00E+00	1.15E+01
Cs-134	<4.36E+00	0.00E+00	4.36E+00
Cs-137	<4.00E+00	0.00E+00	4.00E+00
BaLa-140	<6.39E+00	0.00E+00	6.39E+00
Be-7	<3.71E+01	0.00E+00	3.71E+01
K-40	2.34E+01	3.40E+01	5.68E+01

Sample ID: 403599 **Sample Dates: 12/8/2015 - 3/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
H3DW	3.92E+02	1.28E+02	1.99E+02

Sample ID: 405631 **Sample Dates: 3/1/2016 - 3/29/2016**

Nuclide	Activity	2 Sigma Error	MDA
Beta	8.99E-01	8.11E-01	1.35E+00
Mn-54	<1.45E+00	0.00E+00	1.45E+00
Co-58	<1.80E+00	0.00E+00	1.80E+00
Fe-59	<4.25E+00	0.00E+00	4.25E+00
Co-60	<1.78E+00	0.00E+00	1.78E+00
Zn-65	<4.12E+00	0.00E+00	4.12E+00
Zr-95	<4.15E+00	0.00E+00	4.15E+00
Nb-95	<2.87E+00	0.00E+00	2.87E+00
I-131	<1.03E+01	0.00E+00	1.03E+01
Cs-134	<1.73E+00	0.00E+00	1.73E+00
Cs-137	<2.06E+00	0.00E+00	2.06E+00
BaLa-140	<7.05E+00	0.00E+00	7.05E+00
Be-7	<1.70E+01	0.00E+00	1.70E+01
K-40	4.70E+01	2.96E+01	4.60E+01

Sample ID: 408515 **Sample Dates: 3/29/2016 - 4/26/2016**

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.30E+00	8.49E-01	1.38E+00
Mn-54	<3.00E+00	0.00E+00	3.00E+00

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

Sample Point 214 [INDICATOR - SSE @ 7.3 miles]

Sample ID: 408515 Sample Dates: 3/29/2016 - 4/26/2016

Nuclide	Activity	2 Sigma Error	MDA
Co-58	<3.57E+00	0.00E+00	3.57E+00
Fe-59	<6.57E+00	0.00E+00	6.57E+00
Co-60	<3.33E+00	0.00E+00	3.33E+00
Zn-65	<6.12E+00	0.00E+00	6.12E+00
Zr-95	<5.90E+00	0.00E+00	5.90E+00
Nb-95	<4.01E+00	0.00E+00	4.01E+00
I-131	<1.19E+01	0.00E+00	1.19E+01
Cs-134	<2.75E+00	0.00E+00	2.75E+00
Cs-137	<3.21E+00	0.00E+00	3.21E+00
BaLa-140	<9.28E+00	0.00E+00	9.28E+00
Be-7	<3.34E+01	0.00E+00	3.34E+01
K-40	3.70E+01	3.00E+01	4.51E+01

Sample ID: 411588 Sample Dates: 4/26/2016 - 5/24/2016

Nuclide	Activity	2 Sigma Error	MDA
Beta	2.70E+00	8.71E-01	1.31E+00
Mn-54	<3.36E+00	0.00E+00	3.36E+00
Co-58	<2.39E+00	0.00E+00	2.39E+00
Fe-59	<8.78E+00	0.00E+00	8.78E+00
Co-60	<3.81E+00	0.00E+00	3.81E+00
Zn-65	<7.00E+00	0.00E+00	7.00E+00
Zr-95	<7.67E+00	0.00E+00	7.67E+00
Nb-95	<4.31E+00	0.00E+00	4.31E+00
I-131	<1.18E+01	0.00E+00	1.18E+01
Cs-134	<3.55E+00	0.00E+00	3.55E+00
Cs-137	<4.17E+00	0.00E+00	4.17E+00
BaLa-140	<9.36E+00	0.00E+00	9.36E+00
Be-7	<2.83E+01	0.00E+00	2.83E+01
K-40	<5.56E+01	0.00E+00	5.56E+01

Sample ID: 413173 Sample Dates: 3/1/2016 - 5/24/2016

Nuclide	Activity	2 Sigma Error	MDA
H3DW	5.22E+02	1.28E+02	1.96E+02

Sample ID: 413511 Sample Dates: 5/24/2016 - 6/21/2016

Nuclide	Activity	2 Sigma Error	MDA
Beta	9.97E-01	7.96E-01	1.31E+00
Mn-54	<2.73E+00	0.00E+00	2.73E+00
Co-58	<3.22E+00	0.00E+00	3.22E+00
Fe-59	<5.69E+00	0.00E+00	5.69E+00
Co-60	<1.81E+00	0.00E+00	1.81E+00
Zn-65	<6.73E+00	0.00E+00	6.73E+00
Zr-95	<6.35E+00	0.00E+00	6.35E+00
Nb-95	<1.67E+00	0.00E+00	1.67E+00
I-131	<1.08E+01	0.00E+00	1.08E+01
Cs-134	<3.52E+00	0.00E+00	3.52E+00
Cs-137	<3.38E+00	0.00E+00	3.38E+00
BaLa-140	<7.25E+00	0.00E+00	7.25E+00
Be-7	<2.79E+01	0.00E+00	2.79E+01
K-40	5.01E+01	3.17E+01	4.56E+01

Sample ID: 416850 Sample Dates: 6/21/2016 - 7/19/2016

Nuclide	Activity	2 Sigma Error	MDA
Beta	2.44E+00	8.95E-01	1.37E+00
Mn-54	<3.19E+00	0.00E+00	3.19E+00
Co-58	<6.01E-01	0.00E+00	6.01E-01
Fe-59	<8.78E+00	0.00E+00	8.78E+00
Co-60	<7.33E-01	0.00E+00	7.33E-01
Zn-65	<7.01E+00	0.00E+00	7.01E+00
Zr-95	<5.90E+00	0.00E+00	5.90E+00
Nb-95	<3.71E+00	0.00E+00	3.71E+00
I-131	<1.02E+01	0.00E+00	1.02E+01
Cs-134	<3.05E+00	0.00E+00	3.05E+00
Cs-137	<3.40E+00	0.00E+00	3.40E+00
BaLa-140	<8.57E+00	0.00E+00	8.57E+00
Be-7	<3.23E+01	0.00E+00	3.23E+01
K-40	<5.40E+01	0.00E+00	5.40E+01

Sample ID: 418772 Sample Dates: 7/19/2016 - 8/16/2016

Nuclide	Activity	2 Sigma Error	MDA
Beta	2.52E+00	7.99E-01	1.18E+00
Mn-54	<3.37E+00	0.00E+00	3.37E+00

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

Sample Point 214 [INDICATOR - SSE @ 7.3 miles]

Sample ID: 418772 Sample Dates: 7/19/2016 - 8/16/2016

Nuclide	Activity	2 Sigma Error	MDA
Co-58	<3.72E+00	0.00E+00	3.72E+00
Fe-59	<9.41E+00	0.00E+00	9.41E+00
Co-60	<3.86E+00	0.00E+00	3.86E+00
Zn-65	<7.74E+00	0.00E+00	7.74E+00
Zr-95	<7.79E+00	0.00E+00	7.79E+00
Nb-95	<5.73E+00	0.00E+00	5.73E+00
I-131	<1.13E+01	0.00E+00	1.13E+01
Cs-134	<4.21E+00	0.00E+00	4.21E+00
Cs-137	<4.52E+00	0.00E+00	4.52E+00
BaLa-140	<1.12E+01	0.00E+00	1.12E+01
Be-7	<3.48E+01	0.00E+00	3.48E+01
K-40	<6.99E+01	0.00E+00	6.99E+01

Sample ID: 420854 Sample Dates: 5/24/2016 - 8/16/2016

Nuclide	Activity	2 Sigma Error	MDA
H3DW	6.89E+02	1.33E+02	1.92E+02

Sample ID: 420771 Sample Dates: 8/16/2016 - 9/13/2016

Nuclide	Activity	2 Sigma Error	MDA
Beta	2.11E+00	8.70E-01	1.36E+00
Mn-54	<2.07E+00	0.00E+00	2.07E+00
Co-58	<2.94E+00	0.00E+00	2.94E+00
Fe-59	<6.15E+00	0.00E+00	6.15E+00
Co-60	<3.31E+00	0.00E+00	3.31E+00
Zn-65	<4.56E+00	0.00E+00	4.56E+00
Zr-95	<5.22E+00	0.00E+00	5.22E+00
Nb-95	<2.92E+00	0.00E+00	2.92E+00
I-131	<9.76E+00	0.00E+00	9.76E+00
Cs-134	<3.30E+00	0.00E+00	3.30E+00
Cs-137	<2.70E+00	0.00E+00	2.70E+00
BaLa-140	<4.28E+00	0.00E+00	4.28E+00
Be-7	<2.49E+01	0.00E+00	2.49E+01
K-40	<3.92E+01	0.00E+00	3.92E+01

Sample ID: 424737 Sample Dates: 9/13/2016 - 10/11/2016

Nuclide	Activity	2 Sigma Error	MDA
Beta	2.22E+00	8.36E-01	1.29E+00
Mn-54	<2.16E+00	0.00E+00	2.16E+00
Co-58	<3.33E+00	0.00E+00	3.33E+00
Fe-59	<8.34E+00	0.00E+00	8.34E+00
Co-60	<2.91E+00	0.00E+00	2.91E+00
Zn-65	<8.63E+00	0.00E+00	8.63E+00
Zr-95	<6.54E+00	0.00E+00	6.54E+00
Nb-95	<4.81E+00	0.00E+00	4.81E+00
I-131	<1.18E+01	0.00E+00	1.18E+01
Cs-134	<3.53E+00	0.00E+00	3.53E+00
Cs-137	<4.15E+00	0.00E+00	4.15E+00
BaLa-140	<7.73E+00	0.00E+00	7.73E+00
Be-7	<3.72E+01	0.00E+00	3.72E+01
K-40	6.74E+01	3.85E+01	5.17E+01

Sample ID: 427411 Sample Dates: 10/11/2016 - 11/8/2016

Nuclide	Activity	2 Sigma Error	MDA
Beta	2.19E+00	8.27E-01	1.27E+00
Mn-54	<2.87E+00	0.00E+00	2.87E+00
Co-58	<2.84E+00	0.00E+00	2.84E+00
Fe-59	<8.84E+00	0.00E+00	8.84E+00
Co-60	<3.53E+00	0.00E+00	3.53E+00
Zn-65	<8.33E+00	0.00E+00	8.33E+00
Zr-95	<6.13E+00	0.00E+00	6.13E+00
Nb-95	<4.66E+00	0.00E+00	4.66E+00
I-131	<1.05E+01	0.00E+00	1.05E+01
Cs-134	<3.75E+00	0.00E+00	3.75E+00
Cs-137	<3.68E+00	0.00E+00	3.68E+00
BaLa-140	<1.03E+01	0.00E+00	1.03E+01
Be-7	<3.84E+01	0.00E+00	3.84E+01
K-40	<6.22E+01	0.00E+00	6.22E+01

Sample ID: 427833 Sample Dates: 8/16/2016 - 12/6/2016

Nuclide	Activity	2 Sigma Error	MDA
H3DW	1.15E+03	1.39E+02	1.89E+02

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

Sample Point 214 [INDICATOR - SSE @ 7.3 miles]

Sample ID: 429624 **Sample Dates: 11/8/2016 - 12/6/2016**

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.54E+00	7.59E-01	1.20E+00
Mn-54	<3.14E+00	0.00E+00	3.14E+00
Co-58	<4.22E+00	0.00E+00	4.22E+00
Fe-59	<9.53E+00	0.00E+00	9.53E+00
Co-60	<4.54E+00	0.00E+00	4.54E+00
Zn-65	<9.39E+00	0.00E+00	9.39E+00
Zr-95	<7.09E+00	0.00E+00	7.09E+00
Nb-95	<3.59E+00	0.00E+00	3.59E+00
I-131	<9.09E+00	0.00E+00	9.09E+00
Cs-134	<3.99E+00	0.00E+00	3.99E+00
Cs-137	<2.79E+00	0.00E+00	2.79E+00
BaLa-140	<9.60E+00	0.00E+00	9.60E+00
Be-7	<3.52E+01	0.00E+00	3.52E+01
K-40	<6.42E+01	0.00E+00	6.42E+01

Sample Point 218 [CONTROL - NNE @ 13.5 miles]

Sample ID: 398473 **Sample Dates: 12/8/2015 - 1/6/2016**

Nuclide	Activity	2 Sigma Error	MDA
Beta	<4.49E-01	0.00E+00	1.41E+00
Mn-54	<4.13E+00	0.00E+00	4.13E+00
Co-58	<3.61E+00	0.00E+00	3.61E+00
Fe-59	<7.05E+00	0.00E+00	7.05E+00
Co-60	<4.37E+00	0.00E+00	4.37E+00
Zn-65	<7.35E+00	0.00E+00	7.35E+00
Zr-95	<6.39E+00	0.00E+00	6.39E+00
Nb-95	<6.92E+00	0.00E+00	6.92E+00
I-131	<1.19E+01	0.00E+00	1.19E+01
Cs-134	<4.36E+00	0.00E+00	4.36E+00
Cs-137	<4.00E+00	0.00E+00	4.00E+00
BaLa-140	<2.48E+00	0.00E+00	2.48E+00
Be-7	<3.87E+01	0.00E+00	3.87E+01
K-40	<6.44E+01	0.00E+00	6.44E+01

Sample ID: 400155 **Sample Dates: 1/6/2016 - 2/2/2016**

Nuclide	Activity	2 Sigma Error	MDA
Beta	9.63E-01	7.64E-01	1.25E+00
Mn-54	<2.30E+00	0.00E+00	2.30E+00
Co-58	<4.32E+00	0.00E+00	4.32E+00
Fe-59	<4.74E+00	0.00E+00	4.74E+00
Co-60	<3.57E+00	0.00E+00	3.57E+00
Zn-65	<8.59E+00	0.00E+00	8.59E+00
Zr-95	<5.80E+00	0.00E+00	5.80E+00
Nb-95	<4.80E+00	0.00E+00	4.80E+00
I-131	<1.14E+01	0.00E+00	1.14E+01
Cs-134	<3.87E+00	0.00E+00	3.87E+00
Cs-137	<3.15E+00	0.00E+00	3.15E+00
BaLa-140	<2.34E+00	0.00E+00	2.34E+00
Be-7	<3.71E+01	0.00E+00	3.71E+01
K-40	<7.19E+01	0.00E+00	7.19E+01

Sample ID: 401960 **Sample Dates: 2/2/2016 - 3/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.24E+00	7.75E-01	1.25E+00
Mn-54	<3.88E+00	0.00E+00	3.88E+00
Co-58	<2.95E+00	0.00E+00	2.95E+00
Fe-59	<5.42E+00	0.00E+00	5.42E+00
Co-60	<2.20E+00	0.00E+00	2.20E+00
Zn-65	<8.24E+00	0.00E+00	8.24E+00
Zr-95	<7.25E+00	0.00E+00	7.25E+00
Nb-95	<4.56E+00	0.00E+00	4.56E+00
I-131	<1.13E+01	0.00E+00	1.13E+01
Cs-134	<2.97E+00	0.00E+00	2.97E+00
Cs-137	<4.06E+00	0.00E+00	4.06E+00
BaLa-140	<9.60E+00	0.00E+00	9.60E+00
Be-7	<3.66E+01	0.00E+00	3.66E+01
K-40	<7.98E+01	0.00E+00	7.98E+01

Sample ID: 403600 **Sample Dates: 12/8/2015 - 3/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
H3DW	2.58E+02	1.24E+02	1.99E+02

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

Sample Point 218 [CONTROL - NNE @ 13.5 miles]

Sample ID: 405632 **Sample Dates: 3/1/2016 - 3/29/2016**

Nuclide	Activity	2 Sigma Error	MDA
Beta	<4.21E-01	0.00E+00	1.34E+00
Mn-54	<1.80E+00	0.00E+00	1.80E+00
Co-58	<2.43E+00	0.00E+00	2.43E+00
Fe-59	<4.64E+00	0.00E+00	4.64E+00
Co-60	<1.85E+00	0.00E+00	1.85E+00
Zn-65	<3.99E+00	0.00E+00	3.99E+00
Zr-95	<4.08E+00	0.00E+00	4.08E+00
Nb-95	<2.82E+00	0.00E+00	2.82E+00
I-131	<9.83E+00	0.00E+00	9.83E+00
Cs-134	<1.90E+00	0.00E+00	1.90E+00
Cs-137	<1.96E+00	0.00E+00	1.96E+00
BaLa-140	<6.18E+00	0.00E+00	6.18E+00
Be-7	<1.64E+01	0.00E+00	1.64E+01
K-40	3.32E+01	1.79E+01	2.52E+01

Sample ID: 408516 **Sample Dates: 3/29/2016 - 4/26/2016**

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.39E+00	8.48E-01	1.37E+00
Mn-54	<3.40E+00	0.00E+00	3.40E+00
Co-58	<3.68E+00	0.00E+00	3.68E+00
Fe-59	<6.82E+00	0.00E+00	6.82E+00
Co-60	<2.48E+00	0.00E+00	2.48E+00
Zn-65	<5.72E+00	0.00E+00	5.72E+00
Zr-95	<4.61E+00	0.00E+00	4.61E+00
Nb-95	<3.53E+00	0.00E+00	3.53E+00
I-131	<1.20E+01	0.00E+00	1.20E+01
Cs-134	<3.00E+00	0.00E+00	3.00E+00
Cs-137	<2.94E+00	0.00E+00	2.94E+00
BaLa-140	<8.65E+00	0.00E+00	8.65E+00
Be-7	<2.87E+01	0.00E+00	2.87E+01
K-40	3.12E+01	2.45E+01	3.59E+01

Sample ID: 411589 **Sample Dates: 4/26/2016 - 5/24/2016**

Nuclide	Activity	2 Sigma Error	MDA
Beta	2.46E+00	8.55E-01	1.30E+00
Mn-54	<3.25E+00	0.00E+00	3.25E+00
Co-58	<4.10E+00	0.00E+00	4.10E+00
Fe-59	<6.01E+00	0.00E+00	6.01E+00
Co-60	<4.67E+00	0.00E+00	4.67E+00
Zn-65	<9.68E+00	0.00E+00	9.68E+00
Zr-95	<7.27E+00	0.00E+00	7.27E+00
Nb-95	<3.66E+00	0.00E+00	3.66E+00
I-131	<1.04E+01	0.00E+00	1.04E+01
Cs-134	<4.36E+00	0.00E+00	4.36E+00
Cs-137	<3.60E+00	0.00E+00	3.60E+00
BaLa-140	<1.05E+01	0.00E+00	1.05E+01
Be-7	<3.18E+01	0.00E+00	3.18E+01
K-40	4.27E+01	3.12E+01	4.20E+01

Sample ID: 413174 **Sample Dates: 3/1/2016 - 5/24/2016**

Nuclide	Activity	2 Sigma Error	MDA
H3DW	4.44E+02	1.25E+02	1.94E+02

Sample ID: 413512 **Sample Dates: 5/24/2016 - 6/21/2016**

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.21E+00	7.99E-01	1.30E+00
Mn-54	<4.13E+00	0.00E+00	4.13E+00
Co-58	<4.76E+00	0.00E+00	4.76E+00
Fe-59	<1.08E+01	0.00E+00	1.08E+01
Co-60	<3.57E+00	0.00E+00	3.57E+00
Zn-65	<9.68E+00	0.00E+00	9.68E+00
Zr-95	<5.21E+00	0.00E+00	5.21E+00
Nb-95	<5.93E+00	0.00E+00	5.93E+00
I-131	<1.17E+01	0.00E+00	1.17E+01
Cs-134	<4.98E+00	0.00E+00	4.98E+00
Cs-137	<3.15E+00	0.00E+00	3.15E+00
BaLa-140	<6.46E+00	0.00E+00	6.46E+00
Be-7	<3.03E+01	0.00E+00	3.03E+01
K-40	<6.60E+01	0.00E+00	6.60E+01

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

Sample Point 218 [CONTROL - NNE @ 13.5 miles]

Sample ID: 416851 **Sample Dates: 6/21/2016 - 7/19/2016**

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.13E+00	8.26E-01	1.35E+00
Mn-54	<2.31E+00	0.00E+00	2.31E+00
Co-58	<3.96E+00	0.00E+00	3.96E+00
Fe-59	<5.63E+00	0.00E+00	5.63E+00
Co-60	<2.04E+00	0.00E+00	2.04E+00
Zn-65	<6.06E+00	0.00E+00	6.06E+00
Zr-95	<6.84E+00	0.00E+00	6.84E+00
Nb-95	<4.06E+00	0.00E+00	4.06E+00
I-131	<1.14E+01	0.00E+00	1.14E+01
Cs-134	<3.17E+00	0.00E+00	3.17E+00
Cs-137	<3.29E+00	0.00E+00	3.29E+00
BaLa-140	<4.31E+00	0.00E+00	4.31E+00
Be-7	1.56E+01	2.19E+01	3.64E+01
K-40	<4.76E+01	0.00E+00	4.76E+01

Sample ID: 418773 **Sample Dates: 7/19/2016 - 8/16/2016**

Nuclide	Activity	2 Sigma Error	MDA
Beta	2.02E+00	7.69E-01	1.17E+00
Mn-54	<2.21E+00	0.00E+00	2.21E+00
Co-58	<3.25E+00	0.00E+00	3.25E+00
Fe-59	<8.29E+00	0.00E+00	8.29E+00
Co-60	<1.65E+00	0.00E+00	1.65E+00
Zn-65	<7.21E+00	0.00E+00	7.21E+00
Zr-95	<5.52E+00	0.00E+00	5.52E+00
Nb-95	<3.31E+00	0.00E+00	3.31E+00
I-131	<1.14E+01	0.00E+00	1.14E+01
Cs-134	<3.40E+00	0.00E+00	3.40E+00
Cs-137	<2.98E+00	0.00E+00	2.98E+00
BaLa-140	<7.23E+00	0.00E+00	7.23E+00
Be-7	<3.16E+01	0.00E+00	3.16E+01
K-40	4.45E+01	2.97E+01	4.19E+01

Sample ID: 420855 **Sample Dates: 5/24/2016 - 8/16/2016**

Nuclide	Activity	2 Sigma Error	MDA
H3DW	4.63E+02	1.27E+02	1.94E+02

Sample ID: 420772 **Sample Dates: 8/16/2016 - 9/13/2016**

Nuclide	Activity	2 Sigma Error	MDA
Beta	2.06E+00	8.56E-01	1.34E+00
Mn-54	<2.13E+00	0.00E+00	2.13E+00
Co-58	<2.73E+00	0.00E+00	2.73E+00
Fe-59	<4.40E+00	0.00E+00	4.40E+00
Co-60	<2.30E+00	0.00E+00	2.30E+00
Zn-65	<4.43E+00	0.00E+00	4.43E+00
Zr-95	<3.47E+00	0.00E+00	3.47E+00
Nb-95	<2.82E+00	0.00E+00	2.82E+00
I-131	<1.19E+01	0.00E+00	1.19E+01
Cs-134	<2.35E+00	0.00E+00	2.35E+00
Cs-137	<2.17E+00	0.00E+00	2.17E+00
BaLa-140	<7.01E+00	0.00E+00	7.01E+00
Be-7	<1.92E+01	0.00E+00	1.92E+01
K-40	<3.34E+01	0.00E+00	3.34E+01

Sample ID: 424738 **Sample Dates: 9/13/2016 - 10/11/2016**

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.84E+00	8.07E-01	1.27E+00
Mn-54	<4.09E+00	0.00E+00	4.09E+00
Co-58	<4.73E+00	0.00E+00	4.73E+00
Fe-59	<9.63E+00	0.00E+00	9.63E+00
Co-60	<2.41E+00	0.00E+00	2.41E+00
Zn-65	<6.48E+00	0.00E+00	6.48E+00
Zr-95	<7.24E+00	0.00E+00	7.24E+00
Nb-95	<4.81E+00	0.00E+00	4.81E+00
I-131	<1.15E+01	0.00E+00	1.15E+01
Cs-134	<4.95E+00	0.00E+00	4.95E+00
Cs-137	<3.37E+00	0.00E+00	3.37E+00
BaLa-140	<1.15E+01	0.00E+00	1.15E+01
Be-7	<3.61E+01	0.00E+00	3.61E+01
K-40	<7.10E+01	0.00E+00	7.10E+01

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

Sample Point 218 [CONTROL - NNE @ 13.5 miles]

Sample ID: 427412 Sample Dates: 10/11/2016 - 11/8/2016

Nuclide	Activity	2 Sigma Error	MDA
Beta	2.95E+00	8.57E-01	1.27E+00
Mn-54	<3.32E+00	0.00E+00	3.32E+00
Co-58	<3.14E+00	0.00E+00	3.14E+00
Fe-59	<5.86E+00	0.00E+00	5.86E+00
Co-60	<3.44E+00	0.00E+00	3.44E+00
Zn-65	<7.33E+00	0.00E+00	7.33E+00
Zr-95	<6.71E+00	0.00E+00	6.71E+00
Nb-95	<3.81E+00	0.00E+00	3.81E+00
I-131	<1.19E+01	0.00E+00	1.19E+01
Cs-134	<3.43E+00	0.00E+00	3.43E+00
Cs-137	<3.43E+00	0.00E+00	3.43E+00
BaLa-140	<6.60E+00	0.00E+00	6.60E+00
Be-7	<3.29E+01	0.00E+00	3.29E+01
K-40	4.28E+01	3.53E+01	5.41E+01

Sample ID: 427834 Sample Dates: 8/16/2016 - 12/6/2016

Nuclide	Activity	2 Sigma Error	MDA
H3DW	4.59E+02	1.23E+02	1.91E+02

Sample ID: 429625 Sample Dates: 11/8/2016 - 12/6/2016

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.95E+00	7.75E-01	1.19E+00
Mn-54	<2.66E+00	0.00E+00	2.66E+00
Co-58	<2.52E+00	0.00E+00	2.52E+00
Fe-59	<6.45E+00	0.00E+00	6.45E+00
Co-60	<2.79E+00	0.00E+00	2.79E+00
Zn-65	<4.04E+00	0.00E+00	4.04E+00
Zr-95	<5.11E+00	0.00E+00	5.11E+00
Nb-95	<3.42E+00	0.00E+00	3.42E+00
I-131	<1.05E+01	0.00E+00	1.05E+01
Cs-134	<2.51E+00	0.00E+00	2.51E+00
Cs-137	<2.36E+00	0.00E+00	2.36E+00
BaLa-140	<5.04E+00	0.00E+00	5.04E+00
Be-7	<1.97E+01	0.00E+00	1.97E+01
K-40	2.88E+01	2.39E+01	3.65E+01

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID: 407486 Sample Dates: 4/11/2016 - 4/11/2016 PREDATOR

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.78E+01	0.00E+00	1.78E+01
Co-58	<1.76E+01	0.00E+00	1.76E+01
Fe-59	<4.37E+01	0.00E+00	4.37E+01
Co-60	<2.01E+01	0.00E+00	2.01E+01
Zn-65	<3.49E+01	0.00E+00	3.49E+01
Nb-95	<1.04E+01	0.00E+00	1.04E+01
I-131	<1.82E+01	0.00E+00	1.82E+01
Cs-134	<2.19E+01	0.00E+00	2.19E+01
Cs-137	<1.34E+01	0.00E+00	1.34E+01
Be-7	<1.39E+02	0.00E+00	1.39E+02
K-40	3.91E+03	6.75E+02	2.89E+02
Ag-110M	<1.92E+01	0.00E+00	1.92E+01
Sb-122	<2.95E+01	0.00E+00	2.95E+01
Sb-125	<3.89E+01	0.00E+00	3.89E+01

Sample ID: 407487 Sample Dates: 4/11/2016 - 4/11/2016 FORAGER

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.80E+01	0.00E+00	3.80E+01
Co-58	<2.88E+01	0.00E+00	2.88E+01
Fe-59	<8.54E+01	0.00E+00	8.54E+01
Co-60	<4.56E+01	0.00E+00	4.56E+01
Zn-65	<6.44E+01	0.00E+00	6.44E+01
Nb-95	<3.92E+01	0.00E+00	3.92E+01
I-131	<1.69E+02	0.00E+00	1.69E+02
Cs-134	<2.74E+01	0.00E+00	2.74E+01
Cs-137	<3.01E+01	0.00E+00	3.01E+01
Be-7	<3.11E+02	0.00E+00	3.11E+02
K-40	4.12E+03	9.13E+02	5.88E+02
Ag-110M	<3.08E+01	0.00E+00	3.08E+01
Sb-122	<7.26E+03	0.00E+00	7.26E+03

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	407487	Sample Dates: 4/11/2016 - 4/11/2016	FORAGER	Nuclide	Activity	2 Sigma Error	MDA
				Sb-125	<1.01E+02	0.00E+00	1.01E+02
Sample ID:	**407488**	**Sample Dates: 4/11/2016 - 4/11/2016**	**BOTMFEEDER**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.45E+01	0.00E+00	2.45E+01
				Co-58	<2.65E+01	0.00E+00	2.65E+01
				Fe-59	<4.26E+01	0.00E+00	4.26E+01
				Co-60	<3.58E+01	0.00E+00	3.58E+01
				Zn-65	<3.81E+01	0.00E+00	3.81E+01
				Nb-95	<2.55E+01	0.00E+00	2.55E+01
				I-131	<2.72E+01	0.00E+00	2.72E+01
				Cs-134	<3.45E+01	0.00E+00	3.45E+01
				Cs-137	<2.61E+01	0.00E+00	2.61E+01
				Be-7	<1.92E+02	0.00E+00	1.92E+02
				K-40	4.38E+03	8.23E+02	3.64E+02
				Ag-110M	<1.64E+01	0.00E+00	1.64E+01
				Sb-122	<2.92E+01	0.00E+00	2.92E+01
				Sb-125	<5.79E+01	0.00E+00	5.79E+01
Sample ID:	**425351**	**Sample Dates: 10/3/2016 - 10/3/2016**	**PREDATOR**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.45E+01	0.00E+00	2.45E+01
				Co-58	<2.60E+01	0.00E+00	2.60E+01
				Fe-59	<4.52E+01	0.00E+00	4.52E+01
				Co-60	<2.94E+01	0.00E+00	2.94E+01
				Zn-65	<5.10E+01	0.00E+00	5.10E+01
				Nb-95	<1.91E+01	0.00E+00	1.91E+01
				I-131	<2.44E+01	0.00E+00	2.44E+01
				Cs-134	<2.26E+01	0.00E+00	2.26E+01
				Cs-137	<2.55E+01	0.00E+00	2.55E+01
				Be-7	<1.73E+02	0.00E+00	1.73E+02
				K-40	2.55E+03	5.72E+02	7.43E+01
				Ag-110M	<2.55E+01	0.00E+00	2.55E+01
				Sb-122	<3.45E+01	0.00E+00	3.45E+01
				Sb-125	<4.86E+01	0.00E+00	4.86E+01
Sample ID:	**425352**	**Sample Dates: 10/3/2016 - 10/3/2016**	**FORAGER**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<3.90E+01	0.00E+00	3.90E+01
				Co-58	<3.86E+01	0.00E+00	3.86E+01
				Fe-59	<8.74E+01	0.00E+00	8.74E+01
				Co-60	<4.38E+01	0.00E+00	4.38E+01
				Zn-65	<8.84E+01	0.00E+00	8.84E+01
				Nb-95	<2.86E+01	0.00E+00	2.86E+01
				I-131	<4.27E+01	0.00E+00	4.27E+01
				Cs-134	<4.38E+01	0.00E+00	4.38E+01
				Cs-137	<3.39E+01	0.00E+00	3.39E+01
				Be-7	<2.42E+02	0.00E+00	2.42E+02
				K-40	3.40E+03	8.48E+02	1.28E+02
				Ag-110M	<3.01E+01	0.00E+00	3.01E+01
				Sb-122	<3.14E+01	0.00E+00	3.14E+01
				Sb-125	<9.12E+01	0.00E+00	9.12E+01
Sample ID:	**425353**	**Sample Dates: 10/3/2016 - 10/3/2016**	**BOTMFEEDER**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.44E+01	0.00E+00	2.44E+01
				Co-58	<1.35E+01	0.00E+00	1.35E+01
				Fe-59	<5.05E+01	0.00E+00	5.05E+01
				Co-60	<3.29E+01	0.00E+00	3.29E+01
				Zn-65	<3.50E+01	0.00E+00	3.50E+01
				Nb-95	<2.65E+01	0.00E+00	2.65E+01
				I-131	<1.72E+01	0.00E+00	1.72E+01
				Cs-134	<2.51E+01	0.00E+00	2.51E+01
				Cs-137	<2.54E+01	0.00E+00	2.54E+01
				Be-7	<1.74E+02	0.00E+00	1.74E+02
				K-40	2.84E+03	6.35E+02	3.73E+02
				Ag-110M	<1.72E+01	0.00E+00	1.72E+01
				Sb-122	<2.95E+01	0.00E+00	2.95E+01
				Sb-125	<5.25E+01	0.00E+00	5.25E+01

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

Sample Point 216 [CONTROL - NNE @ 4.19 miles]

Sample ID: 407489 Sample Dates: 4/11/2016 - 4/11/2016 PREDATOR

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.81E+01	0.00E+00	1.81E+01
Co-58	<1.51E+01	0.00E+00	1.51E+01
Fe-59	<2.80E+01	0.00E+00	2.80E+01
Co-60	<2.07E+01	0.00E+00	2.07E+01
Zn-65	<4.54E+01	0.00E+00	4.54E+01
Nb-95	<1.29E+01	0.00E+00	1.29E+01
I-131	<1.44E+01	0.00E+00	1.44E+01
Cs-134	<1.96E+01	0.00E+00	1.96E+01
Cs-137	<1.71E+01	0.00E+00	1.71E+01
Be-7	<8.00E+01	0.00E+00	8.00E+01
K-40	4.34E+03	6.08E+02	3.74E+01
Ag-110M	<1.40E+01	0.00E+00	1.40E+01
Sb-122	<2.15E+01	0.00E+00	2.15E+01
Sb-125	<3.12E+01	0.00E+00	3.12E+01

Sample ID: 407490 Sample Dates: 4/11/2016 - 4/11/2016 FORAGER

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.18E+01	0.00E+00	1.18E+01
Co-58	<1.23E+01	0.00E+00	1.23E+01
Fe-59	<2.61E+01	0.00E+00	2.61E+01
Co-60	<1.49E+01	0.00E+00	1.49E+01
Zn-65	<2.00E+01	0.00E+00	2.00E+01
Nb-95	<1.13E+01	0.00E+00	1.13E+01
I-131	<1.05E+01	0.00E+00	1.05E+01
Cs-134	<1.33E+01	0.00E+00	1.33E+01
Cs-137	<5.37E+00	0.00E+00	5.37E+00
Be-7	<6.68E+01	0.00E+00	6.68E+01
K-40	3.29E+03	4.61E+02	1.37E+02
Ag-110M	<6.02E+00	0.00E+00	6.02E+00
Sb-122	<1.51E+01	0.00E+00	1.51E+01
Sb-125	<2.15E+01	0.00E+00	2.15E+01

Sample ID: 407491 Sample Dates: 4/11/2016 - 4/11/2016 BOTMFEEDER

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.55E+01	0.00E+00	1.55E+01
Co-58	<1.26E+01	0.00E+00	1.26E+01
Fe-59	<2.84E+01	0.00E+00	2.84E+01
Co-60	<1.58E+01	0.00E+00	1.58E+01
Zn-65	<3.57E+01	0.00E+00	3.57E+01
Nb-95	<1.59E+01	0.00E+00	1.59E+01
I-131	<1.68E+01	0.00E+00	1.68E+01
Cs-134	<2.00E+01	0.00E+00	2.00E+01
Cs-137	<2.02E+01	0.00E+00	2.02E+01
Be-7	<9.88E+01	0.00E+00	9.88E+01
K-40	3.89E+03	6.03E+02	4.61E+01
Ag-110M	<1.55E+01	0.00E+00	1.55E+01
Sb-122	<2.26E+01	0.00E+00	2.26E+01
Sb-125	<3.86E+01	0.00E+00	3.86E+01

Sample ID: 425354 Sample Dates: 10/3/2016 - 10/3/2016 PREDATOR

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.10E+01	0.00E+00	2.10E+01
Co-58	<1.76E+01	0.00E+00	1.76E+01
Fe-59	<3.71E+01	0.00E+00	3.71E+01
Co-60	<2.76E+01	0.00E+00	2.76E+01
Zn-65	<3.84E+01	0.00E+00	3.84E+01
Nb-95	<1.90E+01	0.00E+00	1.90E+01
I-131	<1.33E+01	0.00E+00	1.33E+01
Cs-134	<1.70E+01	0.00E+00	1.70E+01
Cs-137	<1.73E+01	0.00E+00	1.73E+01
Be-7	<1.37E+02	0.00E+00	1.37E+02
K-40	3.47E+03	5.80E+02	5.01E+01
Ag-110M	<1.63E+01	0.00E+00	1.63E+01
Sb-122	<2.34E+01	0.00E+00	2.34E+01
Sb-125	<3.79E+01	0.00E+00	3.79E+01

Sample ID: 425355 Sample Dates: 10/3/2016 - 10/3/2016 FORAGER

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.68E+01	0.00E+00	1.68E+01
Co-58	<1.19E+01	0.00E+00	1.19E+01
Fe-59	<2.72E+01	0.00E+00	2.72E+01

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

Sample Point 216 [CONTROL - NNE @ 4.19 miles]

Sample ID:	425355	Sample Dates: 10/3/2016 - 10/3/2016	FORAGER	Nuclide	Activity	2 Sigma Error	MDA
				Co-60	<1.21E+01	0.00E+00	1.21E+01
				Zn-65	<3.42E+01	0.00E+00	3.42E+01
				Nb-95	<1.60E+01	0.00E+00	1.60E+01
				I-131	<1.18E+01	0.00E+00	1.18E+01
				Cs-134	<1.89E+01	0.00E+00	1.89E+01
				Cs-137	<1.43E+01	0.00E+00	1.43E+01
				Be-7	<8.38E+01	0.00E+00	8.38E+01
				K-40	2.44E+03	4.48E+02	4.46E+01
				Ag-110M	<1.04E+01	0.00E+00	1.04E+01
				Sb-122	<1.93E+01	0.00E+00	1.93E+01
				Sb-125	<3.37E+01	0.00E+00	3.37E+01
Sample ID:	**425356**	**Sample Dates: 10/3/2016 - 10/3/2016**	**BOTMFEEDER**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.26E+01	0.00E+00	1.26E+01
				Co-58	<1.55E+01	0.00E+00	1.55E+01
				Fe-59	<3.08E+01	0.00E+00	3.08E+01
				Co-60	<2.00E+01	0.00E+00	2.00E+01
				Zn-65	<2.46E+01	0.00E+00	2.46E+01
				Nb-95	<1.07E+01	0.00E+00	1.07E+01
				I-131	<8.83E+00	0.00E+00	8.83E+00
				Cs-134	<1.09E+01	0.00E+00	1.09E+01
				Cs-137	<1.53E+01	0.00E+00	1.53E+01
				Be-7	<9.78E+01	0.00E+00	9.78E+01
				K-40	3.15E+03	5.27E+02	2.85E+02
				Ag-110M	<1.27E+01	0.00E+00	1.27E+01
				Sb-122	<1.94E+01	0.00E+00	1.94E+01
				Sb-125	<3.14E+01	0.00E+00	3.14E+01

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 221 [CONTROL - NW @ 14.5 miles]

Sample ID:	399249	Sample Dates: 1/12/2016 - 1/12/2016	Nuclide	Activity	2 Sigma Error	MDA
			LLI-131	<6.02E-01	0.00E+00	6.02E-01
			I-131	<5.91E+00	0.00E+00	5.91E+00
			Cs-134	<7.96E+00	0.00E+00	7.96E+00
			Cs-137	<6.62E+00	0.00E+00	6.62E+00
			BaLa-140	<2.12E+00	0.00E+00	2.12E+00
			Be-7	<5.60E+01	0.00E+00	5.60E+01
			K-40	1.64E+03	2.53E+02	1.17E+02
Sample ID:	**400348**	**Sample Dates: 1/26/2016 - 1/26/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			LLI-131	<4.86E-01	0.00E+00	4.86E-01
			I-131	<6.64E+00	0.00E+00	6.64E+00
			Cs-134	<8.79E+00	0.00E+00	8.79E+00
			Cs-137	<8.17E+00	0.00E+00	8.17E+00
			BaLa-140	<2.19E+00	0.00E+00	2.19E+00
			Be-7	<4.22E+01	0.00E+00	4.22E+01
			K-40	1.58E+03	2.51E+02	1.11E+02
Sample ID:	**401344**	**Sample Dates: 2/9/2016 - 2/9/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			LLI-131	<4.75E-01	0.00E+00	4.75E-01
			I-131	<4.79E+00	0.00E+00	4.79E+00
			Cs-134	<7.96E+00	0.00E+00	7.96E+00
			Cs-137	<5.63E+00	0.00E+00	5.63E+00
			BaLa-140	<8.43E+00	0.00E+00	8.43E+00
			Be-7	<6.40E+01	0.00E+00	6.40E+01
			K-40	1.56E+03	2.52E+02	1.58E+02
Sample ID:	**402306**	**Sample Dates: 2/23/2016 - 2/23/2016**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
			LLI-131	<5.47E-01	0.00E+00	5.47E-01
			I-131	<7.00E+00	0.00E+00	7.00E+00
			Cs-134	<6.87E+00	0.00E+00	6.87E+00
			Cs-137	<8.73E+00	0.00E+00	8.73E+00
			BaLa-140	<5.65E+00	0.00E+00	5.65E+00
			Be-7	<5.54E+01	0.00E+00	5.54E+01
			K-40	1.87E+03	2.74E+02	1.34E+02

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 221 [CONTROL - NW @ 14.5 miles]

Sample ID: 404514 **Sample Dates: 3/8/2016 - 3/8/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.52E-01	0.00E+00	5.52E-01
I-131	<6.34E+00	0.00E+00	6.34E+00
Cs-134	<7.85E+00	0.00E+00	7.85E+00
Cs-137	<8.06E+00	0.00E+00	8.06E+00
BaLa-140	<5.61E+00	0.00E+00	5.61E+00
Be-7	<3.29E+01	0.00E+00	3.29E+01
K-40	1.45E+03	2.35E+02	1.36E+02

Sample ID: 406019 **Sample Dates: 3/22/2016 - 3/22/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.74E-01	0.00E+00	5.74E-01
I-131	<7.61E+00	0.00E+00	7.61E+00
Cs-134	<7.11E+00	0.00E+00	7.11E+00
Cs-137	<7.99E+00	0.00E+00	7.99E+00
BaLa-140	<6.00E+00	0.00E+00	6.00E+00
Be-7	<4.77E+01	0.00E+00	4.77E+01
K-40	1.62E+03	2.54E+02	1.39E+02

Sample ID: 407545 **Sample Dates: 4/5/2016 - 4/5/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.48E-01	0.00E+00	6.48E-01
I-131	<6.32E+00	0.00E+00	6.32E+00
Cs-134	<6.30E+00	0.00E+00	6.30E+00
Cs-137	<8.21E+00	0.00E+00	8.21E+00
BaLa-140	<8.21E+00	0.00E+00	8.21E+00
Be-7	<5.17E+01	0.00E+00	5.17E+01
K-40	1.54E+03	2.42E+02	1.92E+01

Sample ID: 409435 **Sample Dates: 4/19/2016 - 4/19/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<4.97E-01	0.00E+00	4.97E-01
I-131	<5.94E+00	0.00E+00	5.94E+00
Cs-134	<6.66E+00	0.00E+00	6.66E+00
Cs-137	<1.02E+01	0.00E+00	1.02E+01
BaLa-140	<6.19E+00	0.00E+00	6.19E+00
Be-7	<4.88E+01	0.00E+00	4.88E+01
K-40	1.69E+03	2.57E+02	7.66E+01

Sample ID: 410925 **Sample Dates: 5/3/2016 - 5/3/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<4.18E-01	0.00E+00	4.18E-01
I-131	<7.83E+00	0.00E+00	7.83E+00
Cs-134	<8.54E+00	0.00E+00	8.54E+00
Cs-137	<6.74E+00	0.00E+00	6.74E+00
BaLa-140	<5.74E+00	0.00E+00	5.74E+00
Be-7	<4.45E+01	0.00E+00	4.45E+01
K-40	1.49E+03	2.35E+02	1.08E+02

Sample ID: 411746 **Sample Dates: 5/17/2016 - 5/17/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.79E-01	0.00E+00	5.79E-01
I-131	<5.97E+00	0.00E+00	5.97E+00
Cs-134	<6.28E+00	0.00E+00	6.28E+00
Cs-137	<9.01E+00	0.00E+00	9.01E+00
BaLa-140	<2.14E+00	0.00E+00	2.14E+00
Be-7	<5.14E+01	0.00E+00	5.14E+01
K-40	1.69E+03	2.48E+02	1.72E+01

Sample ID: 412728 **Sample Dates: 6/1/2016 - 6/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<4.97E-01	0.00E+00	4.97E-01
I-131	<6.71E+00	0.00E+00	6.71E+00
Cs-134	<7.87E+00	0.00E+00	7.87E+00
Cs-137	<7.36E+00	0.00E+00	7.36E+00
BaLa-140	<7.38E+00	0.00E+00	7.38E+00
Be-7	<5.59E+01	0.00E+00	5.59E+01
K-40	1.82E+03	2.64E+02	8.56E+01

Sample ID: 413875 **Sample Dates: 6/14/2016 - 6/14/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.10E-01	0.00E+00	5.10E-01
I-131	<7.21E+00	0.00E+00	7.21E+00
Cs-134	<4.86E+00	0.00E+00	4.86E+00
Cs-137	<8.06E+00	0.00E+00	8.06E+00
BaLa-140	<7.09E+00	0.00E+00	7.09E+00

Sample ID: 413875 **Sample Dates: 6/14/2016 - 6/14/2016**

Nuclide	Activity	2 Sigma Error	MDA
Be-7	<5.95E+01	0.00E+00	5.95E+01
K-40	1.71E+03	2.56E+02	1.15E+02

Sample ID: 415396 **Sample Dates: 6/28/2016 - 6/28/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.93E-01	0.00E+00	5.93E-01
I-131	<5.95E+00	0.00E+00	5.95E+00
Cs-134	<4.87E+00	0.00E+00	4.87E+00
Cs-137	<7.36E+00	0.00E+00	7.36E+00
BaLa-140	<7.39E+00	0.00E+00	7.39E+00
Be-7	<5.59E+01	0.00E+00	5.59E+01
K-40	1.78E+03	2.57E+02	1.73E+01

Sample ID: 417004 **Sample Dates: 7/12/2016 - 7/12/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.08E-01	0.00E+00	6.08E-01
I-131	<6.07E+00	0.00E+00	6.07E+00
Cs-134	<7.39E+00	0.00E+00	7.39E+00
Cs-137	<6.08E+00	0.00E+00	6.08E+00
BaLa-140	<7.09E+00	0.00E+00	7.09E+00
Be-7	<5.95E+01	0.00E+00	5.95E+01
K-40	1.57E+03	2.37E+02	1.73E+01

Sample ID: 417792 **Sample Dates: 7/26/2016 - 7/26/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.46E-01	0.00E+00	5.46E-01
I-131	<5.85E+00	0.00E+00	5.85E+00
Cs-134	<7.87E+00	0.00E+00	7.87E+00
Cs-137	<5.57E+00	0.00E+00	5.57E+00
BaLa-140	<5.63E+00	0.00E+00	5.63E+00
Be-7	<5.54E+01	0.00E+00	5.54E+01
K-40	1.70E+03	2.50E+02	1.73E+01

Sample ID: 418982 **Sample Dates: 8/9/2016 - 8/9/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<4.86E-01	0.00E+00	4.86E-01
I-131	<7.15E+00	0.00E+00	7.15E+00
Cs-134	<6.29E+00	0.00E+00	6.29E+00
Cs-137	<6.54E+00	0.00E+00	6.54E+00
BaLa-140	<8.23E+00	0.00E+00	8.23E+00
Be-7	<5.54E+01	0.00E+00	5.54E+01
K-40	1.72E+03	2.57E+02	1.07E+02

Sample ID: 420013 **Sample Dates: 8/23/2016 - 8/23/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.78E-01	0.00E+00	5.78E-01
I-131	<4.24E+00	0.00E+00	4.24E+00
Cs-134	<5.97E+00	0.00E+00	5.97E+00
Cs-137	<7.78E+00	0.00E+00	7.78E+00
BaLa-140	<5.97E+00	0.00E+00	5.97E+00
Be-7	<4.22E+01	0.00E+00	4.22E+01
K-40	1.55E+03	2.50E+02	1.32E+02

Sample ID: 421401 **Sample Dates: 9/7/2016 - 9/7/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.22E-01	0.00E+00	6.22E-01
I-131	<7.45E+00	0.00E+00	7.45E+00
Cs-134	<6.52E+00	0.00E+00	6.52E+00
Cs-137	<7.20E+00	0.00E+00	7.20E+00
BaLa-140	<8.83E+00	0.00E+00	8.83E+00
Be-7	<5.77E+01	0.00E+00	5.77E+01
K-40	1.47E+03	2.36E+02	1.15E+02

Sample ID: 423304 **Sample Dates: 9/20/2016 - 9/20/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.62E-01	0.00E+00	5.62E-01
I-131	<5.88E+00	0.00E+00	5.88E+00
Cs-134	<6.87E+00	0.00E+00	6.87E+00
Cs-137	<7.36E+00	0.00E+00	7.36E+00
BaLa-140	<8.27E+00	0.00E+00	8.27E+00
Be-7	1.05E+01	3.27E+01	5.87E+01
K-40	1.40E+03	2.20E+02	1.73E+01

Sample ID: 425413 **Sample Dates: 10/4/2016 - 10/4/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.05E-01	0.00E+00	6.05E-01

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 221 [CONTROL - NW @ 14.5 miles]

Sample ID: 425413 **Sample Dates: 10/4/2016 - 10/4/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.06E+00	0.00E+00	6.06E+00
Cs-134	<9.38E+00	0.00E+00	9.38E+00
Cs-137	<7.18E+00	0.00E+00	7.18E+00
BaLa-140	<7.23E+00	0.00E+00	7.23E+00
Be-7	<3.40E+01	0.00E+00	3.40E+01
K-40	1.52E+03	2.35E+02	7.47E+01

Sample ID: 426351 **Sample Dates: 10/18/2016 - 10/18/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.04E-01	0.00E+00	5.04E-01
I-131	<6.73E+00	0.00E+00	6.73E+00
Cs-134	<8.74E+00	0.00E+00	8.74E+00
Cs-137	<8.41E+00	0.00E+00	8.41E+00
BaLa-140	<1.04E+01	0.00E+00	1.04E+01
Be-7	<5.37E+01	0.00E+00	5.37E+01
K-40	1.43E+03	2.27E+02	8.08E+01

Sample ID: 427699 **Sample Dates: 11/1/2016 - 11/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<4.88E-01	0.00E+00	4.88E-01
I-131	<4.06E+00	0.00E+00	4.06E+00
Cs-134	<1.05E+01	0.00E+00	1.05E+01
Cs-137	<8.06E+00	0.00E+00	8.06E+00
BaLa-140	<8.22E+00	0.00E+00	8.22E+00
Be-7	<5.32E+01	0.00E+00	5.32E+01
K-40	1.45E+03	2.31E+02	1.05E+02

Sample ID: 428879 **Sample Dates: 11/15/2016 - 11/15/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.30E-01	0.00E+00	5.30E-01
I-131	<6.23E+00	0.00E+00	6.23E+00
Cs-134	<8.30E+00	0.00E+00	8.30E+00
Cs-137	<7.71E+00	0.00E+00	7.71E+00
BaLa-140	<2.14E+00	0.00E+00	2.14E+00
Be-7	<5.59E+01	0.00E+00	5.59E+01
K-40	1.35E+03	2.20E+02	9.42E+01

Sample ID: 429937 **Sample Dates: 11/29/2016 - 11/29/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.46E-01	0.00E+00	6.46E-01
I-131	<5.61E+00	0.00E+00	5.61E+00
Cs-134	<5.15E+00	0.00E+00	5.15E+00
Cs-137	<8.89E+00	0.00E+00	8.89E+00
BaLa-140	<2.20E+00	0.00E+00	2.20E+00
Be-7	<5.37E+01	0.00E+00	5.37E+01
K-40	1.47E+03	2.39E+02	1.02E+02

Sample ID: 431049 **Sample Dates: 12/13/2016 - 12/13/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<4.39E-01	0.00E+00	4.39E-01
I-131	<5.35E+00	0.00E+00	5.35E+00
Cs-134	<7.85E+00	0.00E+00	7.85E+00
Cs-137	<8.39E+00	0.00E+00	8.39E+00
BaLa-140	<5.61E+00	0.00E+00	5.61E+00
Be-7	<4.59E+01	0.00E+00	4.59E+01
K-40	1.47E+03	2.34E+02	1.17E+02

Sample ID: 431797 **Sample Dates: 12/28/2016 - 12/28/2016**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.31E-01	0.00E+00	6.31E-01
I-131	<7.76E+00	0.00E+00	7.76E+00
Cs-134	<6.81E+00	0.00E+00	6.81E+00
Cs-137	<1.01E+01	0.00E+00	1.01E+01
BaLa-140	<2.23E+00	0.00E+00	2.23E+00
Be-7	<4.33E+01	0.00E+00	4.33E+01
K-40	1.56E+03	2.48E+02	1.08E+02

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID: 406127 **Sample Dates: 3/22/2016 - 3/22/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.35E+01	0.00E+00	2.35E+01
Co-58	<2.87E+01	0.00E+00	2.87E+01

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID: 406127 Sample Dates: 3/22/2016 - 3/22/2016

Nuclide	Activity	2 Sigma Error	MDA
Fe-59	<6.20E+01	0.00E+00	6.20E+01
Co-60	5.92E+01	1.91E+01	1.98E+01
Zn-65	<5.34E+01	0.00E+00	5.34E+01
Zr-95	<4.26E+01	0.00E+00	4.26E+01
Nb-95	<3.01E+01	0.00E+00	3.01E+01
I-131	<5.43E+01	0.00E+00	5.43E+01
Cs-134	<3.37E+01	0.00E+00	3.37E+01
Cs-137	<2.75E+01	0.00E+00	2.75E+01
Be-7	2.07E+02	1.05E+02	1.96E+02
K-40	1.63E+04	1.63E+03	3.33E+02
Co-57	<1.73E+01	0.00E+00	1.73E+01
Mo-99	<5.77E+03	0.00E+00	5.77E+03
Ag-110M	<2.35E+01	0.00E+00	2.35E+01
Sb-122	<9.22E+02	0.00E+00	9.22E+02
Sb-125	<5.44E+01	0.00E+00	5.44E+01

Sample ID: 421843 Sample Dates: 9/20/2016 - 9/20/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.08E+01	0.00E+00	3.08E+01
Co-58	<2.56E+01	0.00E+00	2.56E+01
Fe-59	<5.41E+01	0.00E+00	5.41E+01
Co-60	2.03E+02	4.41E+01	4.47E+01
Zn-65	<6.80E+01	0.00E+00	6.80E+01
Zr-95	<3.40E+01	0.00E+00	3.40E+01
Nb-95	<3.01E+01	0.00E+00	3.01E+01
I-131	<2.17E+01	0.00E+00	2.17E+01
Cs-134	<3.24E+01	0.00E+00	3.24E+01
Cs-137	<3.59E+01	0.00E+00	3.59E+01
Be-7	2.73E+02	1.43E+02	2.07E+02
K-40	1.59E+04	1.57E+03	3.39E+02
Co-57	<1.79E+01	0.00E+00	1.79E+01
Mo-99	<2.96E+02	0.00E+00	2.96E+02
Ag-110M	<2.25E+01	0.00E+00	2.25E+01
Sb-122	<4.09E+01	0.00E+00	4.09E+01
Sb-125	<5.56E+01	0.00E+00	5.56E+01

Sample Point 210 [INDICATOR - SE @ 2.31 miles]

Sample ID: 406128 Sample Dates: 3/22/2016 - 3/22/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.87E+01	0.00E+00	1.87E+01
Co-58	<2.82E+01	0.00E+00	2.82E+01
Fe-59	<4.84E+01	0.00E+00	4.84E+01
Co-60	<2.57E+01	0.00E+00	2.57E+01
Zn-65	<5.69E+01	0.00E+00	5.69E+01
Zr-95	<4.94E+01	0.00E+00	4.94E+01
Nb-95	<3.04E+01	0.00E+00	3.04E+01
I-131	<5.36E+01	0.00E+00	5.36E+01
Cs-134	<3.37E+01	0.00E+00	3.37E+01
Cs-137	<2.55E+01	0.00E+00	2.55E+01
Be-7	<1.57E+02	0.00E+00	1.57E+02
K-40	1.11E+04	1.18E+03	2.70E+02
Co-57	<1.87E+01	0.00E+00	1.87E+01
Mo-99	<5.47E+03	0.00E+00	5.47E+03
Ag-110M	<1.98E+01	0.00E+00	1.98E+01
Sb-122	<1.03E+03	0.00E+00	1.03E+03
Sb-125	<5.45E+01	0.00E+00	5.45E+01

Sample ID: 421844 Sample Dates: 9/20/2016 - 9/20/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.19E+01	0.00E+00	2.19E+01
Co-58	<1.81E+01	0.00E+00	1.81E+01
Fe-59	<3.84E+01	0.00E+00	3.84E+01
Co-60	<2.65E+01	0.00E+00	2.65E+01
Zn-65	<5.21E+01	0.00E+00	5.21E+01
Zr-95	<3.40E+01	0.00E+00	3.40E+01
Nb-95	<1.87E+01	0.00E+00	1.87E+01
I-131	<1.64E+01	0.00E+00	1.64E+01
Cs-134	<3.16E+01	0.00E+00	3.16E+01
Cs-137	<2.53E+01	0.00E+00	2.53E+01

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

Sample Point 210 [INDICATOR - SE @ 2.31 miles]

Sample ID: 421844 **Sample Dates: 9/20/2016 - 9/20/2016**

Nuclide	Activity	2 Sigma Error	MDA
Be-7	<1.67E+02	0.00E+00	1.67E+02
K-40	1.33E+04	1.34E+03	2.06E+02
Co-57	<1.39E+01	0.00E+00	1.39E+01
Mo-99	<2.38E+02	0.00E+00	2.38E+02
Ag-110M	<1.77E+01	0.00E+00	1.77E+01
Sb-122	<4.24E+01	0.00E+00	4.24E+01
Sb-125	<4.88E+01	0.00E+00	4.88E+01

Sample Point 215 [CONTROL - NNE @ 4.21 miles]

Sample ID: 406129 **Sample Dates: 3/22/2016 - 3/22/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.64E+01	0.00E+00	1.64E+01
Co-58	<2.08E+01	0.00E+00	2.08E+01
Fe-59	<6.14E+01	0.00E+00	6.14E+01
Co-60	<1.96E+01	0.00E+00	1.96E+01
Zn-65	<5.55E+01	0.00E+00	5.55E+01
Zr-95	<4.33E+01	0.00E+00	4.33E+01
Nb-95	<2.33E+01	0.00E+00	2.33E+01
I-131	<4.84E+01	0.00E+00	4.84E+01
Cs-134	<3.19E+01	0.00E+00	3.19E+01
Cs-137	<2.13E+01	0.00E+00	2.13E+01
Be-7	<1.64E+02	0.00E+00	1.64E+02
K-40	1.62E+04	1.58E+03	3.00E+02
Co-57	<1.84E+01	0.00E+00	1.84E+01
Mo-99	<5.52E+03	0.00E+00	5.52E+03
Ag-110M	<1.70E+01	0.00E+00	1.70E+01
Sb-122	<6.48E+02	0.00E+00	6.48E+02
Sb-125	<4.71E+01	0.00E+00	4.71E+01

Sample ID: 421845 **Sample Dates: 9/20/2016 - 9/20/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.08E+01	0.00E+00	3.08E+01
Co-58	<2.78E+01	0.00E+00	2.78E+01
Fe-59	<7.01E+01	0.00E+00	7.01E+01
Co-60	<3.96E+01	0.00E+00	3.96E+01
Zn-65	<8.48E+01	0.00E+00	8.48E+01
Zr-95	<5.77E+01	0.00E+00	5.77E+01
Nb-95	<3.35E+01	0.00E+00	3.35E+01
I-131	<3.16E+01	0.00E+00	3.16E+01
Cs-134	<5.28E+01	0.00E+00	5.28E+01
Cs-137	<3.84E+01	0.00E+00	3.84E+01
Be-7	<2.91E+02	0.00E+00	2.91E+02
K-40	2.26E+04	2.28E+03	4.95E+02
Co-57	<2.41E+01	0.00E+00	2.41E+01
Mo-99	<3.98E+02	0.00E+00	3.98E+02
Ag-110M	<3.04E+01	0.00E+00	3.04E+01
Sb-122	<6.85E+01	0.00E+00	6.85E+01
Sb-125	<7.82E+01	0.00E+00	7.82E+01

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID: 398931 **Sample Dates: 12/8/2015 - 1/6/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.28E+00	0.00E+00	2.28E+00
Co-58	<2.28E+00	0.00E+00	2.28E+00
Fe-59	<5.89E+00	0.00E+00	5.89E+00
Co-60	<2.30E+00	0.00E+00	2.30E+00
Zn-65	<3.89E+00	0.00E+00	3.89E+00
Zr-95	<5.24E+00	0.00E+00	5.24E+00
Nb-95	<3.18E+00	0.00E+00	3.18E+00
I-131	<1.04E+01	0.00E+00	1.04E+01
Cs-134	<2.33E+00	0.00E+00	2.33E+00
Cs-137	<2.23E+00	0.00E+00	2.23E+00
BaLa-140	<5.49E+00	0.00E+00	5.49E+00
Be-7	<2.46E+01	0.00E+00	2.46E+01
K-40	<3.97E+01	0.00E+00	3.97E+01

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID: 400978 Sample Dates: 1/6/2016 - 2/2/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<4.31E+00	0.00E+00	4.31E+00
Co-58	<3.84E+00	0.00E+00	3.84E+00
Fe-59	<7.72E+00	0.00E+00	7.72E+00
Co-60	<3.08E+00	0.00E+00	3.08E+00
Zn-65	<7.99E+00	0.00E+00	7.99E+00
Zr-95	<8.39E+00	0.00E+00	8.39E+00
Nb-95	<6.07E+00	0.00E+00	6.07E+00
I-131	<9.94E+00	0.00E+00	9.94E+00
Cs-134	<4.79E+00	0.00E+00	4.79E+00
Cs-137	<3.81E+00	0.00E+00	3.81E+00
BaLa-140	<6.30E+00	0.00E+00	6.30E+00
Be-7	<3.01E+01	0.00E+00	3.01E+01
K-40	<6.80E+01	0.00E+00	6.80E+01

Sample ID: 403033 Sample Dates: 2/2/2016 - 3/1/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.83E+00	0.00E+00	2.83E+00
Co-58	<3.32E+00	0.00E+00	3.32E+00
Fe-59	<4.87E+00	0.00E+00	4.87E+00
Co-60	<3.24E+00	0.00E+00	3.24E+00
Zn-65	<6.49E+00	0.00E+00	6.49E+00
Zr-95	<5.13E+00	0.00E+00	5.13E+00
Nb-95	<4.95E+00	0.00E+00	4.95E+00
I-131	<1.17E+01	0.00E+00	1.17E+01
Cs-134	<3.87E+00	0.00E+00	3.87E+00
Cs-137	<4.02E+00	0.00E+00	4.02E+00
BaLa-140	<6.64E+00	0.00E+00	6.64E+00
Be-7	<3.54E+01	0.00E+00	3.54E+01
K-40	<4.02E+01	0.00E+00	4.02E+01

Sample ID: 403601 Sample Dates: 12/8/2015 - 3/1/2016

Nuclide	Activity	2 Sigma Error	MDA
H3SW	4.37E+03	2.17E+02	1.99E+02

Sample ID: 406359 Sample Dates: 3/1/2016 - 3/29/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.96E+00	0.00E+00	1.96E+00
Co-58	<2.04E+00	0.00E+00	2.04E+00
Fe-59	<4.37E+00	0.00E+00	4.37E+00
Co-60	<1.77E+00	0.00E+00	1.77E+00
Zn-65	<3.67E+00	0.00E+00	3.67E+00
Zr-95	<4.05E+00	0.00E+00	4.05E+00
Nb-95	<2.79E+00	0.00E+00	2.79E+00
I-131	<1.08E+01	0.00E+00	1.08E+01
Cs-134	<1.76E+00	0.00E+00	1.76E+00
Cs-137	<1.76E+00	0.00E+00	1.76E+00
BaLa-140	<4.67E+00	0.00E+00	4.67E+00
Be-7	<1.80E+01	0.00E+00	1.80E+01
K-40	5.25E+01	2.14E+01	2.91E+01

Sample ID: 409770 Sample Dates: 3/29/2016 - 4/26/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.96E+00	0.00E+00	3.96E+00
Co-58	<3.71E+00	0.00E+00	3.71E+00
Fe-59	<5.46E+00	0.00E+00	5.46E+00
Co-60	<3.35E+00	0.00E+00	3.35E+00
Zn-65	<7.08E+00	0.00E+00	7.08E+00
Zr-95	<8.04E+00	0.00E+00	8.04E+00
Nb-95	<5.10E+00	0.00E+00	5.10E+00
I-131	<1.12E+01	0.00E+00	1.12E+01
Cs-134	<3.84E+00	0.00E+00	3.84E+00
Cs-137	<3.35E+00	0.00E+00	3.35E+00
BaLa-140	<8.60E+00	0.00E+00	8.60E+00
Be-7	<3.09E+01	0.00E+00	3.09E+01
K-40	<5.95E+01	0.00E+00	5.95E+01

Sample ID: 412209 Sample Dates: 4/26/2016 - 5/24/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.37E+00	0.00E+00	3.37E+00
Co-58	<3.17E+00	0.00E+00	3.17E+00
Fe-59	<7.54E+00	0.00E+00	7.54E+00
Co-60	<4.53E+00	0.00E+00	4.53E+00

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID: 412209 **Sample Dates: 4/26/2016 - 5/24/2016**

Nuclide	Activity	2 Sigma Error	MDA
Zn-65	<7.09E+00	0.00E+00	7.09E+00
Zr-95	<7.42E+00	0.00E+00	7.42E+00
Nb-95	<6.10E+00	0.00E+00	6.10E+00
I-131	<1.02E+01	0.00E+00	1.02E+01
Cs-134	<3.98E+00	0.00E+00	3.98E+00
Cs-137	<3.67E+00	0.00E+00	3.67E+00
BaLa-140	<9.24E+00	0.00E+00	9.24E+00
Be-7	<3.49E+01	0.00E+00	3.49E+01
K-40	6.21E+01	3.10E+01	2.86E+01

Sample ID: 413175 **Sample Dates: 3/1/2016 - 5/24/2016**

Nuclide	Activity	2 Sigma Error	MDA
H3SW	5.21E+03	2.12E+02	1.93E+02

Sample ID: 415016 **Sample Dates: 5/24/2016 - 6/21/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<4.12E+00	0.00E+00	4.12E+00
Co-58	<3.76E+00	0.00E+00	3.76E+00
Fe-59	<7.13E+00	0.00E+00	7.13E+00
Co-60	<4.30E+00	0.00E+00	4.30E+00
Zn-65	<7.34E+00	0.00E+00	7.34E+00
Zr-95	<5.33E+00	0.00E+00	5.33E+00
Nb-95	<3.93E+00	0.00E+00	3.93E+00
I-131	<1.18E+01	0.00E+00	1.18E+01
Cs-134	<4.20E+00	0.00E+00	4.20E+00
Cs-137	<4.57E+00	0.00E+00	4.57E+00
BaLa-140	<8.67E+00	0.00E+00	8.67E+00
Be-7	<3.42E+01	0.00E+00	3.42E+01
K-40	<5.48E+01	0.00E+00	5.48E+01

Sample ID: 417398 **Sample Dates: 6/21/2016 - 7/19/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.72E+00	0.00E+00	3.72E+00
Co-58	<3.54E+00	0.00E+00	3.54E+00
Fe-59	<6.02E+00	0.00E+00	6.02E+00
Co-60	<2.66E+00	0.00E+00	2.66E+00
Zn-65	<7.42E+00	0.00E+00	7.42E+00
Zr-95	<8.40E+00	0.00E+00	8.40E+00
Nb-95	<4.95E+00	0.00E+00	4.95E+00
I-131	<1.15E+01	0.00E+00	1.15E+01
Cs-134	<4.46E+00	0.00E+00	4.46E+00
Cs-137	<3.90E+00	0.00E+00	3.90E+00
BaLa-140	<8.20E+00	0.00E+00	8.20E+00
Be-7	<3.11E+01	0.00E+00	3.11E+01
K-40	<7.11E+01	0.00E+00	7.11E+01

Sample ID: 419483 **Sample Dates: 7/19/2016 - 8/16/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.39E+00	0.00E+00	3.39E+00
Co-58	<3.90E+00	0.00E+00	3.90E+00
Fe-59	<6.70E+00	0.00E+00	6.70E+00
Co-60	<5.27E+00	0.00E+00	5.27E+00
Zn-65	<6.78E+00	0.00E+00	6.78E+00
Zr-95	<6.91E+00	0.00E+00	6.91E+00
Nb-95	<5.51E+00	0.00E+00	5.51E+00
I-131	<1.19E+01	0.00E+00	1.19E+01
Cs-134	<4.21E+00	0.00E+00	4.21E+00
Cs-137	<3.15E+00	0.00E+00	3.15E+00
BaLa-140	<8.36E+00	0.00E+00	8.36E+00
Be-7	<3.31E+01	0.00E+00	3.31E+01
K-40	4.48E+01	3.18E+01	4.52E+01

Sample ID: 420856 **Sample Dates: 5/24/2016 - 8/16/2016**

Nuclide	Activity	2 Sigma Error	MDA
H3SW	7.50E+03	2.64E+02	1.90E+02

Sample ID: 422560 **Sample Dates: 8/16/2016 - 9/13/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.35E+00	0.00E+00	2.35E+00
Co-58	<2.53E+00	0.00E+00	2.53E+00
Fe-59	<5.10E+00	0.00E+00	5.10E+00
Co-60	<2.49E+00	0.00E+00	2.49E+00
Zn-65	<4.92E+00	0.00E+00	4.92E+00

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID: 422560 Sample Dates: 8/16/2016 - 9/13/2016

Nuclide	Activity	2 Sigma Error	MDA
Zr-95	<3.75E+00	0.00E+00	3.75E+00
Nb-95	<2.77E+00	0.00E+00	2.77E+00
I-131	<1.17E+01	0.00E+00	1.17E+01
Cs-134	<2.87E+00	0.00E+00	2.87E+00
Cs-137	<1.93E+00	0.00E+00	1.93E+00
BaLa-140	<4.70E+00	0.00E+00	4.70E+00
Be-7	<2.37E+01	0.00E+00	2.37E+01
K-40	<3.18E+01	0.00E+00	3.18E+01

Sample ID: 425981 Sample Dates: 9/13/2016 - 10/11/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.19E+00	0.00E+00	3.19E+00
Co-58	<4.12E+00	0.00E+00	4.12E+00
Fe-59	<7.40E+00	0.00E+00	7.40E+00
Co-60	<3.43E+00	0.00E+00	3.43E+00
Zn-65	<1.02E+01	0.00E+00	1.02E+01
Zr-95	<8.43E+00	0.00E+00	8.43E+00
Nb-95	<5.66E+00	0.00E+00	5.66E+00
I-131	<1.13E+01	0.00E+00	1.13E+01
Cs-134	<4.27E+00	0.00E+00	4.27E+00
Cs-137	<3.73E+00	0.00E+00	3.73E+00
BaLa-140	<8.55E+00	0.00E+00	8.55E+00
Be-7	<3.24E+01	0.00E+00	3.24E+01
K-40	<6.03E+01	0.00E+00	6.03E+01

Sample ID: 428194 Sample Dates: 10/11/2016 - 11/8/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.72E+00	0.00E+00	3.72E+00
Co-58	<4.11E+00	0.00E+00	4.11E+00
Fe-59	<9.15E+00	0.00E+00	9.15E+00
Co-60	<3.08E+00	0.00E+00	3.08E+00
Zn-65	<4.49E+00	0.00E+00	4.49E+00
Zr-95	<7.69E+00	0.00E+00	7.69E+00
Nb-95	<4.58E+00	0.00E+00	4.58E+00
I-131	<1.13E+01	0.00E+00	1.13E+01
Cs-134	<4.13E+00	0.00E+00	4.13E+00
Cs-137	<4.83E+00	0.00E+00	4.83E+00
BaLa-140	<6.49E+00	0.00E+00	6.49E+00
Be-7	<3.47E+01	0.00E+00	3.47E+01
K-40	<4.93E+01	0.00E+00	4.93E+01

Sample ID: 427835 Sample Dates: 8/16/2016 - 12/6/2016

Nuclide	Activity	2 Sigma Error	MDA
H3SW	8.27E+03	2.54E+02	1.89E+02

Sample ID: 430558 Sample Dates: 11/8/2016 - 12/6/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.45E+00	0.00E+00	2.45E+00
Co-58	<3.76E+00	0.00E+00	3.76E+00
Fe-59	<6.48E+00	0.00E+00	6.48E+00
Co-60	<3.00E+00	0.00E+00	3.00E+00
Zn-65	<5.53E+00	0.00E+00	5.53E+00
Zr-95	<6.13E+00	0.00E+00	6.13E+00
Nb-95	<4.83E+00	0.00E+00	4.83E+00
I-131	<1.13E+01	0.00E+00	1.13E+01
Cs-134	<3.90E+00	0.00E+00	3.90E+00
Cs-137	<3.52E+00	0.00E+00	3.52E+00
BaLa-140	<5.10E+00	0.00E+00	5.10E+00
Be-7	<3.02E+01	0.00E+00	3.02E+01
K-40	<6.18E+01	0.00E+00	6.18E+01

Sample Point 211 [INDICATOR - ESE @ 4.06 miles]

Sample ID: 398932 Sample Dates: 12/8/2015 - 1/6/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.33E+00	0.00E+00	2.33E+00
Co-58	<2.56E+00	0.00E+00	2.56E+00
Fe-59	<4.86E+00	0.00E+00	4.86E+00
Co-60	<2.62E+00	0.00E+00	2.62E+00
Zn-65	<4.60E+00	0.00E+00	4.60E+00
Zr-95	<4.37E+00	0.00E+00	4.37E+00
Nb-95	<3.51E+00	0.00E+00	3.51E+00

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

Sample Point 211 [INDICATOR - ESE @ 4.06 miles]

Sample ID: 398932 **Sample Dates: 12/8/2015 - 1/6/2016**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.13E+01	0.00E+00	1.13E+01
Cs-134	<3.06E+00	0.00E+00	3.06E+00
Cs-137	<2.46E+00	0.00E+00	2.46E+00
BaLa-140	<8.42E+00	0.00E+00	8.42E+00
Be-7	<2.35E+01	0.00E+00	2.35E+01
K-40	3.92E+01	2.45E+01	3.46E+01

Sample ID: 400979 **Sample Dates: 1/6/2016 - 2/2/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.97E+00	0.00E+00	3.97E+00
Co-58	<4.93E+00	0.00E+00	4.93E+00
Fe-59	<6.68E+00	0.00E+00	6.68E+00
Co-60	<2.98E+00	0.00E+00	2.98E+00
Zn-65	<8.84E+00	0.00E+00	8.84E+00
Zr-95	<9.42E+00	0.00E+00	9.42E+00
Nb-95	<4.83E+00	0.00E+00	4.83E+00
I-131	<1.19E+01	0.00E+00	1.19E+01
Cs-134	<4.61E+00	0.00E+00	4.61E+00
Cs-137	<3.04E+00	0.00E+00	3.04E+00
BaLa-140	<8.87E+00	0.00E+00	8.87E+00
Be-7	<3.92E+01	0.00E+00	3.92E+01
K-40	<6.78E+01	0.00E+00	6.78E+01

Sample ID: 403034 **Sample Dates: 2/2/2016 - 3/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<4.20E+00	0.00E+00	4.20E+00
Co-58	<3.44E+00	0.00E+00	3.44E+00
Fe-59	<7.70E+00	0.00E+00	7.70E+00
Co-60	<2.68E+00	0.00E+00	2.68E+00
Zn-65	<4.25E+00	0.00E+00	4.25E+00
Zr-95	<5.16E+00	0.00E+00	5.16E+00
Nb-95	<3.82E+00	0.00E+00	3.82E+00
I-131	<1.14E+01	0.00E+00	1.14E+01
Cs-134	<3.46E+00	0.00E+00	3.46E+00
Cs-137	<2.19E+00	0.00E+00	2.19E+00
BaLa-140	<7.05E+00	0.00E+00	7.05E+00
Be-7	<3.71E+01	0.00E+00	3.71E+01
K-40	<5.54E+01	0.00E+00	5.54E+01

Sample ID: 403602 **Sample Dates: 12/8/2015 - 3/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
H3SW	2.38E+02	1.23E+02	1.99E+02

Sample ID: 406360 **Sample Dates: 3/1/2016 - 3/29/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.31E+00	0.00E+00	2.31E+00
Co-58	<2.91E+00	0.00E+00	2.91E+00
Fe-59	<6.35E+00	0.00E+00	6.35E+00
Co-60	<2.14E+00	0.00E+00	2.14E+00
Zn-65	<4.94E+00	0.00E+00	4.94E+00
Zr-95	<5.31E+00	0.00E+00	5.31E+00
Nb-95	<3.26E+00	0.00E+00	3.26E+00
I-131	<1.18E+01	0.00E+00	1.18E+01
Cs-134	<2.69E+00	0.00E+00	2.69E+00
Cs-137	<1.99E+00	0.00E+00	1.99E+00
BaLa-140	<9.33E+00	0.00E+00	9.33E+00
Be-7	<2.63E+01	0.00E+00	2.63E+01
K-40	<4.36E+01	0.00E+00	4.36E+01

Sample ID: 409771 **Sample Dates: 3/29/2016 - 4/26/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.09E+00	0.00E+00	3.09E+00
Co-58	<2.98E+00	0.00E+00	2.98E+00
Fe-59	<5.75E+00	0.00E+00	5.75E+00
Co-60	<3.89E+00	0.00E+00	3.89E+00
Zn-65	<5.70E+00	0.00E+00	5.70E+00
Zr-95	<5.28E+00	0.00E+00	5.28E+00
Nb-95	<4.32E+00	0.00E+00	4.32E+00
I-131	<1.11E+01	0.00E+00	1.11E+01
Cs-134	<2.71E+00	0.00E+00	2.71E+00
Cs-137	<3.87E+00	0.00E+00	3.87E+00
BaLa-140	<1.05E+01	0.00E+00	1.05E+01

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

Sample Point 211 [INDICATOR - ESE @ 4.06 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
409771	3/29/2016 - 4/26/2016	Be-7	<2.76E+01	0.00E+00	2.76E+01
		K-40	4.83E+01	3.08E+01	4.37E+01
412210	4/26/2016 - 5/24/2016	Mn-54	<3.93E+00	0.00E+00	3.93E+00
		Co-58	<3.91E+00	0.00E+00	3.91E+00
		Fe-59	<7.43E+00	0.00E+00	7.43E+00
		Co-60	<4.16E+00	0.00E+00	4.16E+00
		Zn-65	<6.27E+00	0.00E+00	6.27E+00
		Zr-95	<6.93E+00	0.00E+00	6.93E+00
		Nb-95	<4.10E+00	0.00E+00	4.10E+00
		I-131	<1.12E+01	0.00E+00	1.12E+01
		Cs-134	<4.16E+00	0.00E+00	4.16E+00
		Cs-137	<2.46E+00	0.00E+00	2.46E+00
		BaLa-140	<1.19E+01	0.00E+00	1.19E+01
		Be-7	<2.74E+01	0.00E+00	2.74E+01
		K-40	3.70E+01	2.99E+01	4.23E+01
413176	3/1/2016 - 5/24/2016	H3SW	5.66E+02	1.29E+02	1.95E+02
415017	5/24/2016 - 6/22/2016	Mn-54	<4.13E+00	0.00E+00	4.13E+00
		Co-58	<2.95E+00	0.00E+00	2.95E+00
		Fe-59	<8.54E+00	0.00E+00	8.54E+00
		Co-60	<4.35E+00	0.00E+00	4.35E+00
		Zn-65	<8.00E+00	0.00E+00	8.00E+00
		Zr-95	<7.30E+00	0.00E+00	7.30E+00
		Nb-95	<5.78E+00	0.00E+00	5.78E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<4.13E+00	0.00E+00	4.13E+00
		Cs-137	<3.15E+00	0.00E+00	3.15E+00
		BaLa-140	<6.60E+00	0.00E+00	6.60E+00
		Be-7	<3.05E+01	0.00E+00	3.05E+01
		K-40	<6.40E+01	0.00E+00	6.40E+01
417399	6/22/2016 - 7/19/2016	Mn-54	<3.46E+00	0.00E+00	3.46E+00
		Co-58	<4.49E+00	0.00E+00	4.49E+00
		Fe-59	<7.61E+00	0.00E+00	7.61E+00
		Co-60	<3.93E+00	0.00E+00	3.93E+00
		Zn-65	<7.88E+00	0.00E+00	7.88E+00
		Zr-95	<7.58E+00	0.00E+00	7.58E+00
		Nb-95	<4.98E+00	0.00E+00	4.98E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.57E+00	0.00E+00	3.57E+00
		Cs-137	<3.98E+00	0.00E+00	3.98E+00
		BaLa-140	<1.10E+01	0.00E+00	1.10E+01
		Be-7	<3.44E+01	0.00E+00	3.44E+01
		K-40	<6.72E+01	0.00E+00	6.72E+01
419484	7/19/2016 - 8/16/2016	Mn-54	<3.80E+00	0.00E+00	3.80E+00
		Co-58	<3.94E+00	0.00E+00	3.94E+00
		Fe-59	<6.15E+00	0.00E+00	6.15E+00
		Co-60	<4.46E+00	0.00E+00	4.46E+00
		Zn-65	<7.50E+00	0.00E+00	7.50E+00
		Zr-95	<7.85E+00	0.00E+00	7.85E+00
		Nb-95	<4.93E+00	0.00E+00	4.93E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<4.46E+00	0.00E+00	4.46E+00
		Cs-137	<4.09E+00	0.00E+00	4.09E+00
		BaLa-140	<9.74E+00	0.00E+00	9.74E+00
		Be-7	<2.75E+01	0.00E+00	2.75E+01
		K-40	<7.39E+01	0.00E+00	7.39E+01

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

Sample Point 211 [INDICATOR - ESE @ 4.06 miles]

Sample ID:	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
420857	5/24/2016 - 8/16/2016	H3SW	5.90E+02	1.31E+02	1.94E+02
422561	8/16/2016 - 9/13/2016	Mn-54	<1.47E+00	0.00E+00	1.47E+00
		Co-58	<2.38E+00	0.00E+00	2.38E+00
		Fe-59	<4.57E+00	0.00E+00	4.57E+00
		Co-60	<2.08E+00	0.00E+00	2.08E+00
		Zn-65	<3.63E+00	0.00E+00	3.63E+00
		Zr-95	<4.01E+00	0.00E+00	4.01E+00
		Nb-95	<2.66E+00	0.00E+00	2.66E+00
		I-131	<1.05E+01	0.00E+00	1.05E+01
		Cs-134	<2.53E+00	0.00E+00	2.53E+00
		Cs-137	<2.31E+00	0.00E+00	2.31E+00
		BaLa-140	<6.84E+00	0.00E+00	6.84E+00
		Be-7	<2.18E+01	0.00E+00	2.18E+01
		K-40	3.17E+01	2.32E+01	3.57E+01
425982	9/13/2016 - 10/11/2016	Mn-54	<3.41E+00	0.00E+00	3.41E+00
		Co-58	<2.74E+00	0.00E+00	2.74E+00
		Fe-59	<4.28E+00	0.00E+00	4.28E+00
		Co-60	<3.49E+00	0.00E+00	3.49E+00
		Zn-65	<5.63E+00	0.00E+00	5.63E+00
		Zr-95	<6.95E+00	0.00E+00	6.95E+00
		Nb-95	<3.97E+00	0.00E+00	3.97E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.08E+00	0.00E+00	3.08E+00
		Cs-137	<2.40E+00	0.00E+00	2.40E+00
		BaLa-140	<7.76E+00	0.00E+00	7.76E+00
		Be-7	<3.01E+01	0.00E+00	3.01E+01
		K-40	<5.18E+01	0.00E+00	5.18E+01
428195	10/11/2016 - 11/8/2016	Mn-54	<2.85E+00	0.00E+00	2.85E+00
		Co-58	<3.47E+00	0.00E+00	3.47E+00
		Fe-59	<7.20E+00	0.00E+00	7.20E+00
		Co-60	<2.45E+00	0.00E+00	2.45E+00
		Zn-65	<6.78E+00	0.00E+00	6.78E+00
		Zr-95	<5.96E+00	0.00E+00	5.96E+00
		Nb-95	<3.97E+00	0.00E+00	3.97E+00
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<3.77E+00	0.00E+00	3.77E+00
		Cs-137	<3.13E+00	0.00E+00	3.13E+00
		BaLa-140	<6.51E+00	0.00E+00	6.51E+00
		Be-7	<2.62E+01	0.00E+00	2.62E+01
		K-40	6.02E+01	2.90E+01	3.54E+01
427836	8/16/2016 - 12/6/2016	H3SW	1.13E+03	1.38E+02	1.87E+02
430559	11/8/2016 - 12/6/2016	Mn-54	<3.58E+00	0.00E+00	3.58E+00
		Co-58	<3.98E+00	0.00E+00	3.98E+00
		Fe-59	<8.70E+00	0.00E+00	8.70E+00
		Co-60	<4.99E+00	0.00E+00	4.99E+00
		Zn-65	<5.85E+00	0.00E+00	5.85E+00
		Zr-95	<8.28E+00	0.00E+00	8.28E+00
		Nb-95	<4.28E+00	0.00E+00	4.28E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.29E+00	0.00E+00	3.29E+00
		Cs-137	<3.96E+00	0.00E+00	3.96E+00
		BaLa-140	<9.64E+00	0.00E+00	9.64E+00
		Be-7	<2.89E+01	0.00E+00	2.89E+01
		K-40	2.81E+01	2.87E+01	4.49E+01

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

Sample Point 215 [CONTROL - NNE @ 4.21 miles]

Sample ID: 398933 **Sample Dates: 12/8/2015 - 1/6/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.57E+00	0.00E+00	1.57E+00
Co-58	<2.64E+00	0.00E+00	2.64E+00
Fe-59	<4.92E+00	0.00E+00	4.92E+00
Co-60	<2.22E+00	0.00E+00	2.22E+00
Zn-65	<4.79E+00	0.00E+00	4.79E+00
Zr-95	<4.96E+00	0.00E+00	4.96E+00
Nb-95	<3.42E+00	0.00E+00	3.42E+00
I-131	<1.05E+01	0.00E+00	1.05E+01
Cs-134	<2.23E+00	0.00E+00	2.23E+00
Cs-137	<2.22E+00	0.00E+00	2.22E+00
BaLa-140	<7.55E+00	0.00E+00	7.55E+00
Be-7	<2.47E+01	0.00E+00	2.47E+01
K-40	<4.24E+01	0.00E+00	4.24E+01

Sample ID: 400980 **Sample Dates: 1/6/2016 - 2/2/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.53E+00	0.00E+00	2.53E+00
Co-58	<2.97E+00	0.00E+00	2.97E+00
Fe-59	<6.59E+00	0.00E+00	6.59E+00
Co-60	<2.61E+00	0.00E+00	2.61E+00
Zn-65	<5.81E+00	0.00E+00	5.81E+00
Zr-95	<6.81E+00	0.00E+00	6.81E+00
Nb-95	<3.47E+00	0.00E+00	3.47E+00
I-131	<1.08E+01	0.00E+00	1.08E+01
Cs-134	<3.00E+00	0.00E+00	3.00E+00
Cs-137	<2.91E+00	0.00E+00	2.91E+00
BaLa-140	<8.26E+00	0.00E+00	8.26E+00
Be-7	<3.71E+01	0.00E+00	3.71E+01
K-40	<6.03E+01	0.00E+00	6.03E+01

Sample ID: 403035 **Sample Dates: 2/2/2016 - 3/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.10E+00	0.00E+00	3.10E+00
Co-58	<3.16E+00	0.00E+00	3.16E+00
Fe-59	<6.46E+00	0.00E+00	6.46E+00
Co-60	<3.32E+00	0.00E+00	3.32E+00
Zn-65	<6.76E+00	0.00E+00	6.76E+00
Zr-95	<5.60E+00	0.00E+00	5.60E+00
Nb-95	<3.20E+00	0.00E+00	3.20E+00
I-131	<1.10E+01	0.00E+00	1.10E+01
Cs-134	<3.56E+00	0.00E+00	3.56E+00
Cs-137	<3.58E+00	0.00E+00	3.58E+00
BaLa-140	<5.41E+00	0.00E+00	5.41E+00
Be-7	<2.71E+01	0.00E+00	2.71E+01
K-40	4.77E+01	2.83E+01	3.77E+01

Sample ID: 403603 **Sample Dates: 12/8/2015 - 3/1/2016**

Nuclide	Activity	2 Sigma Error	MDA
H3SW	2.79E+02	1.24E+02	1.99E+02

Sample ID: 406361 **Sample Dates: 3/1/2016 - 3/29/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.36E+00	0.00E+00	1.36E+00
Co-58	<1.67E+00	0.00E+00	1.67E+00
Fe-59	<3.53E+00	0.00E+00	3.53E+00
Co-60	<1.44E+00	0.00E+00	1.44E+00
Zn-65	<3.07E+00	0.00E+00	3.07E+00
Zr-95	<3.14E+00	0.00E+00	3.14E+00
Nb-95	<2.16E+00	0.00E+00	2.16E+00
I-131	<9.94E+00	0.00E+00	9.94E+00
Cs-134	<1.69E+00	0.00E+00	1.69E+00
Cs-137	<1.56E+00	0.00E+00	1.56E+00
BaLa-140	<4.26E+00	0.00E+00	4.26E+00
Be-7	<1.29E+01	0.00E+00	1.29E+01
K-40	3.67E+01	1.80E+01	2.61E+01

Sample ID: 409772 **Sample Dates: 3/29/2016 - 4/26/2016**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.52E+00	0.00E+00	2.52E+00
Co-58	<2.94E+00	0.00E+00	2.94E+00
Fe-59	<3.91E+00	0.00E+00	3.91E+00
Co-60	<3.20E+00	0.00E+00	3.20E+00

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

Sample Point 215 [CONTROL - NNE @ 4.21 miles]

Sample ID: 409772 Sample Dates: 3/29/2016 - 4/26/2016

Nuclide	Activity	2 Sigma Error	MDA
Zn-65	<6.53E+00	0.00E+00	6.53E+00
Zr-95	<6.66E+00	0.00E+00	6.66E+00
Nb-95	<4.86E+00	0.00E+00	4.86E+00
I-131	<1.13E+01	0.00E+00	1.13E+01
Cs-134	<3.64E+00	0.00E+00	3.64E+00
Cs-137	<3.09E+00	0.00E+00	3.09E+00
BaLa-140	<7.14E+00	0.00E+00	7.14E+00
Be-7	<2.79E+01	0.00E+00	2.79E+01
K-40	3.30E+01	2.96E+01	4.58E+01

Sample ID: 412211 Sample Dates: 4/26/2016 - 5/24/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.88E+00	0.00E+00	2.88E+00
Co-58	<4.21E+00	0.00E+00	4.21E+00
Fe-59	<8.87E+00	0.00E+00	8.87E+00
Co-60	<3.46E+00	0.00E+00	3.46E+00
Zn-65	<5.49E+00	0.00E+00	5.49E+00
Zr-95	<7.83E+00	0.00E+00	7.83E+00
Nb-95	<4.69E+00	0.00E+00	4.69E+00
I-131	<1.18E+01	0.00E+00	1.18E+01
Cs-134	<4.00E+00	0.00E+00	4.00E+00
Cs-137	<3.88E+00	0.00E+00	3.88E+00
BaLa-140	<1.03E+01	0.00E+00	1.03E+01
Be-7	<3.36E+01	0.00E+00	3.36E+01
K-40	<5.77E+01	0.00E+00	5.77E+01

Sample ID: 413177 Sample Dates: 3/1/2016 - 5/24/2016

Nuclide	Activity	2 Sigma Error	MDA
H3SW	2.30E+02	1.20E+02	1.95E+02

Sample ID: 415018 Sample Dates: 5/24/2016 - 6/21/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.46E+00	0.00E+00	3.46E+00
Co-58	<4.74E+00	0.00E+00	4.74E+00
Fe-59	<8.36E+00	0.00E+00	8.36E+00
Co-60	<4.61E+00	0.00E+00	4.61E+00
Zn-65	<9.04E+00	0.00E+00	9.04E+00
Zr-95	<6.30E+00	0.00E+00	6.30E+00
Nb-95	<5.25E+00	0.00E+00	5.25E+00
I-131	<1.20E+01	0.00E+00	1.20E+01
Cs-134	<4.33E+00	0.00E+00	4.33E+00
Cs-137	<3.99E+00	0.00E+00	3.99E+00
BaLa-140	<1.13E+01	0.00E+00	1.13E+01
Be-7	<2.69E+01	0.00E+00	2.69E+01
K-40	<5.40E+01	0.00E+00	5.40E+01

Sample ID: 417400 Sample Dates: 6/21/2016 - 7/19/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.69E+00	0.00E+00	2.69E+00
Co-58	<3.23E+00	0.00E+00	3.23E+00
Fe-59	<7.67E+00	0.00E+00	7.67E+00
Co-60	<4.24E+00	0.00E+00	4.24E+00
Zn-65	<7.78E+00	0.00E+00	7.78E+00
Zr-95	<4.93E+00	0.00E+00	4.93E+00
Nb-95	<3.60E+00	0.00E+00	3.60E+00
I-131	<1.16E+01	0.00E+00	1.16E+01
Cs-134	<4.50E+00	0.00E+00	4.50E+00
Cs-137	<3.44E+00	0.00E+00	3.44E+00
BaLa-140	<8.61E+00	0.00E+00	8.61E+00
Be-7	<3.47E+01	0.00E+00	3.47E+01
K-40	6.11E+01	3.93E+01	5.44E+01

Sample ID: 419485 Sample Dates: 7/19/2016 - 8/16/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<4.98E+00	0.00E+00	4.98E+00
Co-58	<4.76E+00	0.00E+00	4.76E+00
Fe-59	<8.49E+00	0.00E+00	8.49E+00
Co-60	<3.98E+00	0.00E+00	3.98E+00
Zn-65	<7.33E+00	0.00E+00	7.33E+00
Zr-95	<6.83E+00	0.00E+00	6.83E+00
Nb-95	<4.29E+00	0.00E+00	4.29E+00
I-131	<1.13E+01	0.00E+00	1.13E+01

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

Sample Point 215 [CONTROL - NNE @ 4.21 miles]

Sample ID: 419485 Sample Dates: 7/19/2016 - 8/16/2016

Nuclide	Activity	2 Sigma Error	MDA
Cs-134	<4.58E+00	0.00E+00	4.58E+00
Cs-137	<3.38E+00	0.00E+00	3.38E+00
BaLa-140	<9.46E+00	0.00E+00	9.46E+00
Be-7	<3.47E+01	0.00E+00	3.47E+01
K-40	<7.00E+01	0.00E+00	7.00E+01

Sample ID: 420858 Sample Dates: 5/24/2016 - 8/16/2016

Nuclide	Activity	2 Sigma Error	MDA
H3SW	2.27E+02	1.18E+02	1.91E+02

Sample ID: 422562 Sample Dates: 8/16/2016 - 9/13/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.54E+00	0.00E+00	1.54E+00
Co-58	<1.84E+00	0.00E+00	1.84E+00
Fe-59	<3.95E+00	0.00E+00	3.95E+00
Co-60	<1.68E+00	0.00E+00	1.68E+00
Zn-65	<3.81E+00	0.00E+00	3.81E+00
Zr-95	<3.59E+00	0.00E+00	3.59E+00
Nb-95	<2.18E+00	0.00E+00	2.18E+00
I-131	<9.54E+00	0.00E+00	9.54E+00
Cs-134	<1.84E+00	0.00E+00	1.84E+00
Cs-137	<1.78E+00	0.00E+00	1.78E+00
BaLa-140	<5.19E+00	0.00E+00	5.19E+00
Be-7	<1.59E+01	0.00E+00	1.59E+01
K-40	3.66E+01	1.63E+01	2.18E+01

Sample ID: 425983 Sample Dates: 9/13/2016 - 10/11/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.14E+00	0.00E+00	3.14E+00
Co-58	<2.72E+00	0.00E+00	2.72E+00
Fe-59	<6.90E+00	0.00E+00	6.90E+00
Co-60	<2.79E+00	0.00E+00	2.79E+00
Zn-65	<4.61E+00	0.00E+00	4.61E+00
Zr-95	<6.19E+00	0.00E+00	6.19E+00
Nb-95	<4.61E+00	0.00E+00	4.61E+00
I-131	<1.20E+01	0.00E+00	1.20E+01
Cs-134	<3.35E+00	0.00E+00	3.35E+00
Cs-137	<3.04E+00	0.00E+00	3.04E+00
BaLa-140	<8.49E+00	0.00E+00	8.49E+00
Be-7	<3.45E+01	0.00E+00	3.45E+01
K-40	4.45E+01	2.83E+01	3.83E+01

Sample ID: 428196 Sample Dates: 10/11/2016 - 11/8/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.91E+00	0.00E+00	2.91E+00
Co-58	<4.13E+00	0.00E+00	4.13E+00
Fe-59	<6.50E+00	0.00E+00	6.50E+00
Co-60	<3.33E+00	0.00E+00	3.33E+00
Zn-65	<6.12E+00	0.00E+00	6.12E+00
Zr-95	<6.73E+00	0.00E+00	6.73E+00
Nb-95	<3.58E+00	0.00E+00	3.58E+00
I-131	<1.18E+01	0.00E+00	1.18E+01
Cs-134	<2.13E+00	0.00E+00	2.13E+00
Cs-137	<4.27E+00	0.00E+00	4.27E+00
BaLa-140	<6.84E+00	0.00E+00	6.84E+00
Be-7	<2.79E+01	0.00E+00	2.79E+01
K-40	<6.18E+01	0.00E+00	6.18E+01

Sample ID: 427837 Sample Dates: 8/16/2016 - 12/6/2016

Nuclide	Activity	2 Sigma Error	MDA
H3SW	3.87E+02	1.19E+02	1.87E+02

Sample ID: 430560 Sample Dates: 11/8/2016 - 12/6/2016

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.86E+00	0.00E+00	2.86E+00
Co-58	<3.02E+00	0.00E+00	3.02E+00
Fe-59	<6.41E+00	0.00E+00	6.41E+00
Co-60	<2.14E+00	0.00E+00	2.14E+00
Zn-65	<6.72E+00	0.00E+00	6.72E+00
Zr-95	<5.36E+00	0.00E+00	5.36E+00
Nb-95	<5.14E+00	0.00E+00	5.14E+00
I-131	<1.12E+01	0.00E+00	1.12E+01
Cs-134	<3.02E+00	0.00E+00	3.02E+00

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

Sample Point 215 [CONTROL - NNE @ 4.21 miles]

Sample ID: 430560 **Sample Dates: 11/8/2016 - 12/6/2016**

Nuclide	Activity	2 Sigma Error	MDA
Cs-137	<3.13E+00	0.00E+00	3.13E+00
BaLa-140	<5.92E+00	0.00E+00	5.92E+00
Be-7	<3.01E+01	0.00E+00	3.01E+01
K-40	1.11E+01	2.84E+01	4.99E+01

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 200 [INDICATOR - NNE @ 0.63 miles] **TLD RING TLD_INNER**

Sample ID: 403360 **Sample Dates: 12/17/2015 - 3/17/2016**

Nuclide	Activity
mR/Std Qtr	19.33

Sample ID: 412934 **Sample Dates: 3/17/2016 - 6/16/2016**

Nuclide	Activity
mR/Std Qtr	15.81

Sample ID: 420933 **Sample Dates: 6/16/2016 - 9/15/2016**

Nuclide	Activity
mR/Std Qtr	15.31

Sample ID: 430280 **Sample Dates: 9/15/2016 - 12/15/2016**

Nuclide	Activity
mR/Std Qtr	20.13

Sample Point 201 [INDICATOR - NE @ 0.53 miles] **TLD RING TLD_INNER**

Sample ID: 403361 **Sample Dates: 12/17/2015 - 3/17/2016**

Nuclide	Activity
mR/Std Qtr	18.87

Sample ID: 412935 **Sample Dates: 3/17/2016 - 6/16/2016**

Nuclide	Activity
mR/Std Qtr	17.16

Sample ID: 420934 **Sample Dates: 6/16/2016 - 9/15/2016**

Nuclide	Activity
mR/Std Qtr	14.14

Sample ID: 430281 **Sample Dates: 9/15/2016 - 12/15/2016**

Nuclide	Activity
mR/Std Qtr	17.84

Sample Point 203 [INDICATOR - ESE @ 0.38 miles] **TLD RING TLD_INNER**

Sample ID: 403362 **Sample Dates: 12/17/2015 - 3/17/2016**

Nuclide	Activity
mR/Std Qtr	20.16

Sample ID: 412936 **Sample Dates: 3/17/2016 - 6/16/2016**

Nuclide	Activity
mR/Std Qtr	16.36

Sample ID: 420935 **Sample Dates: 6/16/2016 - 9/15/2016**

Nuclide	Activity
mR/Std Qtr	16.58

Sample ID: 430282 **Sample Dates: 9/15/2016 - 12/15/2016**

Nuclide	Activity
mR/Std Qtr	25.29

Sample Point 204 [INDICATOR - SSW @ 0.48 miles] **TLD RING TLD_INNER**

Sample ID: 403363 **Sample Dates: 12/17/2015 - 3/17/2016**

Nuclide	Activity
mR/Std Qtr	17.57

Sample ID: 412937 **Sample Dates: 3/17/2016 - 6/16/2016**

Nuclide	Activity
mR/Std Qtr	14.74

Sample ID: 420936 **Sample Dates: 6/16/2016 - 9/15/2016**

Nuclide	Activity
mR/Std Qtr	15.11

Sample ID: 430283 **Sample Dates: 9/15/2016 - 12/15/2016**

Nuclide	Activity
mR/Std Qtr	19.86

Sample Point 205 [INDICATOR - SW @ 0.5 miles] **TLD RING TLD_INNER**

Sample ID: 403364 **Sample Dates: 12/17/2015 - 3/17/2016**

Nuclide	Activity
mR/Std Qtr	19.29

Sample ID: 412938 **Sample Dates: 3/17/2016 - 6/16/2016**

Nuclide	Activity
mR/Std Qtr	17.38

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 205 [INDICATOR - SW @ 0.5 miles] — **TLD RING TLD_INNER**

Sample ID:	Sample Dates:	Nuclide	Activity
420937	6/16/2016 - 9/15/2016	mR/Std Qtr	17.63
430284	9/15/2016 - 12/15/2016	mR/Std Qtr	20.35

Sample Point 206 [INDICATOR - WNW @ 0.67 miles] — **TLD RING TLD_INNER**

Sample ID:	Sample Dates:	Nuclide	Activity
403365	12/17/2015 - 3/17/2016	mR/Std Qtr	23.82
412939	3/17/2016 - 6/16/2016	mR/Std Qtr	20.64
420938	6/16/2016 - 9/15/2016	mR/Std Qtr	20.39
430285	9/15/2016 - 12/15/2016	mR/Std Qtr	23.34

Sample Point 207 [INDICATOR - NNW @ 0.95 miles] — **TLD RING TLD_INNER**

Sample ID:	Sample Dates:	Nuclide	Activity
403366	12/17/2015 - 3/17/2016	mR/Std Qtr	22.19
412940	3/17/2016 - 6/16/2016	mR/Std Qtr	18.42
420939	6/16/2016 - 9/15/2016	mR/Std Qtr	18.08
430286	9/15/2016 - 12/15/2016	mR/Std Qtr	20.71

Sample Point 212 [INDICATOR - E @ 3.32 miles] — **TLD RING TLD_SPEC**

Sample ID:	Sample Dates:	Nuclide	Activity
403367	12/17/2015 - 3/17/2016	mR/Std Qtr	17.68
412941	3/17/2016 - 6/16/2016	mR/Std Qtr	15.05
420940	6/16/2016 - 9/15/2016	mR/Std Qtr	14.60
430287	9/15/2016 - 12/15/2016	mR/Std Qtr	18.84

Sample Point 217 [CONTROL - SSE @ 10.3 miles] — **TLD RING TLD_CTRL**

Sample ID:	Sample Dates:	Nuclide	Activity
403368	12/17/2015 - 3/17/2016	mR/Std Qtr	14.72
420941	6/16/2016 - 9/15/2016	mR/Std Qtr	11.15

Sample Point 222 [INDICATOR - N @ 0.71 miles] — **TLD RING TLD_INNER**

Sample ID:	Sample Dates:	Nuclide	Activity
403369	12/17/2015 - 3/17/2016	mR/Std Qtr	18.56
412943	3/17/2016 - 6/16/2016	mR/Std Qtr	15.20
420942	6/16/2016 - 9/15/2016	mR/Std Qtr	15.49
430289	9/15/2016 - 12/15/2016	mR/Std Qtr	18.83

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 223 [INDICATOR - E @ 0.57 miles] — **TLD RING TLD_INNER**

Sample ID:	Sample Dates:	Nuclide	Activity
403370	12/17/2015 - 3/17/2016	mR/Std Qtr	22.01
412944	3/17/2016 - 6/16/2016	mR/Std Qtr	18.39
420943	6/16/2016 - 9/15/2016	mR/Std Qtr	19.79
430290	9/15/2016 - 12/15/2016	mR/Std Qtr	21.01

Sample Point 225 [INDICATOR - SE @ 0.68 miles] — **TLD RING TLD_INNER**

Sample ID:	Sample Dates:	Nuclide	Activity
403371	12/17/2015 - 3/17/2016	mR/Std Qtr	21.04
412945	3/17/2016 - 6/16/2016	mR/Std Qtr	16.14
420944	6/16/2016 - 9/15/2016	mR/Std Qtr	18.78
430291	9/15/2016 - 12/15/2016	mR/Std Qtr	19.59

Sample Point 226 [INDICATOR - S @ 0.48 miles] — **TLD RING TLD_INNER**

Sample ID:	Sample Dates:	Nuclide	Activity
403372	12/17/2015 - 3/17/2016	mR/Std Qtr	18.31
412946	3/17/2016 - 6/16/2016	mR/Std Qtr	16.03
420945	6/16/2016 - 9/15/2016	mR/Std Qtr	18.35
430292	9/15/2016 - 12/15/2016	mR/Std Qtr	17.70

Sample Point 227 [INDICATOR - WSW @ 0.52 miles] — **TLD RING TLD_INNER**

Sample ID:	Sample Dates:	Nuclide	Activity
403373	12/17/2015 - 3/17/2016	mR/Std Qtr	18.61
412947	3/17/2016 - 6/16/2016	mR/Std Qtr	17.26
420946	6/16/2016 - 9/15/2016	mR/Std Qtr	17.01
430293	9/15/2016 - 12/15/2016	mR/Std Qtr	18.88

Sample Point 228 [INDICATOR - W @ 0.61 miles] — **TLD RING TLD_INNER**

Sample ID:	Sample Dates:	Nuclide	Activity
403374	12/17/2015 - 3/17/2016	mR/Std Qtr	19.36
412948	3/17/2016 - 6/16/2016	mR/Std Qtr	17.96
420947	6/16/2016 - 9/15/2016	mR/Std Qtr	16.97
430294	9/15/2016 - 12/15/2016	mR/Std Qtr	19.36

Sample Point 229 [INDICATOR - NW @ 0.84 miles] — **TLD RING TLD_INNER**

Sample ID:	Sample Dates:	Nuclide	Activity
403375	12/17/2015 - 3/17/2016	mR/Std Qtr	25.25

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
412949	3/17/2016 - 6/16/2016	mR/Std Qtr	22.69
420948	6/16/2016 - 9/15/2016	mR/Std Qtr	21.08
430295	9/15/2016 - 12/15/2016	mR/Std Qtr	22.90

Sample Point 230 [INDICATOR - N @ 4.37 miles] — **TLD RING TLD_OUTER**

Sample ID:	Sample Dates:	Nuclide	Activity
403376	12/17/2015 - 3/17/2016	mR/Std Qtr	13.82
412950	3/17/2016 - 6/16/2016	mR/Std Qtr	12.18
420949	6/16/2016 - 9/15/2016	mR/Std Qtr	11.68
430296	9/15/2016 - 12/15/2016	mR/Std Qtr	13.03

Sample Point 231 [INDICATOR - NNE @ 4.21 miles] — **TLD RING TLD_OUTER**

Sample ID:	Sample Dates:	Nuclide	Activity
403377	12/17/2015 - 3/17/2016	mR/Std Qtr	17.20
412951	3/17/2016 - 6/16/2016	mR/Std Qtr	15.95
420950	6/16/2016 - 9/15/2016	mR/Std Qtr	16.82
430297	9/15/2016 - 12/15/2016	mR/Std Qtr	20.24

Sample Point 232 [INDICATOR - NE @ 4.18 miles] — **TLD RING TLD_OUTER**

Sample ID:	Sample Dates:	Nuclide	Activity
403378	12/17/2015 - 3/17/2016	mR/Std Qtr	23.44
412952	3/17/2016 - 6/16/2016	mR/Std Qtr	21.71
420951	6/16/2016 - 9/15/2016	mR/Std Qtr	22.01
430298	9/15/2016 - 12/15/2016	mR/Std Qtr	27.22

Sample Point 233 [INDICATOR - ENE @ 3.95 miles] — **TLD RING TLD_OUTER**

Sample ID:	Sample Dates:	Nuclide	Activity
403379	12/17/2015 - 3/17/2016	mR/Std Qtr	16.35
412953	3/17/2016 - 6/16/2016	mR/Std Qtr	13.68
420952	6/16/2016 - 9/15/2016	mR/Std Qtr	13.04
430299	9/15/2016 - 12/15/2016	mR/Std Qtr	16.08

Sample Point 234 [INDICATOR - E @ 4.5 miles] — **TLD RING TLD_OUTER**

Sample ID:	Sample Dates:	Nuclide	Activity
403380	12/17/2015 - 3/17/2016	mR/Std Qtr	18.29
412954	3/17/2016 - 6/16/2016	mR/Std Qtr	15.99

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
420953	6/16/2016 - 9/15/2016	mR/Std Qtr	16.64
430300	9/15/2016 - 12/15/2016	mR/Std Qtr	19.38

Sample Point 235 [INDICATOR - ESE @ 4.07 miles] — **TLD RING TLD_OUTER**

Sample ID:	Sample Dates:	Nuclide	Activity
403381	12/17/2015 - 3/17/2016	mR/Std Qtr	17.94
412955	3/17/2016 - 6/16/2016	mR/Std Qtr	16.57
420954	6/16/2016 - 9/15/2016	mR/Std Qtr	15.73
430301	9/15/2016 - 12/15/2016	mR/Std Qtr	18.92

Sample Point 236 [INDICATOR - SE @ 4.25 miles] — **TLD RING TLD_OUTER**

Sample ID:	Sample Dates:	Nuclide	Activity
403382	12/17/2015 - 3/17/2016	mR/Std Qtr	23.09
412956	3/17/2016 - 6/16/2016	mR/Std Qtr	21.20
420955	6/16/2016 - 9/15/2016	mR/Std Qtr	19.52
430302	9/15/2016 - 12/15/2016	mR/Std Qtr	23.56

Sample Point 237 [INDICATOR - SSE @ 4.75 miles] — **TLD RING TLD_OUTER**

Sample ID:	Sample Dates:	Nuclide	Activity
403383	12/17/2015 - 3/17/2016	mR/Std Qtr	23.35
412957	3/17/2016 - 6/16/2016	mR/Std Qtr	22.16
420956	6/16/2016 - 9/15/2016	mR/Std Qtr	20.23
430303	9/15/2016 - 12/15/2016	mR/Std Qtr	24.01

Sample Point 238 [INDICATOR - S @ 4.02 miles] — **TLD RING TLD_OUTER**

Sample ID:	Sample Dates:	Nuclide	Activity
403384	12/17/2015 - 3/17/2016	mR/Std Qtr	18.55
412958	3/17/2016 - 6/16/2016	mR/Std Qtr	17.71
420957	6/16/2016 - 9/15/2016	mR/Std Qtr	15.86
430304	9/15/2016 - 12/15/2016	mR/Std Qtr	18.19

Sample Point 239 [INDICATOR - SSW @ 4.49 miles] — **TLD RING TLD_OUTER**

Sample ID:	Sample Dates:	Nuclide	Activity
403385	12/17/2015 - 3/17/2016	mR/Std Qtr	20.66
412959	3/17/2016 - 6/16/2016	mR/Std Qtr	17.04
420958	6/16/2016 - 9/15/2016	mR/Std Qtr	16.91

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
430305	9/15/2016 - 12/15/2016	mR/Std Qtr	20.02

Sample Point 240 [INDICATOR - SW @ 4.07 miles] — **TLD RING TLD_OUTER**

Sample ID:	Sample Dates:	Nuclide	Activity
403386	12/17/2015 - 3/17/2016	mR/Std Qtr	13.83
412960	3/17/2016 - 6/16/2016	mR/Std Qtr	11.47
420959	6/16/2016 - 9/15/2016	mR/Std Qtr	11.09
430306	9/15/2016 - 12/15/2016	mR/Std Qtr	14.05

Sample Point 241 [INDICATOR - WSW @ 4.58 miles] — **TLD RING TLD_OUTER**

Sample ID:	Sample Dates:	Nuclide	Activity
403387	12/17/2015 - 3/17/2016	mR/Std Qtr	13.55
412961	3/17/2016 - 6/16/2016	mR/Std Qtr	12.51
420960	6/16/2016 - 9/15/2016	mR/Std Qtr	11.98
430307	9/15/2016 - 12/15/2016	mR/Std Qtr	13.11

Sample Point 242 [INDICATOR - W @ 4.56 miles] — **TLD RING TLD_OUTER**

Sample ID:	Sample Dates:	Nuclide	Activity
403388	12/17/2015 - 3/17/2016	mR/Std Qtr	17.65
412962	3/17/2016 - 6/16/2016	mR/Std Qtr	16.62
420961	6/16/2016 - 9/15/2016	mR/Std Qtr	14.83
430308	9/15/2016 - 12/15/2016	mR/Std Qtr	17.78

Sample Point 243 [INDICATOR - WNW @ 4.39 miles] — **TLD RING TLD_OUTER**

Sample ID:	Sample Dates:	Nuclide	Activity
403389	12/17/2015 - 3/17/2016	mR/Std Qtr	16.66
412963	3/17/2016 - 6/16/2016	mR/Std Qtr	16.31
420962	6/16/2016 - 9/15/2016	mR/Std Qtr	14.46
430309	9/15/2016 - 12/15/2016	mR/Std Qtr	17.40

Sample Point 244 [INDICATOR - NW @ 4.02 miles] — **TLD RING TLD_OUTER**

Sample ID:	Sample Dates:	Nuclide	Activity
403390	12/17/2015 - 3/17/2016	mR/Std Qtr	20.41
412964	3/17/2016 - 6/16/2016	mR/Std Qtr	18.22
420963	6/16/2016 - 9/15/2016	mR/Std Qtr	18.55
430310	9/15/2016 - 12/15/2016	mR/Std Qtr	22.06

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 245 [INDICATOR - NNW @ 4.01 miles] — **TLD RING TLD_OUTER**

Sample ID:	Sample Dates:	Nuclide	Activity
403391	12/17/2015 - 3/17/2016	mR/Std Qtr	17.22
412965	3/17/2016 - 6/16/2016	mR/Std Qtr	15.86
420964	6/16/2016 - 9/15/2016	mR/Std Qtr	13.62
430311	9/15/2016 - 12/15/2016	mR/Std Qtr	17.91

Sample Point 246 [INDICATOR - ENE @ 7.87 miles] — **TLD RING TLD_SPEC**

Sample ID:	Sample Dates:	Nuclide	Activity
403392	12/17/2015 - 3/17/2016	mR/Std Qtr	16.06
412966	3/17/2016 - 6/16/2016	mR/Std Qtr	14.36
420965	6/16/2016 - 9/15/2016	mR/Std Qtr	16.68
430312	9/15/2016 - 12/15/2016	mR/Std Qtr	16.70

Sample Point 247 [CONTROL - ESE @ 7.33 miles] — **TLD RING TLD_CTRL**

Sample ID:	Sample Dates:	Nuclide	Activity
403393	12/17/2015 - 3/17/2016	mR/Std Qtr	13.79
412967	3/17/2016 - 6/16/2016	mR/Std Qtr	12.05
420966	6/16/2016 - 9/15/2016	mR/Std Qtr	11.30
430313	9/15/2016 - 12/15/2016	mR/Std Qtr	13.97

Sample Point 248 [INDICATOR - S @ 6.54 miles] — **TLD RING TLD_SPEC**

Sample ID:	Sample Dates:	Nuclide	Activity
403394	12/17/2015 - 3/17/2016	mR/Std Qtr	16.09
412968	3/17/2016 - 6/16/2016	mR/Std Qtr	13.73
420967	6/16/2016 - 9/15/2016	mR/Std Qtr	11.88
430314	9/15/2016 - 12/15/2016	mR/Std Qtr	15.40

Sample Point 249 [INDICATOR - S @ 7.17 miles] — **TLD RING TLD_SPEC**

Sample ID:	Sample Dates:	Nuclide	Activity
403395	12/17/2015 - 3/17/2016	mR/Std Qtr	17.06
412969	3/17/2016 - 6/16/2016	mR/Std Qtr	18.08
420968	6/16/2016 - 9/15/2016	mR/Std Qtr	13.90
430315	9/15/2016 - 12/15/2016	mR/Std Qtr	16.68

Sample Point 250 [INDICATOR - WSW @ 10.4 miles] — **TLD RING TLD_SPEC**

Sample ID:	Sample Dates:	Nuclide	Activity
403396	12/17/2015 - 3/17/2016	mR/Std Qtr	17.46

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
412970	3/17/2016 - 6/16/2016	mR/Std Qtr	17.24
420969	6/16/2016 - 9/15/2016	mR/Std Qtr	15.11
430316	9/15/2016 - 12/15/2016	mR/Std Qtr	16.21

Sample Point 251 [CONTROL - WNW @ 9.72 miles] — **TLD RING TLD_CTRL**

Sample ID:	Sample Dates:	Nuclide	Activity
403397	12/17/2015 - 3/17/2016	mR/Std Qtr	18.40
412971	3/17/2016 - 6/16/2016	mR/Std Qtr	15.60
420970	6/16/2016 - 9/15/2016	mR/Std Qtr	15.28
430317	9/15/2016 - 12/15/2016	mR/Std Qtr	15.11

Sample Point 255 [INDICATOR - ENE @ 0.61 miles] — **TLD RING TLD_INNER**

Sample ID:	Sample Dates:	Nuclide	Activity
403398	12/17/2015 - 3/17/2016	mR/Std Qtr	21.38
412972	3/17/2016 - 6/16/2016	mR/Std Qtr	19.61
420971	6/16/2016 - 9/15/2016	mR/Std Qtr	20.70
430318	9/15/2016 - 12/15/2016	mR/Std Qtr	21.65

Sample Point 256 [INDICATOR - SSE @ 0.58 miles] — **TLD RING TLD_INNER**

Sample ID:	Sample Dates:	Nuclide	Activity
403399	12/17/2015 - 3/17/2016	mR/Std Qtr	21.04
412973	3/17/2016 - 6/16/2016	mR/Std Qtr	21.48
420972	6/16/2016 - 9/15/2016	mR/Std Qtr	19.95
430319	9/15/2016 - 12/15/2016	mR/Std Qtr	22.64

Sample Point 258 [INDICATOR TLD @ AIR CONTROL - W @ 9.84 miles] — **TLD RING TLD_SPEC**

Sample ID:	Sample Dates:	Nuclide	Activity
403400	12/17/2015 - 3/17/2016	mR/Std Qtr	21.64
412974	3/17/2016 - 6/16/2016	mR/Std Qtr	18.14
420973	6/16/2016 - 9/15/2016	mR/Std Qtr	16.87
430320	9/15/2016 - 12/15/2016	mR/Std Qtr	19.60

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
398621	1/6/2016 - 1/6/2016	MIXEDBLV	Mn-54	<1.91E+01	0.00E+00	1.91E+01
			Co-58	<1.89E+01	0.00E+00	1.89E+01
			Fe-59	<5.28E+01	0.00E+00	5.28E+01

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	398621	Sample Dates: 1/6/2016 - 1/6/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Co-60	<2.11E+01	0.00E+00	2.11E+01
				Zn-65	<3.29E+01	0.00E+00	3.29E+01
				Zr-95	<3.73E+01	0.00E+00	3.73E+01
				Nb-95	<2.37E+01	0.00E+00	2.37E+01
				I-131	<1.97E+01	0.00E+00	1.97E+01
				Cs-134	<2.35E+01	0.00E+00	2.35E+01
				Cs-137	<2.55E+01	0.00E+00	2.55E+01
				BaLa-140	<2.07E+01	0.00E+00	2.07E+01
				Be-7	1.50E+03	2.72E+02	2.03E+02
				K-40	2.87E+03	5.32E+02	3.06E+02
Sample ID:	**400267**	**Sample Dates: 2/2/2016 - 2/2/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.50E+01	0.00E+00	1.50E+01
				Co-58	<1.72E+01	0.00E+00	1.72E+01
				Fe-59	<3.91E+01	0.00E+00	3.91E+01
				Co-60	<2.19E+01	0.00E+00	2.19E+01
				Zn-65	<4.36E+01	0.00E+00	4.36E+01
				Zr-95	<3.73E+01	0.00E+00	3.73E+01
				Nb-95	<2.09E+01	0.00E+00	2.09E+01
				I-131	<1.97E+01	0.00E+00	1.97E+01
				Cs-134	<2.59E+01	0.00E+00	2.59E+01
				Cs-137	<2.31E+01	0.00E+00	2.31E+01
				BaLa-140	<2.06E+01	0.00E+00	2.06E+01
				Be-7	1.17E+03	2.44E+02	2.21E+02
				K-40	2.59E+03	4.89E+02	2.90E+02
Sample ID:	**402256**	**Sample Dates: 3/1/2016 - 3/1/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.94E+01	0.00E+00	2.94E+01
				Co-58	<2.69E+01	0.00E+00	2.69E+01
				Fe-59	<4.61E+01	0.00E+00	4.61E+01
				Co-60	<2.11E+01	0.00E+00	2.11E+01
				Zn-65	<6.28E+01	0.00E+00	6.28E+01
				Zr-95	<6.43E+01	0.00E+00	6.43E+01
				Nb-95	<3.50E+01	0.00E+00	3.50E+01
				I-131	<2.45E+01	0.00E+00	2.45E+01
				Cs-134	<2.92E+01	0.00E+00	2.92E+01
				Cs-137	<2.41E+01	0.00E+00	2.41E+01
				BaLa-140	<3.48E+01	0.00E+00	3.48E+01
				Be-7	1.80E+03	3.43E+02	2.81E+02
				K-40	2.37E+03	5.24E+02	3.10E+02
Sample ID:	**406014**	**Sample Dates: 4/5/2016 - 4/5/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<7.52E+00	0.00E+00	7.52E+00
				Co-58	<8.72E+00	0.00E+00	8.72E+00
				Fe-59	<2.19E+01	0.00E+00	2.19E+01
				Co-60	<8.71E+00	0.00E+00	8.71E+00
				Zn-65	<1.91E+01	0.00E+00	1.91E+01
				Zr-95	<1.48E+01	0.00E+00	1.48E+01
				Nb-95	<1.03E+01	0.00E+00	1.03E+01
				I-131	<3.36E+01	0.00E+00	3.36E+01
				Cs-134	<9.93E+00	0.00E+00	9.93E+00
				Cs-137	<8.82E+00	0.00E+00	8.82E+00
				BaLa-140	<1.91E+01	0.00E+00	1.91E+01
				Be-7	5.31E+02	1.11E+02	1.34E+02
				K-40	3.68E+03	3.81E+02	1.11E+02
Sample ID:	**409564**	**Sample Dates: 5/3/2016 - 5/3/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<3.21E+01	0.00E+00	3.21E+01
				Co-58	<2.62E+01	0.00E+00	2.62E+01
				Fe-59	<5.97E+01	0.00E+00	5.97E+01
				Co-60	<3.06E+01	0.00E+00	3.06E+01
				Zn-65	<6.08E+01	0.00E+00	6.08E+01
				Zr-95	<4.74E+01	0.00E+00	4.75E+01
				Nb-95	<2.94E+01	0.00E+00	2.94E+01
				I-131	<1.77E+01	0.00E+00	1.77E+01
				Cs-134	<3.12E+01	0.00E+00	3.12E+01
				Cs-137	<2.91E+01	0.00E+00	2.91E+01

Sample ID:	409564	Sample Dates: 5/3/2016 - 5/3/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				BaLa-140	<4.14E+01	0.00E+00	4.14E+01
				Be-7	5.24E+02	2.18E+02	2.87E+02
				K-40	3.29E+03	6.64E+02	4.67E+02
Sample ID:	**412034**	**Sample Dates: 6/1/2016 - 6/1/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.64E+01	0.00E+00	1.64E+01
				Co-58	<1.34E+01	0.00E+00	1.34E+01
				Fe-59	<2.66E+01	0.00E+00	2.66E+01
				Co-60	<1.86E+01	0.00E+00	1.86E+01
				Zn-65	<3.82E+01	0.00E+00	3.82E+01
				Zr-95	<3.20E+01	0.00E+00	3.20E+01
				Nb-95	<1.72E+01	0.00E+00	1.72E+01
				I-131	<1.15E+01	0.00E+00	1.15E+01
				Cs-134	<1.84E+01	0.00E+00	1.84E+01
				Cs-137	<1.65E+01	0.00E+00	1.65E+01
				BaLa-140	<1.23E+01	0.00E+00	1.23E+01
				Be-7	7.76E+02	1.84E+02	1.94E+02
				K-40	3.82E+03	5.64E+02	2.59E+02
Sample ID:	**414419**	**Sample Dates: 7/6/2016 - 7/6/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.81E+01	0.00E+00	1.81E+01
				Co-58	<1.02E+01	0.00E+00	1.02E+01
				Fe-59	<3.76E+01	0.00E+00	3.76E+01
				Co-60	<2.55E+01	0.00E+00	2.55E+01
				Zn-65	<4.06E+01	0.00E+00	4.06E+01
				Zr-95	<2.73E+01	0.00E+00	2.73E+01
				Nb-95	<1.83E+01	0.00E+00	1.83E+01
				I-131	<1.50E+01	0.00E+00	1.50E+01
				Cs-134	<2.17E+01	0.00E+00	2.17E+01
				Cs-137	<1.62E+01	0.00E+00	1.62E+01
				BaLa-140	<1.30E+01	0.00E+00	1.30E+01
				Be-7	5.76E+02	1.61E+02	1.80E+02
				K-40	3.57E+03	5.57E+02	2.94E+02
Sample ID:	**417254**	**Sample Dates: 8/2/2016 - 8/2/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.67E+01	0.00E+00	1.67E+01
				Co-58	<1.64E+01	0.00E+00	1.64E+01
				Fe-59	<3.90E+01	0.00E+00	3.90E+01
				Co-60	<2.45E+01	0.00E+00	2.45E+01
				Zn-65	<4.96E+01	0.00E+00	4.96E+01
				Zr-95	<3.21E+01	0.00E+00	3.21E+01
				Nb-95	<1.64E+01	0.00E+00	1.64E+01
				I-131	<1.82E+01	0.00E+00	1.82E+01
				Cs-134	<2.05E+01	0.00E+00	2.05E+01
				Cs-137	<1.90E+01	0.00E+00	1.90E+01
				BaLa-140	<1.31E+01	0.00E+00	1.31E+01
				Be-7	5.81E+02	1.83E+02	2.28E+02
				K-40	3.79E+03	5.79E+02	2.44E+02
Sample ID:	**419431**	**Sample Dates: 9/7/2016 - 9/7/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.56E+01	0.00E+00	1.56E+01
				Co-58	<1.76E+01	0.00E+00	1.76E+01
				Fe-59	<2.95E+01	0.00E+00	2.95E+01
				Co-60	<1.80E+01	0.00E+00	1.80E+01
				Zn-65	<4.96E+01	0.00E+00	4.96E+01
				Zr-95	<3.07E+01	0.00E+00	3.07E+01
				Nb-95	<1.49E+01	0.00E+00	1.49E+01
				I-131	<2.36E+01	0.00E+00	2.36E+01
				Cs-134	<2.26E+01	0.00E+00	2.26E+01
				Cs-137	<1.81E+01	0.00E+00	1.81E+01
				BaLa-140	<1.73E+01	0.00E+00	1.73E+01
				Be-7	7.23E+02	1.91E+02	2.06E+02
				K-40	2.37E+03	4.29E+02	1.60E+02
Sample ID:	**422483**	**Sample Dates: 10/4/2016 - 10/4/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.40E+01	0.00E+00	2.40E+01
				Co-58	<2.12E+01	0.00E+00	2.12E+01

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	422483	Sample Dates: 10/4/2016 - 10/4/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Fe-59	<3.90E+01	0.00E+00	3.90E+01
				Co-60	<2.16E+01	0.00E+00	2.16E+01
				Zn-65	<3.75E+01	0.00E+00	3.75E+01
				Zr-95	<2.97E+01	0.00E+00	2.97E+01
				Nb-95	<1.95E+01	0.00E+00	1.95E+01
				I-131	<1.97E+01	0.00E+00	1.97E+01
				Cs-134	<2.12E+01	0.00E+00	2.12E+01
				Cs-137	<2.61E+01	0.00E+00	2.61E+01
				BaLa-140	<2.12E+01	0.00E+00	2.12E+01
				Be-7	1.10E+03	2.30E+02	1.84E+02
				K-40	2.51E+03	5.03E+02	3.39E+02
Sample ID:	**425976**	**Sample Dates: 11/1/2016 - 11/1/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.94E+01	0.00E+00	1.94E+01
				Co-58	<1.53E+01	0.00E+00	1.53E+01
				Fe-59	<4.03E+01	0.00E+00	4.03E+01
				Co-60	<2.38E+01	0.00E+00	2.38E+01
				Zn-65	<3.92E+01	0.00E+00	3.92E+01
				Zr-95	<2.79E+01	0.00E+00	2.79E+01
				Nb-95	<1.90E+01	0.00E+00	1.90E+01
				I-131	<1.67E+01	0.00E+00	1.67E+01
				Cs-134	<1.83E+01	0.00E+00	1.83E+01
				Cs-137	<2.13E+01	0.00E+00	2.13E+01
				BaLa-140	<2.49E+01	0.00E+00	2.49E+01
				Be-7	6.68E+02	1.84E+02	2.08E+02
				K-40	2.45E+03	4.88E+02	4.11E+02
Sample ID:	**428478**	**Sample Dates: 12/6/2016 - 12/6/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.65E+01	0.00E+00	1.65E+01
				Co-58	<1.53E+01	0.00E+00	1.53E+01
				Fe-59	<4.49E+01	0.00E+00	4.49E+01
				Co-60	<1.73E+01	0.00E+00	1.73E+01
				Zn-65	<4.19E+01	0.00E+00	4.19E+01
				Zr-95	<3.14E+01	0.00E+00	3.14E+01
				Nb-95	<1.37E+01	0.00E+00	1.37E+01
				I-131	<1.85E+01	0.00E+00	1.85E+01
				Cs-134	<2.70E+01	0.00E+00	2.70E+01
				Cs-137	<2.01E+01	0.00E+00	2.01E+01
				BaLa-140	<2.89E+01	0.00E+00	2.89E+01
				Be-7	8.45E+02	1.94E+02	1.74E+02
				K-40	3.55E+03	5.83E+02	3.20E+02

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	398622	Sample Dates: 1/6/2016 - 1/6/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<1.04E+01	0.00E+00	1.04E+01
				Co-58	<1.10E+01	0.00E+00	1.10E+01
				Fe-59	<2.23E+01	0.00E+00	2.23E+01
				Co-60	<9.44E+00	0.00E+00	9.44E+00
				Zn-65	<2.28E+01	0.00E+00	2.28E+01
				Zr-95	<1.83E+01	0.00E+00	1.83E+01
				Nb-95	<1.47E+01	0.00E+00	1.47E+01
				I-131	<4.08E+01	0.00E+00	4.08E+01
				Cs-134	<1.16E+01	0.00E+00	1.16E+01
				Cs-137	<1.13E+01	0.00E+00	1.13E+01
				BaLa-140	<2.83E+01	0.00E+00	2.83E+01
				Be-7	1.75E+03	2.07E+02	1.44E+02
				K-40	2.76E+03	3.05E+02	1.39E+02
Sample ID:	**400268**	**Sample Dates: 2/2/2016 - 2/2/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.96E+01	0.00E+00	1.96E+01
				Co-58	<1.95E+01	0.00E+00	1.95E+01
				Fe-59	<4.07E+01	0.00E+00	4.07E+01
				Co-60	<1.77E+01	0.00E+00	1.77E+01
				Zn-65	<4.29E+01	0.00E+00	4.29E+01
				Zr-95	<4.46E+01	0.00E+00	4.46E+01
				Nb-95	<1.81E+01	0.00E+00	1.81E+01

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	400268	Sample Dates: 2/2/2016 - 2/2/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				I-131	<2.13E+01	0.00E+00	2.13E+01
				Cs-134	<2.83E+01	0.00E+00	2.83E+01
				Cs-137	<3.06E+01	0.00E+00	3.06E+01
				BaLa-140	<2.04E+01	0.00E+00	2.04E+01
				Be-7	1.90E+03	3.19E+02	2.58E+02
				K-40	2.28E+03	4.92E+02	4.38E+02
Sample ID:	**402257**	**Sample Dates: 3/1/2016 - 3/1/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.27E+01	0.00E+00	2.27E+01
				Co-58	<2.72E+01	0.00E+00	2.72E+01
				Fe-59	<6.17E+01	0.00E+00	6.17E+01
				Co-60	<3.02E+01	0.00E+00	3.02E+01
				Zn-65	<9.07E+01	0.00E+00	9.07E+01
				Zr-95	<4.18E+01	0.00E+00	4.18E+01
				Nb-95	<2.87E+01	0.00E+00	2.87E+01
				I-131	<3.09E+01	0.00E+00	3.09E+01
				Cs-134	<3.91E+01	0.00E+00	3.91E+01
				Cs-137	<3.67E+01	0.00E+00	3.67E+01
				BaLa-140	<2.98E+01	0.00E+00	2.98E+01
				Be-7	2.36E+03	4.17E+02	3.15E+02
				K-40	3.81E+03	7.31E+02	4.63E+02
Sample ID:	**406015**	**Sample Dates: 4/5/2016 - 4/5/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.20E+01	0.00E+00	2.20E+01
				Co-58	<2.00E+01	0.00E+00	2.00E+01
				Fe-59	<4.76E+01	0.00E+00	4.76E+01
				Co-60	<2.31E+01	0.00E+00	2.31E+01
				Zn-65	<5.13E+01	0.00E+00	5.13E+01
				Zr-95	<3.47E+01	0.00E+00	3.47E+01
				Nb-95	<2.40E+01	0.00E+00	2.40E+01
				I-131	<1.93E+01	0.00E+00	1.93E+01
				Cs-134	<3.14E+01	0.00E+00	3.14E+01
				Cs-137	<2.44E+01	0.00E+00	2.44E+01
				BaLa-140	<2.08E+01	0.00E+00	2.08E+01
				Be-7	2.99E+02	1.69E+02	2.46E+02
				K-40	4.30E+03	6.74E+02	3.41E+02
Sample ID:	**409565**	**Sample Dates: 5/3/2016 - 5/3/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.95E+01	0.00E+00	1.95E+01
				Co-58	<1.72E+01	0.00E+00	1.72E+01
				Fe-59	<3.62E+01	0.00E+00	3.62E+01
				Co-60	<1.93E+01	0.00E+00	1.93E+01
				Zn-65	<5.66E+01	0.00E+00	5.66E+01
				Zr-95	<2.59E+01	0.00E+00	2.59E+01
				Nb-95	<1.95E+01	0.00E+00	1.95E+01
				I-131	<1.89E+01	0.00E+00	1.89E+01
				Cs-134	<2.69E+01	0.00E+00	2.69E+01
				Cs-137	<2.99E+01	0.00E+00	2.99E+01
				BaLa-140	<2.71E+01	0.00E+00	2.71E+01
				Be-7	6.74E+02	2.17E+02	2.71E+02
				K-40	2.43E+03	4.77E+02	2.54E+02
Sample ID:	**412035**	**Sample Dates: 6/1/2016 - 6/1/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.38E+01	0.00E+00	2.38E+01
				Co-58	<1.75E+01	0.00E+00	1.75E+01
				Fe-59	<2.57E+01	0.00E+00	2.57E+01
				Co-60	<1.14E+01	0.00E+00	1.14E+01
				Zn-65	<3.53E+01	0.00E+00	3.53E+01
				Zr-95	<3.77E+01	0.00E+00	3.77E+01
				Nb-95	<1.83E+01	0.00E+00	1.83E+01
				I-131	<1.55E+01	0.00E+00	1.55E+01
				Cs-134	<2.47E+01	0.00E+00	2.47E+01
				Cs-137	<2.68E+01	0.00E+00	2.68E+01
				BaLa-140	<1.44E+01	0.00E+00	1.44E+01
				Be-7	6.07E+02	1.83E+02	2.17E+02
				K-40	2.67E+03	4.89E+02	3.21E+02

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	414420	Sample Dates: 7/6/2016 - 7/6/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.30E+01	0.00E+00	2.30E+01
				Co-58	<2.17E+01	0.00E+00	2.17E+01
				Fe-59	<3.38E+01	0.00E+00	3.38E+01
				Co-60	<2.60E+01	0.00E+00	2.60E+01
				Zn-65	<5.09E+01	0.00E+00	5.09E+01
				Zr-95	<2.32E+01	0.00E+00	2.32E+01
				Nb-95	<2.58E+01	0.00E+00	2.58E+01
				I-131	<2.26E+01	0.00E+00	2.26E+01
				Cs-134	<2.48E+01	0.00E+00	2.48E+01
				Cs-137	<3.26E+01	0.00E+00	3.26E+01
				BaLa-140	<3.17E+01	0.00E+00	3.17E+01
				Be-7	5.11E+02	2.26E+02	3.21E+02
				K-40	2.91E+03	5.20E+02	5.02E+01
Sample ID:	**417255**	**Sample Dates: 8/2/2016 - 8/2/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.60E+01	0.00E+00	2.60E+01
				Co-58	<2.29E+01	0.00E+00	2.29E+01
				Fe-59	<3.86E+01	0.00E+00	3.86E+01
				Co-60	<2.21E+01	0.00E+00	2.21E+01
				Zn-65	<4.39E+01	0.00E+00	4.39E+01
				Zr-95	<3.57E+01	0.00E+00	3.57E+01
				Nb-95	<1.42E+01	0.00E+00	1.42E+01
				I-131	<1.88E+01	0.00E+00	1.88E+01
				Cs-134	<2.85E+01	0.00E+00	2.85E+01
				Cs-137	<2.59E+01	0.00E+00	2.59E+01
				BaLa-140	<2.46E+01	0.00E+00	2.46E+01
				Be-7	4.98E+02	2.01E+02	2.77E+02
				K-40	2.45E+03	4.52E+02	4.58E+01
Sample ID:	**419432**	**Sample Dates: 9/7/2016 - 9/7/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.81E+01	0.00E+00	1.81E+01
				Co-58	<1.74E+01	0.00E+00	1.74E+01
				Fe-59	<4.07E+01	0.00E+00	4.07E+01
				Co-60	<1.78E+01	0.00E+00	1.78E+01
				Zn-65	<5.06E+01	0.00E+00	5.06E+01
				Zr-95	<3.03E+01	0.00E+00	3.03E+01
				Nb-95	<2.19E+01	0.00E+00	2.19E+01
				I-131	<2.29E+01	0.00E+00	2.29E+01
				Cs-134	<2.40E+01	0.00E+00	2.40E+01
				Cs-137	<2.63E+01	0.00E+00	2.63E+01
				BaLa-140	<3.14E+01	0.00E+00	3.14E+01
				Be-7	8.36E+02	2.10E+02	2.14E+02
				K-40	3.10E+03	5.51E+02	3.48E+02
Sample ID:	**422484**	**Sample Dates: 10/4/2016 - 10/4/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.37E+01	0.00E+00	2.37E+01
				Co-58	<2.79E+01	0.00E+00	2.79E+01
				Fe-59	<4.40E+01	0.00E+00	4.40E+01
				Co-60	<2.02E+01	0.00E+00	2.02E+01
				Zn-65	<6.00E+01	0.00E+00	6.00E+01
				Zr-95	<3.61E+01	0.00E+00	3.61E+01
				Nb-95	<2.68E+01	0.00E+00	2.68E+01
				I-131	<2.31E+01	0.00E+00	2.31E+01
				Cs-134	<2.67E+01	0.00E+00	2.67E+01
				Cs-137	<3.41E+01	0.00E+00	3.41E+01
				BaLa-140	<3.31E+01	0.00E+00	3.31E+01
				Be-7	<3.63E+02	0.00E+00	3.63E+02
				K-40	3.25E+03	6.01E+02	2.31E+02
Sample ID:	**425977**	**Sample Dates: 11/1/2016 - 11/1/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.55E+01	0.00E+00	1.55E+01
				Co-58	<1.27E+01	0.00E+00	1.27E+01
				Fe-59	<3.49E+01	0.00E+00	3.49E+01
				Co-60	<2.14E+01	0.00E+00	2.14E+01
				Zn-65	<2.30E+01	0.00E+00	2.30E+01
				Zr-95	<2.79E+01	0.00E+00	2.79E+01
				Nb-95	<1.75E+01	0.00E+00	1.75E+01

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	425977	Sample Dates: 11/1/2016 - 11/1/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				I-131	<1.43E+01	0.00E+00	1.43E+01
				Cs-134	<2.21E+01	0.00E+00	2.21E+01
				Cs-137	<2.08E+01	0.00E+00	2.08E+01
				BaLa-140	<1.94E+01	0.00E+00	1.94E+01
				Be-7	6.13E+02	1.76E+02	2.08E+02
				K-40	2.21E+03	4.42E+02	3.61E+02

Sample ID:	428479	Sample Dates: 12/6/2016 - 12/6/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.46E+01	0.00E+00	2.46E+01
				Co-58	<2.28E+01	0.00E+00	2.28E+01
				Fe-59	<5.21E+01	0.00E+00	5.21E+01
				Co-60	<3.38E+01	0.00E+00	3.38E+01
				Zn-65	<3.86E+01	0.00E+00	3.86E+01
				Zr-95	<4.21E+01	0.00E+00	4.21E+01
				Nb-95	<2.04E+01	0.00E+00	2.04E+01
				I-131	<2.77E+01	0.00E+00	2.77E+01
				Cs-134	<3.06E+01	0.00E+00	3.06E+01
				Cs-137	<3.19E+01	0.00E+00	3.19E+01
				BaLa-140	<3.68E+01	0.00E+00	3.68E+01
				Be-7	7.48E+02	2.53E+02	3.10E+02
				K-40	2.70E+03	5.87E+02	3.78E+02

Sample Point 222 [INDICATOR - N @ 0.71 miles]

Sample ID:	398623	Sample Dates: 1/6/2016 - 1/6/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.12E+01	0.00E+00	2.12E+01
				Co-58	<2.78E+01	0.00E+00	2.78E+01
				Fe-59	<4.76E+01	0.00E+00	4.76E+01
				Co-60	<3.07E+01	0.00E+00	3.07E+01
				Zn-65	<3.01E+01	0.00E+00	3.01E+01
				Zr-95	<4.39E+01	0.00E+00	4.39E+01
				Nb-95	<2.31E+01	0.00E+00	2.31E+01
				I-131	<2.63E+01	0.00E+00	2.63E+01
				Cs-134	<3.16E+01	0.00E+00	3.16E+01
				Cs-137	<3.25E+01	0.00E+00	3.25E+01
				BaLa-140	<2.77E+01	0.00E+00	2.77E+01
				Be-7	8.89E+02	2.84E+02	3.53E+02
				K-40	4.19E+03	7.39E+02	3.88E+02

Sample ID:	400269	Sample Dates: 2/2/2016 - 2/2/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.69E+01	0.00E+00	2.69E+01
				Co-58	<4.04E+01	0.00E+00	4.04E+01
				Fe-59	<5.48E+01	0.00E+00	5.48E+01
				Co-60	<4.26E+01	0.00E+00	4.26E+01
				Zn-65	<8.51E+01	0.00E+00	8.51E+01
				Zr-95	<6.72E+01	0.00E+00	6.72E+01
				Nb-95	<4.85E+01	0.00E+00	4.85E+01
				I-131	<3.84E+01	0.00E+00	3.84E+01
				Cs-134	<3.77E+01	0.00E+00	3.77E+01
				Cs-137	<3.06E+01	0.00E+00	3.06E+01
				BaLa-140	<3.18E+01	0.00E+00	3.18E+01
				Be-7	5.20E+02	2.84E+02	4.04E+02
				K-40	2.44E+03	5.97E+02	8.83E+01

Sample ID:	402258	Sample Dates: 3/1/2016 - 3/1/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.54E+01	0.00E+00	3.54E+01
				Co-58	<2.81E+01	0.00E+00	2.81E+01
				Fe-59	<7.97E+01	0.00E+00	7.97E+01
				Co-60	<3.19E+01	0.00E+00	3.19E+01
				Zn-65	<9.95E+01	0.00E+00	9.95E+01
				Zr-95	<4.86E+01	0.00E+00	4.86E+01
				Nb-95	<3.38E+01	0.00E+00	3.38E+01
				I-131	<3.49E+01	0.00E+00	3.49E+01
				Cs-134	<3.98E+01	0.00E+00	3.98E+01
				Cs-137	<3.63E+01	0.00E+00	3.63E+01
				BaLa-140	<5.74E+01	0.00E+00	5.74E+01
				Be-7	8.07E+02	3.51E+02	4.77E+02

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 222 [INDICATOR - N @ 0.71 miles]

Sample ID:	402258	Sample Dates: 3/1/2016 - 3/1/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				K-40	1.69E+03	6.09E+02	6.64E+02
Sample ID:	**406016**	**Sample Dates: 4/5/2016 - 4/5/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.56E+01	0.00E+00	1.56E+01
				Co-58	<1.25E+01	0.00E+00	1.25E+01
				Fe-59	<2.85E+01	0.00E+00	2.85E+01
				Co-60	<1.41E+01	0.00E+00	1.41E+01
				Zn-65	<3.43E+01	0.00E+00	3.43E+01
				Zr-95	<3.27E+01	0.00E+00	3.27E+01
				Nb-95	<1.72E+01	0.00E+00	1.72E+01
				I-131	<1.43E+01	0.00E+00	1.43E+01
				Cs-134	<1.09E+01	0.00E+00	1.09E+01
				Cs-137	<1.86E+01	0.00E+00	1.86E+01
				BaLa-140	<1.55E+01	0.00E+00	1.55E+01
				Be-7	2.25E+02	1.13E+02	1.56E+02
				K-40	3.47E+03	5.52E+02	3.71E+02
Sample ID:	**409566**	**Sample Dates: 5/3/2016 - 5/3/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.10E+01	0.00E+00	2.10E+01
				Co-58	<2.21E+01	0.00E+00	2.21E+01
				Fe-59	<4.00E+01	0.00E+00	4.00E+01
				Co-60	<2.33E+01	0.00E+00	2.33E+01
				Zn-65	<6.27E+01	0.00E+00	6.27E+01
				Zr-95	<3.06E+01	0.00E+00	3.06E+01
				Nb-95	<2.35E+01	0.00E+00	2.35E+01
				I-131	<2.58E+01	0.00E+00	2.58E+01
				Cs-134	<2.65E+01	0.00E+00	2.65E+01
				Cs-137	<2.82E+01	0.00E+00	2.82E+01
				BaLa-140	<2.52E+01	0.00E+00	2.52E+01
				Be-7	2.87E+02	1.70E+02	2.44E+02
				K-40	2.80E+03	5.79E+02	3.95E+02
Sample ID:	**412036**	**Sample Dates: 6/1/2016 - 6/1/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.84E+01	0.00E+00	1.84E+01
				Co-58	<1.82E+01	0.00E+00	1.82E+01
				Fe-59	<3.71E+01	0.00E+00	3.71E+01
				Co-60	<1.72E+01	0.00E+00	1.72E+01
				Zn-65	<4.42E+01	0.00E+00	4.42E+01
				Zr-95	<4.13E+01	0.00E+00	4.13E+01
				Nb-95	<2.23E+01	0.00E+00	2.23E+01
				I-131	<1.96E+01	0.00E+00	1.96E+01
				Cs-134	<1.86E+01	0.00E+00	1.86E+01
				Cs-137	<2.08E+01	0.00E+00	2.08E+01
				BaLa-140	<1.48E+01	0.00E+00	1.48E+01
				Be-7	2.44E+02	1.15E+02	1.48E+02
				K-40	2.74E+03	4.93E+02	2.69E+02
Sample ID:	**414421**	**Sample Dates: 7/6/2016 - 7/6/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.54E+01	0.00E+00	1.54E+01
				Co-58	<1.51E+01	0.00E+00	1.51E+01
				Fe-59	<3.64E+01	0.00E+00	3.64E+01
				Co-60	<1.17E+01	0.00E+00	1.17E+01
				Zn-65	<3.89E+01	0.00E+00	3.89E+01
				Zr-95	<3.62E+01	0.00E+00	3.62E+01
				Nb-95	<1.71E+01	0.00E+00	1.71E+01
				I-131	<1.55E+01	0.00E+00	1.55E+01
				Cs-134	<2.54E+01	0.00E+00	2.54E+01
				Cs-137	<1.77E+01	0.00E+00	1.77E+01
				BaLa-140	<1.42E+01	0.00E+00	1.42E+01
				Be-7	3.66E+02	1.67E+02	2.33E+02
				K-40	2.13E+03	4.21E+02	2.26E+02
Sample ID:	**417256**	**Sample Dates: 8/2/2016 - 8/2/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.85E+01	0.00E+00	2.85E+01
				Co-58	<2.02E+01	0.00E+00	2.02E+01
				Fe-59	<4.93E+01	0.00E+00	4.93E+01
				Co-60	<6.21E+00	0.00E+00	6.21E+00

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 222 [INDICATOR - N @ 0.71 miles]

Sample ID:	417256	Sample Dates: 8/2/2016 - 8/2/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Zn-65	<6.63E+01	0.00E+00	6.63E+01
				Zr-95	<5.03E+01	0.00E+00	5.03E+01
				Nb-95	<2.56E+01	0.00E+00	2.56E+01
				I-131	<2.03E+01	0.00E+00	2.03E+01
				Cs-134	<3.20E+01	0.00E+00	3.20E+01
				Cs-137	<3.07E+01	0.00E+00	3.07E+01
				BaLa-140	<3.35E+01	0.00E+00	3.35E+01
				Be-7	1.21E+03	3.25E+02	3.85E+02
				K-40	2.77E+03	6.05E+02	4.64E+02
Sample ID:	**419433**	**Sample Dates: 9/7/2016 - 9/7/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.50E+01	0.00E+00	2.50E+01
				Co-58	<2.79E+01	0.00E+00	2.79E+01
				Fe-59	<2.83E+01	0.00E+00	2.83E+01
				Co-60	<2.44E+01	0.00E+00	2.44E+01
				Zn-65	<5.69E+01	0.00E+00	5.69E+01
				Zr-95	<3.97E+01	0.00E+00	3.97E+01
				Nb-95	<2.64E+01	0.00E+00	2.64E+01
				I-131	<2.58E+01	0.00E+00	2.58E+01
				Cs-134	<2.50E+01	0.00E+00	2.50E+01
				Cs-137	<2.41E+01	0.00E+00	2.41E+01
				BaLa-140	<3.16E+01	0.00E+00	3.16E+01
				Be-7	6.32E+02	2.27E+02	2.95E+02
				K-40	3.26E+03	6.11E+02	4.54E+02
Sample ID:	**422485**	**Sample Dates: 10/4/2016 - 10/4/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.71E+01	0.00E+00	2.71E+01
				Co-58	<2.57E+01	0.00E+00	2.57E+01
				Fe-59	<3.61E+01	0.00E+00	3.61E+01
				Co-60	<3.26E+01	0.00E+00	3.26E+01
				Zn-65	<6.59E+01	0.00E+00	6.59E+01
				Zr-95	<2.75E+01	0.00E+00	2.75E+01
				Nb-95	<2.37E+01	0.00E+00	2.37E+01
				I-131	<2.49E+01	0.00E+00	2.49E+01
				Cs-134	<3.16E+01	0.00E+00	3.16E+01
				Cs-137	<2.53E+01	0.00E+00	2.53E+01
				BaLa-140	<3.31E+01	0.00E+00	3.31E+01
				Be-7	4.09E+02	1.80E+02	2.33E+02
				K-40	2.92E+03	5.85E+02	3.55E+02
Sample ID:	**425978**	**Sample Dates: 11/1/2016 - 11/1/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.63E+01	0.00E+00	2.63E+01
				Co-58	<1.88E+01	0.00E+00	1.88E+01
				Fe-59	<3.42E+01	0.00E+00	3.42E+01
				Co-60	<1.98E+01	0.00E+00	1.98E+01
				Zn-65	<4.21E+01	0.00E+00	4.21E+01
				Zr-95	<3.75E+01	0.00E+00	3.75E+01
				Nb-95	<2.27E+01	0.00E+00	2.27E+01
				I-131	<2.26E+01	0.00E+00	2.26E+01
				Cs-134	<2.26E+01	0.00E+00	2.26E+01
				Cs-137	<2.40E+01	0.00E+00	2.40E+01
				BaLa-140	<2.50E+01	0.00E+00	2.50E+01
				Be-7	6.52E+02	2.10E+02	2.57E+02
				K-40	1.86E+03	4.44E+02	3.70E+02
Sample ID:	**428480**	**Sample Dates: 12/6/2016 - 12/6/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<3.01E+01	0.00E+00	3.01E+01
				Co-58	<3.36E+01	0.00E+00	3.36E+01
				Fe-59	<5.17E+01	0.00E+00	5.17E+01
				Co-60	<2.88E+01	0.00E+00	2.88E+01
				Zn-65	<7.62E+01	0.00E+00	7.62E+01
				Zr-95	<5.81E+01	0.00E+00	5.81E+01
				Nb-95	<3.69E+01	0.00E+00	3.69E+01
				I-131	<3.13E+01	0.00E+00	3.13E+01
				Cs-134	<4.18E+01	0.00E+00	4.18E+01
				Cs-137	<3.45E+01	0.00E+00	3.45E+01
				BaLa-140	<4.74E+01	0.00E+00	4.74E+01

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 222 [INDICATOR - N @ 0.71 miles]

Sample ID:	428480	Sample Dates: 12/6/2016 - 12/6/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Be-7	6.44E+02	2.80E+02	3.71E+02
				K-40	2.26E+03	6.81E+02	7.23E+02

Sample Point 226 [INDICATOR - S @ 0.48 miles]

Sample ID:	398624	Sample Dates: 1/6/2016 - 1/6/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.08E+01	0.00E+00	2.08E+01
				Co-58	<1.64E+01	0.00E+00	1.64E+01
				Fe-59	<4.16E+01	0.00E+00	4.16E+01
				Co-60	<1.74E+01	0.00E+00	1.74E+01
				Zn-65	<4.90E+01	0.00E+00	4.90E+01
				Zr-95	<2.84E+01	0.00E+00	2.84E+01
				Nb-95	<1.75E+01	0.00E+00	1.75E+01
				I-131	<2.02E+01	0.00E+00	2.02E+01
				Cs-134	<1.86E+01	0.00E+00	1.86E+01
				Cs-137	<2.02E+01	0.00E+00	2.02E+01
				BaLa-140	<2.22E+01	0.00E+00	2.22E+01
				Be-7	9.42E+02	2.15E+02	2.11E+02
				K-40	4.27E+03	6.41E+02	2.01E+02
Sample ID:	400270	Sample Dates: 2/2/2016 - 2/2/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.21E+01	0.00E+00	2.21E+01
				Co-58	<1.86E+01	0.00E+00	1.86E+01
				Fe-59	<4.24E+01	0.00E+00	4.24E+01
				Co-60	<2.05E+01	0.00E+00	2.05E+01
				Zn-65	<4.95E+01	0.00E+00	4.95E+01
				Zr-95	<3.04E+01	0.00E+00	3.04E+01
				Nb-95	<2.06E+01	0.00E+00	2.06E+01
				I-131	<1.92E+01	0.00E+00	1.92E+01
				Cs-134	<2.48E+01	0.00E+00	2.48E+01
				Cs-137	<1.71E+01	0.00E+00	1.71E+01
				BaLa-140	<2.98E+01	0.00E+00	2.98E+01
				Be-7	9.94E+02	2.37E+02	2.48E+02
				K-40	3.98E+03	6.50E+02	4.11E+02
Sample ID:	402259	Sample Dates: 3/1/2016 - 3/1/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.49E+01	0.00E+00	2.49E+01
				Co-58	<3.04E+01	0.00E+00	3.04E+01
				Fe-59	<5.23E+01	0.00E+00	5.23E+01
				Co-60	<1.90E+01	0.00E+00	1.90E+01
				Zn-65	<5.39E+01	0.00E+00	5.39E+01
				Zr-95	<3.96E+01	0.00E+00	3.96E+01
				Nb-95	<2.67E+01	0.00E+00	2.67E+01
				I-131	<2.92E+01	0.00E+00	2.92E+01
				Cs-134	<3.73E+01	0.00E+00	3.73E+01
				Cs-137	<3.10E+01	0.00E+00	3.10E+01
				BaLa-140	<3.96E+01	0.00E+00	3.96E+01
				Be-7	1.02E+03	3.33E+02	4.26E+02
				K-40	4.79E+03	8.35E+02	4.19E+02
Sample ID:	406017	Sample Dates: 4/5/2016 - 4/5/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.13E+01	0.00E+00	2.13E+01
				Co-58	<1.56E+01	0.00E+00	1.56E+01
				Fe-59	<3.73E+01	0.00E+00	3.73E+01
				Co-60	<2.20E+01	0.00E+00	2.20E+01
				Zn-65	<4.85E+01	0.00E+00	4.85E+01
				Zr-95	<3.06E+01	0.00E+00	3.06E+01
				Nb-95	<1.76E+01	0.00E+00	1.76E+01
				I-131	<1.76E+01	0.00E+00	1.76E+01
				Cs-134	<2.39E+01	0.00E+00	2.39E+01
				Cs-137	<1.46E+01	0.00E+00	1.46E+01
				BaLa-140	<1.64E+01	0.00E+00	1.64E+01
				Be-7	3.84E+02	1.61E+02	2.24E+02
				K-40	4.68E+03	6.38E+02	3.78E+01
Sample ID:	409567	Sample Dates: 5/3/2016 - 5/3/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.08E+01	0.00E+00	2.08E+01

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 226 [INDICATOR - S @ 0.48 miles]

Sample ID: 409567 **Sample Dates: 5/3/2016 - 5/3/2016** **MIXEDBLV**

Nuclide	Activity	2 Sigma Error	MDA
Co-58	<2.13E+01	0.00E+00	2.13E+01
Fe-59	<4.66E+01	0.00E+00	4.66E+01
Co-60	<2.26E+01	0.00E+00	2.26E+01
Zn-65	<4.43E+01	0.00E+00	4.43E+01
Zr-95	<2.66E+01	0.00E+00	2.66E+01
Nb-95	<1.90E+01	0.00E+00	1.90E+01
I-131	<2.00E+01	0.00E+00	2.00E+01
Cs-134	<2.42E+01	0.00E+00	2.42E+01
Cs-137	<1.51E+01	0.00E+00	1.51E+01
BaLa-140	<2.43E+01	0.00E+00	2.43E+01
Be-7	2.57E+02	1.61E+02	2.42E+02
K-40	4.47E+03	6.52E+02	1.94E+02

Sample ID: 412037 **Sample Dates: 6/1/2016 - 6/1/2016** **MIXEDBLV**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.10E+01	0.00E+00	2.10E+01
Co-58	<1.60E+01	0.00E+00	1.60E+01
Fe-59	<4.72E+01	0.00E+00	4.72E+01
Co-60	<1.88E+01	0.00E+00	1.88E+01
Zn-65	<4.76E+01	0.00E+00	4.76E+01
Zr-95	<3.22E+01	0.00E+00	3.22E+01
Nb-95	<1.79E+01	0.00E+00	1.79E+01
I-131	<1.62E+01	0.00E+00	1.62E+01
Cs-134	<2.11E+01	0.00E+00	2.11E+01
Cs-137	<1.48E+01	0.00E+00	1.48E+01
BaLa-140	<2.14E+01	0.00E+00	2.14E+01
Be-7	7.93E+02	2.12E+02	2.44E+02
K-40	4.67E+03	6.65E+02	1.93E+02

Sample ID: 414422 **Sample Dates: 7/6/2016 - 7/6/2016** **MIXEDBLV**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.07E+01	0.00E+00	3.07E+01
Co-58	<2.33E+01	0.00E+00	2.33E+01
Fe-59	<5.25E+01	0.00E+00	5.25E+01
Co-60	<3.44E+01	0.00E+00	3.44E+01
Zn-65	<6.64E+01	0.00E+00	6.64E+01
Zr-95	<3.78E+01	0.00E+00	3.78E+01
Nb-95	<3.47E+01	0.00E+00	3.47E+01
I-131	<2.79E+01	0.00E+00	2.79E+01
Cs-134	<2.95E+01	0.00E+00	2.95E+01
Cs-137	<2.16E+01	0.00E+00	2.16E+01
BaLa-140	<2.05E+01	0.00E+00	2.05E+01
Be-7	<3.70E+02	0.00E+00	3.70E+02
K-40	5.83E+03	9.00E+02	4.54E+02

Sample ID: 417257 **Sample Dates: 8/2/2016 - 8/2/2016** **MIXEDBLV**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.51E+01	0.00E+00	1.51E+01
Co-58	<1.36E+01	0.00E+00	1.36E+01
Fe-59	<4.47E+01	0.00E+00	4.47E+01
Co-60	<2.53E+01	0.00E+00	2.53E+01
Zn-65	<4.12E+01	0.00E+00	4.12E+01
Zr-95	<3.83E+01	0.00E+00	3.83E+01
Nb-95	<2.11E+01	0.00E+00	2.11E+01
I-131	<1.34E+01	0.00E+00	1.34E+01
Cs-134	<2.44E+01	0.00E+00	2.44E+01
Cs-137	<2.04E+01	0.00E+00	2.04E+01
BaLa-140	<1.90E+01	0.00E+00	1.90E+01
Be-7	7.86E+02	1.96E+02	1.93E+02
K-40	4.25E+03	6.45E+02	2.31E+02

Sample ID: 419434 **Sample Dates: 9/7/2016 - 9/7/2016** **MIXEDBLV**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.25E+01	0.00E+00	2.25E+01
Co-58	<1.62E+01	0.00E+00	1.62E+01
Fe-59	<4.36E+01	0.00E+00	4.36E+01
Co-60	<1.99E+01	0.00E+00	1.99E+01
Zn-65	<3.51E+01	0.00E+00	3.51E+01
Zr-95	<3.52E+01	0.00E+00	3.52E+01
Nb-95	<2.10E+01	0.00E+00	2.10E+01
I-131	<2.46E+01	0.00E+00	2.46E+01

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 226 [INDICATOR - S @ 0.48 miles]

Sample ID:	419434	Sample Dates: 9/7/2016 - 9/7/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<2.44E+01	0.00E+00	2.44E+01
				Cs-137	<2.04E+01	0.00E+00	2.04E+01
				BaLa-140	<2.23E+01	0.00E+00	2.23E+01
				Be-7	7.45E+02	1.89E+02	1.92E+02
				K-40	4.76E+03	6.74E+02	2.63E+02
Sample ID:	**422486**	**Sample Dates: 10/4/2016 - 10/4/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.47E+01	0.00E+00	2.47E+01
				Co-58	<1.99E+01	0.00E+00	1.99E+01
				Fe-59	<4.29E+01	0.00E+00	4.29E+01
				Co-60	<2.22E+01	0.00E+00	2.22E+01
				Zn-65	<3.86E+01	0.00E+00	3.86E+01
				Zr-95	<3.62E+01	0.00E+00	3.62E+01
				Nb-95	<2.35E+01	0.00E+00	2.35E+01
				I-131	<1.98E+01	0.00E+00	1.98E+01
				Cs-134	<2.78E+01	0.00E+00	2.78E+01
				Cs-137	<2.40E+01	0.00E+00	2.40E+01
				BaLa-140	<1.73E+01	0.00E+00	1.73E+01
				Be-7	6.89E+02	1.97E+02	2.13E+02
				K-40	3.20E+03	5.66E+02	2.77E+02
Sample ID:	**425979**	**Sample Dates: 11/1/2016 - 11/1/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.20E+01	0.00E+00	2.20E+01
				Co-58	<1.80E+01	0.00E+00	1.80E+01
				Fe-59	<3.57E+01	0.00E+00	3.57E+01
				Co-60	<2.65E+01	0.00E+00	2.65E+01
				Zn-65	<5.12E+01	0.00E+00	5.12E+01
				Zr-95	<3.62E+01	0.00E+00	3.62E+01
				Nb-95	<1.63E+01	0.00E+00	1.63E+01
				I-131	<1.97E+01	0.00E+00	1.97E+01
				Cs-134	<2.57E+01	0.00E+00	2.57E+01
				Cs-137	<2.05E+01	0.00E+00	2.05E+01
				BaLa-140	<2.07E+01	0.00E+00	2.07E+01
				Be-7	5.36E+02	1.77E+02	2.08E+02
				K-40	3.42E+03	5.96E+02	3.67E+02
Sample ID:	**428481**	**Sample Dates: 12/6/2016 - 12/6/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.34E+01	0.00E+00	1.34E+01
				Co-58	<1.75E+01	0.00E+00	1.75E+01
				Fe-59	<3.97E+01	0.00E+00	3.97E+01
				Co-60	<1.75E+01	0.00E+00	1.75E+01
				Zn-65	<3.70E+01	0.00E+00	3.70E+01
				Zr-95	<3.18E+01	0.00E+00	3.18E+01
				Nb-95	<1.85E+01	0.00E+00	1.85E+01
				I-131	<1.66E+01	0.00E+00	1.66E+01
				Cs-134	<2.44E+01	0.00E+00	2.44E+01
				Cs-137	<1.80E+01	0.00E+00	1.80E+01
				BaLa-140	<1.92E+01	0.00E+00	1.92E+01
				Be-7	4.39E+02	1.55E+02	1.85E+02
				K-40	3.51E+03	5.81E+02	3.30E+02

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	398625	Sample Dates: 1/6/2016 - 1/6/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.12E+01	0.00E+00	2.12E+01
				Co-58	<1.93E+01	0.00E+00	1.93E+01
				Fe-59	<3.17E+01	0.00E+00	3.17E+01
				Co-60	<2.42E+01	0.00E+00	2.42E+01
				Zn-65	<5.78E+01	0.00E+00	5.78E+01
				Zr-95	<3.50E+01	0.00E+00	3.50E+01
				Nb-95	<1.78E+01	0.00E+00	1.78E+01
				I-131	<1.65E+01	0.00E+00	1.65E+01
				Cs-134	<3.23E+01	0.00E+00	3.23E+01
				Cs-137	<2.43E+01	0.00E+00	2.43E+01
				BaLa-140	<2.36E+01	0.00E+00	2.36E+01
				Be-7	4.16E+03	5.28E+02	2.56E+02
				K-40	3.73E+03	6.07E+02	2.99E+02

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID: 400271 Sample Dates: 2/2/2016 - 2/2/2016 MIXEDBLV

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.02E+01	0.00E+00	2.02E+01
Co-58	<1.41E+01	0.00E+00	1.41E+01
Fe-59	<2.76E+01	0.00E+00	2.76E+01
Co-60	<1.36E+01	0.00E+00	1.36E+01
Zn-65	<3.84E+01	0.00E+00	3.84E+01
Zr-95	<2.89E+01	0.00E+00	2.89E+01
Nb-95	<2.07E+01	0.00E+00	2.07E+01
I-131	<1.36E+01	0.00E+00	1.36E+01
Cs-134	<2.12E+01	0.00E+00	2.12E+01
Cs-137	<2.13E+01	0.00E+00	2.13E+01
BaLa-140	<2.11E+01	0.00E+00	2.11E+01
Be-7	2.93E+03	3.97E+02	2.42E+02
K-40	3.59E+03	5.62E+02	2.54E+02

Sample ID: 402260 Sample Dates: 3/1/2016 - 3/1/2016 MIXEDBLV

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.74E+01	0.00E+00	2.74E+01
Co-58	<2.57E+01	0.00E+00	2.57E+01
Fe-59	<7.58E+01	0.00E+00	7.58E+01
Co-60	<3.55E+01	0.00E+00	3.55E+01
Zn-65	<6.94E+01	0.00E+00	6.94E+01
Zr-95	<4.94E+01	0.00E+00	4.94E+01
Nb-95	<2.99E+01	0.00E+00	2.99E+01
I-131	<2.60E+01	0.00E+00	2.60E+01
Cs-134	<4.25E+01	0.00E+00	4.25E+01
Cs-137	<3.48E+01	0.00E+00	3.48E+01
BaLa-140	<2.38E+01	0.00E+00	2.38E+01
Be-7	1.85E+03	3.68E+02	3.06E+02
K-40	4.23E+03	7.89E+02	5.35E+02

Sample ID: 406018 Sample Dates: 4/5/2016 - 4/5/2016 MIXEDBLV

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.69E+01	0.00E+00	1.69E+01
Co-58	<1.13E+01	0.00E+00	1.13E+01
Fe-59	<3.54E+01	0.00E+00	3.54E+01
Co-60	<1.66E+01	0.00E+00	1.66E+01
Zn-65	<4.29E+01	0.00E+00	4.29E+01
Zr-95	<2.48E+01	0.00E+00	2.48E+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	<2.08E+01	0.00E+00	2.08E+01
Cs-137	<2.03E+01	0.00E+00	2.03E+01
BaLa-140	<1.18E+01	0.00E+00	1.18E+01
Be-7	3.12E+02	1.37E+02	1.89E+02
K-40	4.23E+03	5.89E+02	2.63E+02

Sample ID: 409568 Sample Dates: 5/3/2016 - 5/3/2016 MIXEDBLV

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.70E+01	0.00E+00	3.70E+01
Co-58	<2.80E+01	0.00E+00	2.80E+01
Fe-59	<6.67E+01	0.00E+00	6.67E+01
Co-60	<3.67E+01	0.00E+00	3.67E+01
Zn-65	<6.37E+01	0.00E+00	6.37E+01
Zr-95	<3.29E+01	0.00E+00	3.29E+01
Nb-95	<2.55E+01	0.00E+00	2.55E+01
I-131	<2.69E+01	0.00E+00	2.69E+01
Cs-134	<3.01E+01	0.00E+00	3.01E+01
Cs-137	<3.49E+01	0.00E+00	3.49E+01
BaLa-140	<3.05E+01	0.00E+00	3.05E+01
Be-7	<2.38E+02	0.00E+00	2.38E+02
K-40	2.75E+03	6.18E+02	4.26E+02

Sample ID: 412038 Sample Dates: 6/1/2016 - 6/1/2016 MIXEDBLV

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.02E+01	0.00E+00	2.02E+01
Co-58	<1.75E+01	0.00E+00	1.75E+01
Fe-59	<4.55E+01	0.00E+00	4.55E+01
Co-60	<1.75E+01	0.00E+00	1.75E+01
Zn-65	<4.25E+01	0.00E+00	4.25E+01
Zr-95	<3.33E+01	0.00E+00	3.33E+01
Nb-95	<1.39E+01	0.00E+00	1.39E+01

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	412038	Sample Dates: 6/1/2016 - 6/1/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				I-131	<2.06E+01	0.00E+00	2.06E+01
				Cs-134	<2.95E+01	0.00E+00	2.95E+01
				Cs-137	<1.97E+01	0.00E+00	1.97E+01
				BaLa-140	<2.91E+01	0.00E+00	2.91E+01
				Be-7	6.23E+02	2.09E+02	2.70E+02
				K-40	3.00E+03	5.12E+02	1.98E+02
Sample ID:	**414423**	**Sample Dates: 7/6/2016 - 7/6/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<3.51E+01	0.00E+00	3.51E+01
				Co-58	<2.70E+01	0.00E+00	2.70E+01
				Fe-59	<4.44E+01	0.00E+00	4.44E+01
				Co-60	<2.88E+01	0.00E+00	2.88E+01
				Zn-65	<6.19E+01	0.00E+00	6.19E+01
				Zr-95	<3.61E+01	0.00E+00	3.61E+01
				Nb-95	<2.99E+01	0.00E+00	2.99E+01
				I-131	<2.36E+01	0.00E+00	2.36E+01
				Cs-134	<3.08E+01	0.00E+00	3.08E+01
				Cs-137	<2.66E+01	0.00E+00	2.66E+01
				BaLa-140	<1.89E+01	0.00E+00	1.89E+01
				Be-7	7.12E+02	2.29E+02	2.78E+02
				K-40	3.53E+03	6.08E+02	5.56E+01
Sample ID:	**417258**	**Sample Dates: 8/2/2016 - 8/2/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<3.53E+01	0.00E+00	3.53E+01
				Co-58	<3.31E+01	0.00E+00	3.31E+01
				Fe-59	<4.11E+01	0.00E+00	4.11E+01
				Co-60	<3.55E+01	0.00E+00	3.55E+01
				Zn-65	<4.19E+01	0.00E+00	4.19E+01
				Zr-95	<4.92E+01	0.00E+00	4.92E+01
				Nb-95	<2.99E+01	0.00E+00	2.99E+01
				I-131	<2.84E+01	0.00E+00	2.84E+01
				Cs-134	<3.48E+01	0.00E+00	3.48E+01
				Cs-137	<3.19E+01	0.00E+00	3.19E+01
				BaLa-140	<2.53E+01	0.00E+00	2.53E+01
				Be-7	1.04E+03	3.20E+02	4.13E+02
				K-40	1.80E+03	5.59E+02	6.54E+02
Sample ID:	**419435**	**Sample Dates: 9/7/2016 - 9/7/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.94E+01	0.00E+00	1.94E+01
				Co-58	<2.57E+01	0.00E+00	2.57E+01
				Fe-59	<4.02E+01	0.00E+00	4.02E+01
				Co-60	<2.44E+01	0.00E+00	2.44E+01
				Zn-65	<5.20E+01	0.00E+00	5.20E+01
				Zr-95	<4.15E+01	0.00E+00	4.15E+01
				Nb-95	<1.73E+01	0.00E+00	1.73E+01
				I-131	<3.53E+01	0.00E+00	3.53E+01
				Cs-134	<2.29E+01	0.00E+00	2.29E+01
				Cs-137	<2.65E+01	0.00E+00	2.65E+01
				BaLa-140	<3.17E+01	0.00E+00	3.17E+01
				Be-7	1.16E+03	2.63E+02	2.60E+02
				K-40	2.26E+03	4.73E+02	2.93E+02
Sample ID:	**422487**	**Sample Dates: 10/4/2016 - 10/4/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<2.43E+01	0.00E+00	2.43E+01
				Co-58	<2.40E+01	0.00E+00	2.40E+01
				Fe-59	<6.33E+01	0.00E+00	6.33E+01
				Co-60	<2.20E+01	0.00E+00	2.20E+01
				Zn-65	<5.00E+01	0.00E+00	5.00E+01
				Zr-95	<4.80E+01	0.00E+00	4.80E+01
				Nb-95	<2.50E+01	0.00E+00	2.50E+01
				I-131	<2.01E+01	0.00E+00	2.01E+01
				Cs-134	<3.68E+01	0.00E+00	3.68E+01
				Cs-137	<2.96E+01	0.00E+00	2.96E+01
				BaLa-140	<2.42E+01	0.00E+00	2.42E+01
				Be-7	5.27E+02	2.39E+02	3.40E+02
				K-40	4.54E+03	7.36E+02	3.48E+02

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	425980	Sample Dates: 11/1/2016 - 11/1/2016	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.10E+01	0.00E+00	2.10E+01
				Co-58	<1.62E+01	0.00E+00	1.62E+01
				Fe-59	<2.80E+01	0.00E+00	2.80E+01
				Co-60	<2.54E+01	0.00E+00	2.54E+01
				Zn-65	<4.41E+01	0.00E+00	4.41E+01
				Zr-95	<4.00E+01	0.00E+00	4.00E+01
				Nb-95	<1.92E+01	0.00E+00	1.92E+01
				I-131	<1.38E+01	0.00E+00	1.38E+01
				Cs-134	<3.32E+01	0.00E+00	3.32E+01
				Cs-137	<2.41E+01	0.00E+00	2.41E+01
				BaLa-140	<5.81E+00	0.00E+00	5.81E+00
				Be-7	1.10E+03	2.39E+02	2.27E+02
				K-40	1.88E+03	4.46E+02	4.07E+02
Sample ID:	**428482**	**Sample Dates: 12/6/2016 - 12/6/2016**	**MIXEDBLV**	**Nuclide**	**Activity**	**2 Sigma Error**	**MDA**
				Mn-54	<1.97E+01	0.00E+00	1.97E+01
				Co-58	<1.87E+01	0.00E+00	1.87E+01
				Fe-59	<3.20E+01	0.00E+00	3.20E+01
				Co-60	<2.37E+01	0.00E+00	2.37E+01
				Zn-65	<4.12E+01	0.00E+00	4.12E+01
				Zr-95	<3.24E+01	0.00E+00	3.24E+01
				Nb-95	<2.01E+01	0.00E+00	2.01E+01
				I-131	<1.56E+01	0.00E+00	1.56E+01
				Cs-134	<2.12E+01	0.00E+00	2.12E+01
				Cs-137	<2.12E+01	0.00E+00	2.12E+01
				BaLa-140	<1.87E+01	0.00E+00	1.87E+01
				Be-7	4.41E+02	1.45E+02	1.62E+02
				K-40	3.34E+03	5.37E+02	1.79E+02

APPENDIX F

ERRATA TO PREVIOUS REPORTS

APPENDIX F

ERRATA TO THE 2016 AREOR

Catawba AREOR: 2005

During a 2016 NOS audit, it was identified that some samples processed by the EnRad laboratory using the APEX gamma counting geometry 025LMAR310 did not have the required a priori lower limit of detection (LLD) calculated prior to performing the analysis. An a posteriori LLD was calculated and all required lower limit of detections were satisfied (NCR # 02021801). The failure to calculate the a priori LLD prior to performing the analysis is an Analytical Deviation.

EnRad performed an extent of condition to assess which samples had been processed using the 025LMAR310 geometry. The Sample Manager database was evaluated for any references to the 025LMAR310 geometry and its various alternate historical names. Catawba food products/crops indicator location 253 [Retired] was determined to have been impacted (NCR # 02042792). Catawba food products/crops indicator location was located in the SSE sector at 1.90 miles (Irrigated Garden). The impacted sample was assigned Sample Manager ID # 82442 (Lab Manager LM3_25032813) for collection period 4OCT2005. Gamma analysis results and the a posteriori LLDs were reviewed and the analysis was determined valid.

The a posteriori LLD satisfied the requirements of Catawba Selected Licensee Commitments (SLC) 16.11 RADIOLOGICAL EFFLUENTS CONTROLS, 16.11-13 Radiological Environmental Monitoring, Table 16.11-13-3 (Lower Limit of Detection (LLD)). While the a priori lower limits of detection (LLD) were not calculated prior to performing the analysis, all analytical results for this sample were valid. There were no collection discrepancies identified with this sample.

Catawba AREOR: 2014

During a 2016 NOS audit, it was identified that some samples processed by the EnRad laboratory using the APEX gamma counting geometry 025LMAR310 did not have the required a priori lower limit of detection (LLD) calculated prior to performing the analysis. An a posteriori LLD was calculated and all required lower limit of detections were satisfied (NCR # 02021801). The failure to calculate the a priori LLD prior to performing the analysis is an Analytical Deviation.

EnRad performed an extent of condition to assess which samples had been processed using the 025LMAR310 geometry. The Sample Manager database was evaluated for any references to the 025LMAR310 geometry and its various alternate historical names. Catawba food products/crops indicator location 260 was determined to have been impacted (NCR # 02042794). Catawba food products/crops indicator location is located in the SSE sector at 2.00 miles (Irrigated Garden). The impacted sample was assigned Sample Manager ID #

290923 for collection period 6MAY2014. Gamma analysis results and the a posteriori LLDs were reviewed and the analysis was determined valid.

The a posteriori LLD satisfied the requirements of Catawba Selected Licensee Commitments (SLC) 16.11 RADIOLOGICAL EFFLUENTS CONTROLS, 16.11-13 Radiological Environmental Monitoring, Table 16.11-13-3 (Lower Limit of Detection (LLD)). While the a priori lower limits of detection (LLD) were not calculated prior to performing the analysis, all analytical results for this sample were valid. There were no collection discrepancies identified with this sample.

Catawba AREOR: 2014, 2015

During a 2016 Dosimetry Laboratory peer assessment, it was discovered the 2014 and 2015 (all quarters) internal environmental TLD crosschecks were not completed in accordance with procedure RD/0/B/4000/13, Environmental Monitoring (NCR # 02073609). Environmental monitoring is not National Voluntary Laboratory Accreditation Program (NVLAP) accredited, but the internal crosscheck data was reported to the NRC in the 2014 and 2015 AREORs. External environmental TLD crosschecks were performed during 2014 and 2015 in accordance with procedure RD/0/B/4000/13, Environmental Monitoring, therefore environmental TLD QA/QC was performed.

Laboratory TLD data supporting the 2014 and 2015 internal environmental TLD crosscheck result tables could not be located during the 2016 assessment. The internal environmental crosscheck (Duke Energy) table indicated in the quality assurance section of the 2014 and 2015 reports is therefore not considered acceptable and is removed from the 2014 and 2015 reports. The internal environmental TLD crosscheck data were not presented in the 2016 AREOR and were removed from the quality assurance section in entirety.