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Subject: Duke Energy Carolinas, LLC
Oconee Nuclear Station, Units 1, 2 and 3
Docket Nos. 50-269, 50-270 and 50-287
2017 Annual Radiological Environmental Operating Report (AREOR)

Pursuant to Oconee Nuclear Station Technical Specification 5.6.2 and Selected Licensee Commitment 16.11.10, please find the enclosed 2017 Annual Radiological Environmental Operating Report. This report covers operation of Units 1, 2 and 3 during the 2017 calendar year.

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Sincerely,

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IE25

NRR

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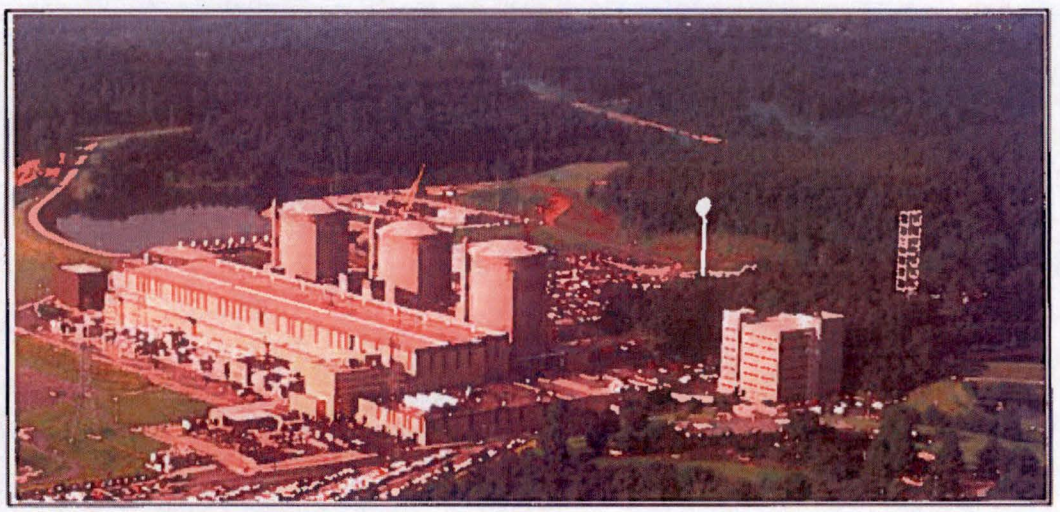
DUKE ENERGY

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

DUKE ENERGY CORPORATION
OCONEE NUCLEAR STATION
Units 1, 2, and 3

2017



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LIST OF TABLES

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
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
ONS	Oconee Nuclear Station
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 Oconee Nuclear Station Radiological Environmental Monitoring Program (REMP), and the program results for the calendar year 2017.

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 and program changes are also discussed.

Sampling activities were conducted as prescribed by Selected Licensee Commitments (SLC's). Required analyses were performed and detection capabilities were met for all collected samples as required by SLC's. One-thousand fifty-three samples were analyzed comprising 1,121 test results in order to compile data for the 2017 report. Based on the annual land use census, the current number of sampling sites for Oconee Nuclear Station is sufficient.

Concentrations observed in the environment in 2017 for station related radionuclides were within the ranges of concentrations observed in the past. Inspection of data showed that radioactivity concentrations in drinking water, surface water, fish, shoreline sediment, and broadleaf vegetation are higher than the activities reported for samples collected at control locations. All positively identified measurements attributable to station operation were within limits as specified in SLC's.

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 2.49E-01 mrem for 2017. 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

Oconee Nuclear Station (ONS) is located in Oconee County, South Carolina, approximately 8 miles northeast of Seneca, South Carolina, on the shore of Lake Keowee. This lake was formed by damming the Keowee and Little Rivers in that location. Immediately to the south is the U.S. Government Hartwell Project. The Keowee Hydroelectric Plant near the station joins Lake Keowee and the upper reaches of Lake Hartwell. To the north, the Jocassee Hydroelectric Plant joins Lake Jocassee and Lake Keowee. Jocassee is a pumped storage plant.

ONS consists of three pressurized water reactors. Each unit has an output of 846 megawatts net. Unit 1 license for operation was issued 2/6/1973. Unit 2 license for operation was issued 10/6/1973. Unit 3 license for operation was issued 7/19/1974. An independent spent fuel storage installation is also located at the site.

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 ONS. Figure 2.1-2 comprises all sample locations within a ten mile radius of ONS.

2.2 SCOPE AND REQUIREMENTS OF THE REMP

An environmental monitoring program has been in effect at Oconee Nuclear Station since 1969, four years prior to operation of Unit 1 in 1973. 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 Oconee Nuclear Station. This program satisfies the requirements of Section IV.B.2 of Appendix I to 10CFR50 and 10CFR72.44(d)(2) 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 radioactivity 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 Radiological Environmental Monitoring Program 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 3.9.

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 LIMIT OF DETECTION AND MINIMUM DETECTABLE ACTIVITY

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

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

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

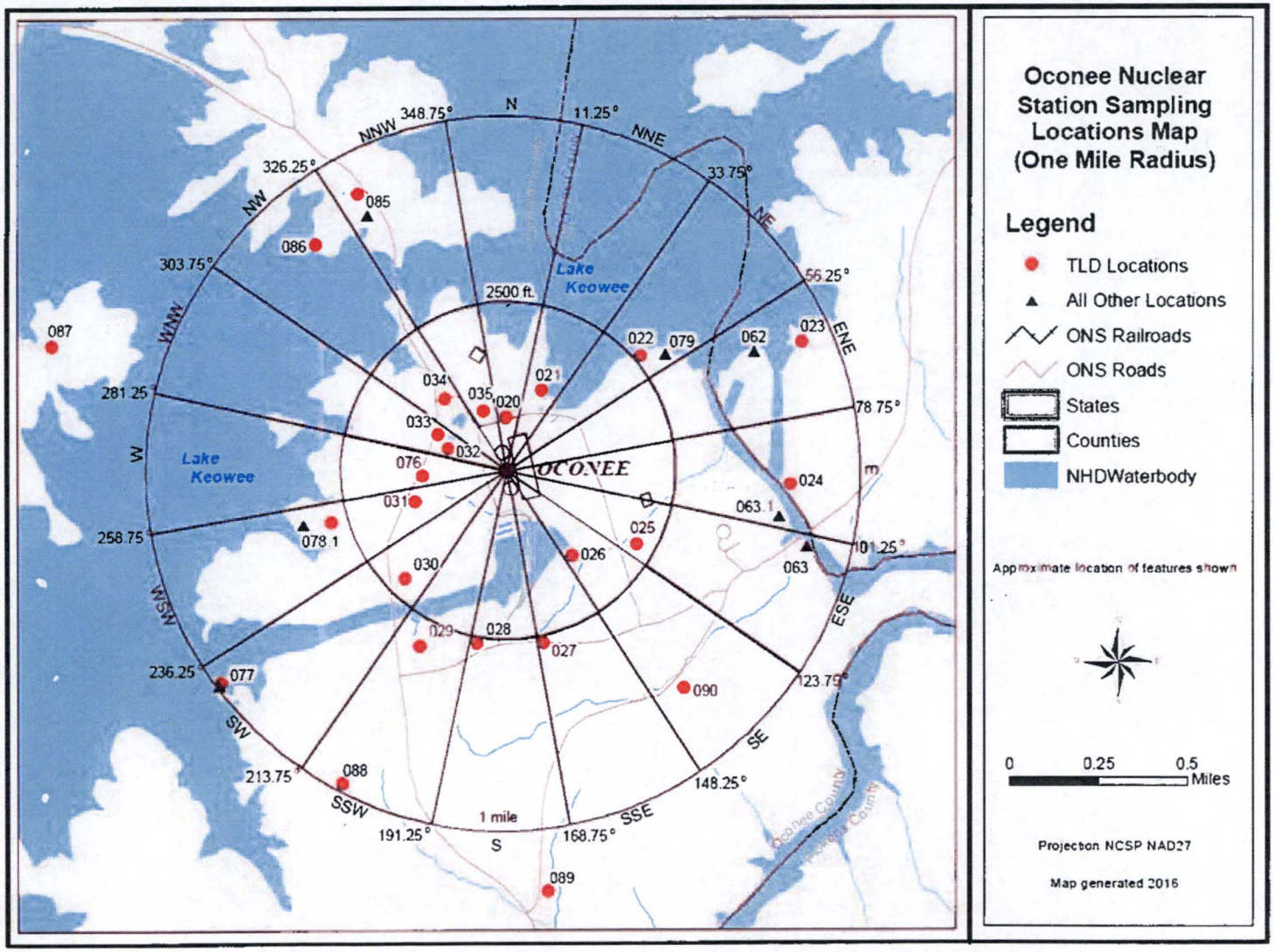

Oconee Nuclear Station Sampling Locations Map (One Mile Radius)
Legend
TLD Locations
All Other Locations
ONS Railroads
ONS Roads
States
Counties
NHDWaterbody
Approximate location of features shown
0
0.25
0.5
Miles
Projection NCSP NAD27
Map generated 2016
N
NNE
NE
ENE
E
ESE
SE
SSE
S
SSW
SW
WSW
W
WNW
NW
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°
2500 ft.
1 mile
Lake Keowee
OCONEE
085
086
087
088
089
090
077
078.1
076
079
062
063
063.1
Oconee County
Pickens County

Figure 2.1-2

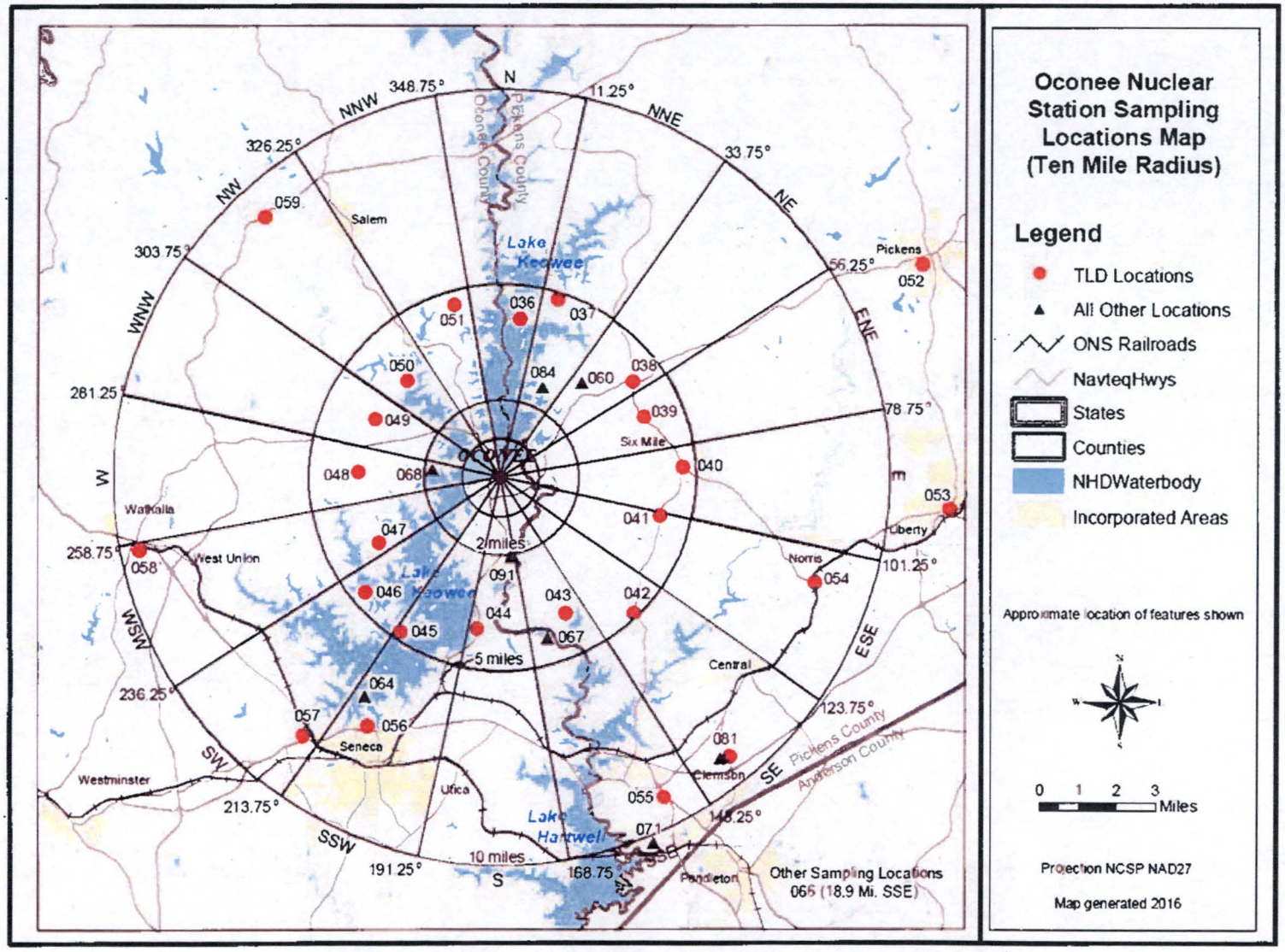

Oconee Nuclear Station Sampling Locations Map (Ten Mile Radius)
Legend
TLD Locations
All Other Locations
ONS Railroads
NavteqHwys
States
Counties
NHDWaterbody
Incorporated Areas
Approximate location of features shown
0 1 2 3 Miles
Projection NCSP NAD27
Map generated 2016
Other Sampling Locations
065 (18.9 Mi. SSE)
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°
146.25°
168.75°
191.25°
213.75°
236.25°
258.75°
281.25°
303.75°
326.25°
2 miles
5 miles
10 miles
Lake Keowee
Lake Hartwell
Oconee County
Pickens County
Anderson County
Salem
Pickens
Six Mile
Walhalla
West Union
Norris
Liberty
Central
Seneca
Westminster
Utica
Clemson
Pendleton
OCONEE
059
052
051
036
037
050
084
060
038
039
049
040
048
068
053
041
047
058
091
054
046
043
042
044
045
067
064
057
056
081
055
071

TABLE 2.1-A

OCONEE 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. & Particulate	Surface Water	Drinking Water	Shoreline Sediment	Fish	Milk	Broadleaf Vegetation
060	I	Greenville Water Intake Road (3.23 NE)			M				
060	C**	Greenville Water Intake Road (2.28 NE)					SA		
062	C	Lake Keowee Hydro Intake (0.85 mi ENE)		M					
063	I	Lake Hartwell Hwy 183 Bridge (0.80 mi ESE) [000.7]					SA		
063.1	I	Lake Hartwell Hwy 183 (0.79 mi E)		M					
064	C	Seneca Municipal Water Supply(6.67 mi SSW) [004.1]			M				
066	I	Anderson Municipal Water Supply (18.9 mi SSE) [012]			M				
067	I	Lawrence Ramsey Bridge Hwy 27 (4.34 mi SSE) [005.2]				SA	SA		
068	C	High Falls County Park (1.82 mi W)				SA			
071	C	Clemson Dairy (10.2 mi SSE) [006.3]						SM	
077	I	Skimmer Wall (1.00 mi SW)	W						M
078.1	I	Recreation Site (0.53 mi WSW)	W						
079	I	Keowee Dam (0.56 mi NE)	W						M
081	C	Clemson Operations Center (9.33 mi SE)	W						M
084	I	Sue Craig Road (2.58 mi NNE)	W						M
085	I	Lake Services / Building B9125 (0.88 mi NNW)	W						
091	I	Holders Landing Road (2.09 miles S)				SA			

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

** Control for Fish Only

[ ] Location Numbers prior to 1984

TABLE 2.1-B

OCONEE RADIOLOCICAL 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
020	IR	Site Boundary	0.16	N	044	OR	HWY 130 at Little River Dam	3.96	S
021	IR	Site Boundary	0.25	NNE	045	OR	Terminus of HWY 588 at Crooked Creek	4.78	SSW
022	IR	Site Boundary	0.53	NE	046	OR	HWY 188 at Crooked Creek	4.61	SW
023	IR	Site Boundary	0.93	ENE	047	OR	New Hope Church, HWY 188	3.58	WSW
024	IR	Site Boundary	0.81	E	048	OR	JCT HWY 175 & 188	3.64	W
025	IR	Site Boundary	0.42	ESE	049	OR	JCT HWY 201 & 92	3.60	WNW
026	IR	Site Boundary	0.34	SE	050	OR	Stamp Creek Landing, End of HWY 92	3.53	NW
027	IR	Site Boundary	0.49	SSE	051	OR	HWY 128, 1 mile N OF HWY 130	4.64	NNW
028	IR	Site Boundary	0.46	S	052	SI	DPC Branch Office Site, Pickens	12.4	ENE
029	IR	Site Boundary	0.56	SSW	053	SI	DPC Branch Office Site, Liberty	11.7	E
030	IR	Site Boundary	0.42	SW	054	SI	Post Office - HWY 93 Norris	8.60	ESE
031	IR	Site Boundary	0.27	WSW	055	SI	Clemson Meteorology Plot	9.27	SSE
076	IR	Site Boundary	0.19	W	056	SI	Water Tower - Seneca	7.30	SSW
032	IR	Site Boundary	0.19	WNW	057	SI	Oconee Memorial Hospital	8.42	SW
033	IR	Site Boundary	0.21	WNW	058	C	Branch Rd Substation, Walhalla	9.39	WSW
034	IR	Site Boundary	0.22	NW	059	SI	Tamassee Dar School	9.20	NW
035	IR	Site Boundary	0.17	NNW	077**	SI	Skimmer wall shared with air monitoring station	1.00	SW
036	OR	Mile Creek Landing	4.18	N	078.1**	SI	ONS Recreation Site shared with air monitoring station	0.53	WSW
037	OR	Keowee Church, HWY 327	4.85	NNE	081	C	Clemson Operations Center	9.33	SE
038	OR	Convenience Mart, JCT HWY 183 & 133	4.24	NE	085**	SI	Lake Services Bldg 9125 shared with air monitoring location	0.88	NNW
039	OR	HWY 133, 1 mile East of JCT HWY 183 & 133	4.02	ENE	086**	SI	Lake Keowee Service Rd at Boat Landing	0.83	NW
040	OR	Microwave Tower, Six Mile	4.74	E	087**	SI	End of Waterfall Rd	1.33	WNW
041	OR	JCT HWY 101 & 133	4.25	ESE	088**	SI	Doug Hollow Rd / Transmission Tower	1.00	SSW
042	OR	Lawrence Chapel Church, HWY 133	4.93	SE	089**	SI	Intersection Hwy 130 & Keowee River Rd	1.19	S
043	OR	HWY 291 at Issaqueena Park	4.09	SSE	090**	SI	Crescent Resources, Keowee River Rd at Beaver Dam	0.79	SE

* GPS data reflect accuracy to within 2-5 meters. GPS field measurements were taken as close as possible to the item of interest.
** TLD location added to Oconee REMP, ODCM Revision 58 (NCR # 02035669).

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)	Broadleaf Vegetation (pCi/kg-wet)
H-3	20,000[a]	---	---	---	---
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[b]	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) For drinking water samples only. This is 40CFR Part 141 value.
(b) If low-level I-131 analyses are performed.

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	---
	Quarterly Composite	X	---	---	---	---
Direct Radiation	Quarterly	---	---	---	---	X
Surface Water	Monthly	X	---	---	---	---
	Quarterly Composite	---	X	---	---	---
Drinking Water	Monthly	X	---	(a)	X	---
	Quarterly Composite	---	X	---	---	---
Shoreline Sediment	Semiannually	X	---	---	---	---
Milk	Semimonthly	X	---	X	---	---
Fish	Semiannually	X	---	---	---	---
Broadleaf Vegetation	Monthly	X	---	---	---	---

(a) Low level I-131 analysis will be performed if abnormal releases occur which could reasonably result in > 1 pCi/liter of I-131 in drinking water. An LLD of 1 pCi/liter will be required for this analysis.

TABLE 2.2-C

MAXIMUM VALUES FOR THE *A PRIORI* LOWER LIMITS OF DETECTION

Analysis	Water (pCi/liter)	Air Particulates or Gases (pCi/m^3)	Fish (pCi/kg-wet)	Milk (pCi/liter)	Broadleaf Vegetation (pCi/kg-wet)	Sediment (pCi/kg-dry)
Gross Beta	4	0.01	---	---	---	---
H-3	2000	---	---	---	---	---
Mn-54	15	---	130	---	---	---
Fe-59	30	---	260	---	---	---
Co-58, 60	15	---	130	---	---	---
Zn-65	30	---	260	---	---	---
Zr-95	15	---	---	---	---	---
Nb-95	15	---	---	---	---	---
I-131	15[a]	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) LLD for low-level I-131 analyses is 1 pCi/liter if performed

3.0 INTERPRETATION OF RESULTS

Review of 2017 REMP analysis results was performed to identify changes in environmental levels as a result of station operations. The review is summarized in this section. Data from 2017 was compared to preoperational and historical data. Sample data for some media is not directly comparable to preoperational and earlier operational sample results because of either significant changes in the analysis methods or changes in the reporting of the results. Summary tables containing 2017 information required by Technical Specification Administrative Control 5.6.2 are located in Appendix B. REMP results for 2017 are located in Appendix E.

Evaluation for significant trends was performed for the radionuclides that have required LLDs listed in Selected Licensee Commitment 16.11.6. These radionuclides are collectively referred to as "Selected Licensee Commitments radionuclides" and 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. Drinking water gross beta results are routinely trended. Trending of air particulate gross beta results was initiated in 1996 when the analysis was resumed. Trending is also performed for other radionuclides that are detected and could have been the result of station effluents. Only Selected Licensee Commitment radionuclides were detected in 2017.

Trending was performed by comparing annual mean concentrations of any effluent related detected radionuclide to historical results. Factors evaluated include the frequency of detection and the concentration in terms of the percent of the radionuclide's SLC reporting level (Table 2.2-A). All maximum percent of reporting level values were well below the 100% action level. The highest value reached during 2017 due to ONS operation was 2.1% for H-3 in a drinking water sample collected at location 066.

Changes in sample location, analytical technique, and presentation of results must be considered when reviewing for trends. Calculation of the annual mean concentrations has been performed differently over the history of the REMP. During 1979-1986, all net results (sample minus background), positive and negative, were included in the calculation of the mean. Only positive net activity results were used to calculate the mean for the other years. A change in gamma spectroscopy analysis systems in 1987 ended a period when many measurements yielded detectable low-level activity for both indicator and control location samples. It is thought that the method the previous system used to estimate net activity may have been vulnerable to false-positive results.

Data presented in Sections 3.1 - 3.8 support the conclusion that there were no significant increases in radionuclides in the environment around ONS due to station operations in 2017.

3.1 AIRBORNE RADIOIODINE AND PARTICULATES

In 2017, 318 radioiodine and particulate samples were analyzed, 265 from five indicator locations and 53 from the control location. Particulate samples were analyzed weekly for gross beta. A quarterly gamma analysis was performed on the quarterly filter composite (by location). An additional gamma analysis was performed on the final 2017 air particulate sample set for calendar reconciliation purposes (NCR # 02174505). Radioiodine samples received a weekly gamma analysis.

There was no detectable I-131 in air samples in 2017. Table 3.1-A gives the highest indicator location annual mean and control location annual mean for I-131 since the preoperational period. The table shows similar historical 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 ONS plant operations has been detected since 1994.

There were no detectable gamma emitting radionuclides detected in air particulate samples in 2017 due to ONS plant operations. No gamma emitting particulates due to ONS plant operations have been detected in indicator location samples since the change in gamma spectroscopy analysis systems in 1987.

Beta analysis of particulate filters was initiated in March of 1996 and became required by Selected Licensee Commitments in 1998. Gross beta analysis was performed on particulate filters during the preoperational and early operational history of the plant but had not been required since 1984. Figure 3.1 summarizes gross beta results for the indicator location with the highest annual mean and the control location samples. Both the indicator and control location results are similar in concentration and are near the lower range of preoperational gross beta results which ranged from 0.04 to 1.46 pCi/m^3.

K-40 and Be-7 observed in air samples are naturally occurring radionuclides.

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

Year	Indicator Location (pCi/m^3)	Control Location (pCi/m^3)
Preoperational 1969-1972	0.00E0	0.00E0
Feb. 1973 - June 1973	0.00E0	0.00E0
July 1973 - Dec. 1973	0.00E0	0.00E0
Jan. 1974 - June 1974	0.00E0	0.00E0
July 1974 - Dec. 1974	2.60E-2	8.00E-3
Jan. 1975 - June 1975	8.65E-2	3.12E-2
July 1975 - Dec. 1975	1.13E-2	9.52E-3
1976	2.76E-2	2.18E-2
1977	3.60E-2	3.60E-2
1978	2.19E-1	1.15E-1
1979	7.54E-3	4.75E-4
1980	3.07E-3	9.67E-4
1981	6.31E-3	5.39E-4
1982	2.87E-3	8.10E-4
1983	1.48E-3	3.05E-4
1984	8.11E-4	-2.30E-5
1985	7.71E-4	4.54E-4
1986	5.02E-3	7.86E-3
1987[1]	4.29E-3	5.19E-3
1988	0.00E0	0.00E0
1989	4.99E-4	0.00E0
1990	0.00E0	0.00E0
1991	0.00E0	0.00E0
1992	0.00E0	0.00E0
1993	0.00E0	0.00E0
1994	1.03E-2	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[2]	5.05E-2	4.13E-2
2012	0.00E0	0.00E0
2013	0.00E0	0.00E0
2014[3]	0.00E0	0.00E0
2015	0.00E0	0.00E0
2016	0.00E0	0.00E0
2017	0.00E0	0.00E0

0.00E0 indicates no detectable measurements

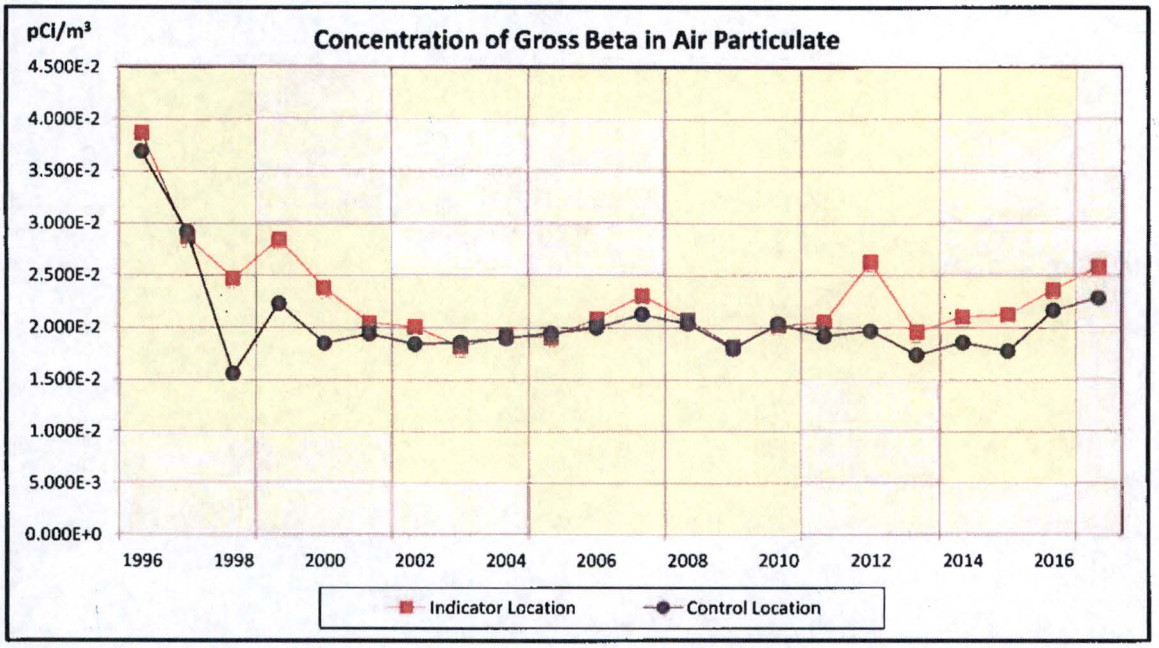
1979 - 1986 mean based on all net activity

(1) 1987 – Gamma spectroscopy system change

(2) 2011 concentration affected by Fukushima Daiichi

(3) 2014 Gamma spectroscopy system was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995). No analytical changes were noted due to the 2014 gamma spectroscopy system change.

Figure 3.1



There is no reporting level for gross beta in air particulate

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

Monitoring Period	Indicator Location (pCi/m^3)	Control Location (pCi/m^3)
1996	3.87E-2	3.69E-2
1997	2.87E-2	2.92E-2
1998	2.47E-2	1.56E-2
1999	2.85E-2	2.23E-2
2000	2.38E-2	1.85E-2
2001	2.05E-2	1.94E-2
2002	2.01E-2	1.84E-2
2003	1.86E-2	1.82E-2
2004	1.92E-2	1.90E-2
2005	1.95E-2	1.91E-2
2006	2.09E-2	2.00E-2
2007	2.31E-2	2.13E-2
2008	2.08E-2	2.04E-2
2009	1.82E-2	1.80E-2
2010	2.02E-2	2.04E-2
2011	2.06E-2	1.92E-2
2012	2.63E-2	1.97E-2
2013	1.96E-2	1.74E-2
2014	2.11E-2	1.86E-2
2015	2.13E-2	1.78E-2
2016	2.37E-2	2.17E-2
2017	2.58E-2	2.28E-2

3.2 DRINKING WATER

Gross beta analysis and gamma spectroscopy were performed on 42 monthly drinking water samples. These samples were composited to form 12 quarterly composite period samples for Tritium analysis with additional Tritium analyses performed on the final 2017 monthly composites for calendar reconciliation purposes (NCR # 02174946). Two indicator locations and a control location were sampled; however, only one of the indicator locations is downstream of the effluent release point.

Table 3.2 lists the highest indicator location annual mean and control location annual mean for gross beta results since the preoperational period. The indicator location had an average concentration of 1.25 pCi/liter in 2017, and the control location had a concentration of 1.19 pCi/liter. For comparison purposes, the 2016 indicator mean was 1.44 pCi/liter. Table 3.2 and Figure 3.2-1 shows the highest indicator and control location annual means for gross beta. The table shows that 2017 gross beta levels in drinking water are lower than preoperational concentrations.

Tritium was detected in five of the fifteen composite samples during 2017. The 2017 mean indicator location 066 concentration was 419 pCi/liter, which is 2.1% of the 20,000 pCi/l Tritium reporting level. Table 3.2 and Figure 3.2-2 show the highest indicator and control location annual means for Tritium since analysis was initiated early in the operational period. Tritium concentrations have decreased at both the indicator and control locations. The closure of the Clemson water plant in 1989 is one reason for the decrease shown in the table and graph. The Clemson site was typically the high mean location when the plant was in operation.

There were no gamma emitting radionuclides attributable to plant operations identified in drinking water samples in 2017. Gamma spectroscopy analysis has not detected any gamma activity in the water supplies since 1988.

The dose for consumption of water was less than one mrem per year based on effluent calculations and there were no abnormal releases exceeding 1 pCi/liter I-131 in 2017; therefore low-level iodine analysis is not required.

K-40 and Be-7 observed in drinking water samples are naturally occurring radionuclides.

Figure 3.2-1

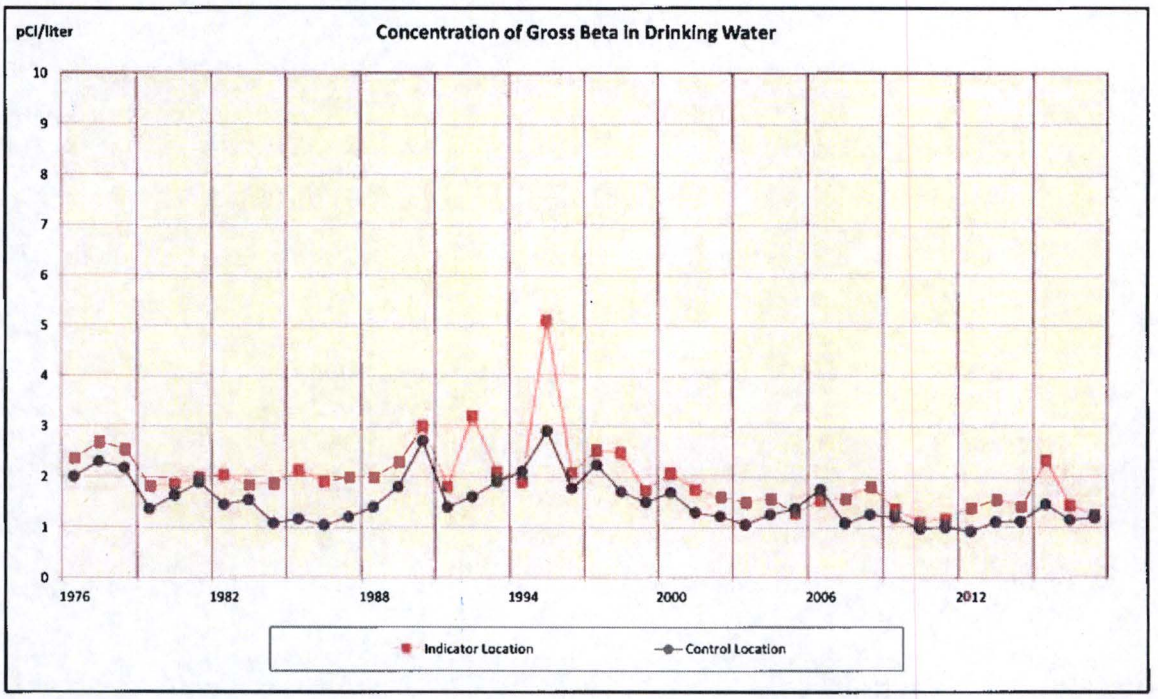
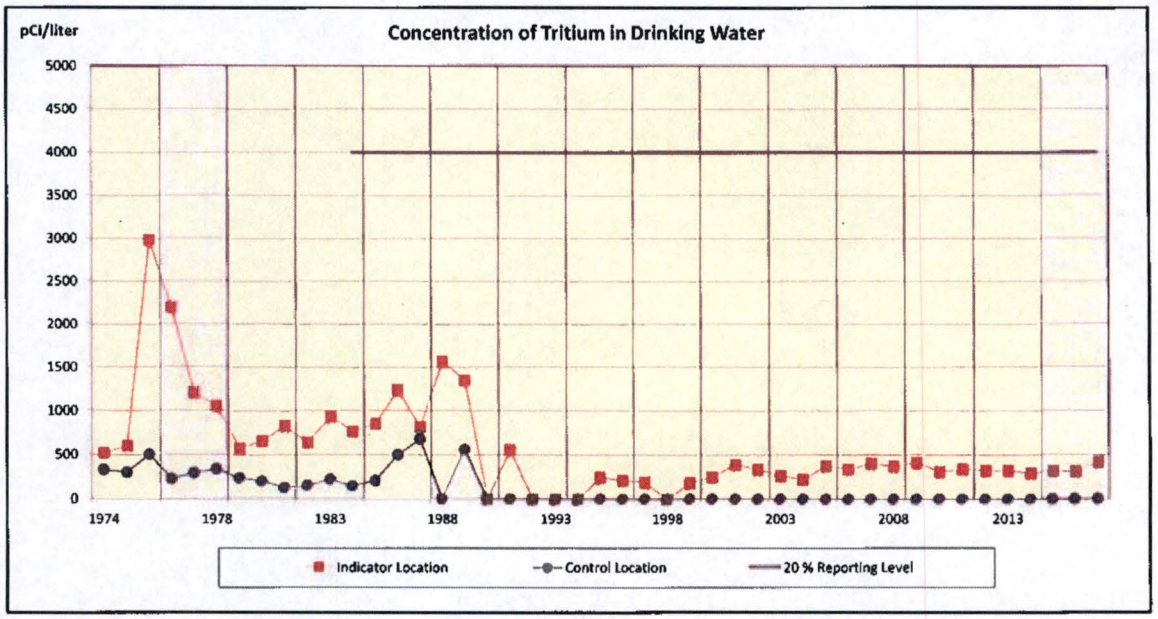


Figure 3.2-2



Current reporting level implemented 1984

Table 3.2 Mean Concentrations of Radionuclides in Drinking Water

Year	Gross Beta (pCi/l)		Tritium (pCi/l)	
	Indicator Location	Control Location	Indicator Location	Control Location
Preoperational ending Jan. 1971	3.03	5.90	Analysis not required	
Preoperational ending Jan. 1973	3.58	4.94	Analysis not required	
Feb. 1973 - June 1973	Qualitative results reported		Analysis not required	
June 1973 - Dec. 1973	7.15	21.78	Analysis not required	
Jan. 1974 - June 1974	3.13	6.98	Analysis not required	
July 1974 - Dec. 1974	2.24	2.02	525	330
Jan. 1975 - June 1975	1.98	1.59	600	300
July 1975 - Dec. 1975	2.01	1.22	2990	505
1976	2.38	2.00	2196	224
1977	2.70	2.30	1200	290
1978	2.56	2.17	1050	333
1979	1.83	1.36	576	235
1980	1.86	1.63	660	200
1981	1.98	1.88	830	127
1982	2.04	1.45	643	153
1983	1.85	1.54	937	220
1984	1.87	1.08	765	145
1985	2.14	1.16	856	210
1986	1.91	1.04	1240	503
1987	2.00	1.20	815	680
1988	2.00	1.40	1570	0.00
1989	2.30	1.80	1350	559
1990	3.00	2.70	0.00	0.00
1991	1.80	1.40	558	0.00
1992	3.20	1.60	0.00	0.00
1993	2.10	1.90	0.00	0.00
1994	1.90	2.10	0.00	0.00
1995	5.10	2.90	248	0.00
1996	2.07	1.77	214	0.00
1997	2.52	2.23	194	0.00
1998	2.48	1.70	0.00	0.00
1999	1.73	1.49	185	0.00
2000	2.07	1.68	251	0.00
2001	1.75	1.29	390	0.00
2002	1.61	1.21	338	0.00
2003	1.51	1.05	266	0.00
2004	1.58	1.25	225	0.00
2005	1.28	1.37	377	0.00
2006	1.54	1.75	340	0.00
2007	1.58	1.08	402	0.00
2008	1.82	1.25	372	0.00
2009	1.37	1.19	415	0.00
2010	1.10	0.97	308	0.00
2011	1.18	1.00	339	0.00
2012	1.40	0.92	322	0.00
2013	1.57	1.11	325	0.00
2014	1.43	1.12	292	0.00
2015	2.34	1.46	325	0.00
2016	1.44	1.15	317	0.00
2017	1.25	1.19	419	0.00

0.00 indicates no detectable measurements

1989 - Clemson water plant closes; nearest downstream plant is Anderson.

1979 - 1986 mean based on all net activity results

3.3 SURFACE WATER

Gamma spectroscopy was performed on 28 monthly surface water samples. These samples were composited to form eight quarterly composite period samples for Tritium analysis with additional Tritium analyses performed on the final 2017 monthly composites for calendar reconciliation purposes (NCR # 02174946). One indicator and one control location were sampled. The indicator location is near the liquid effluent release point.

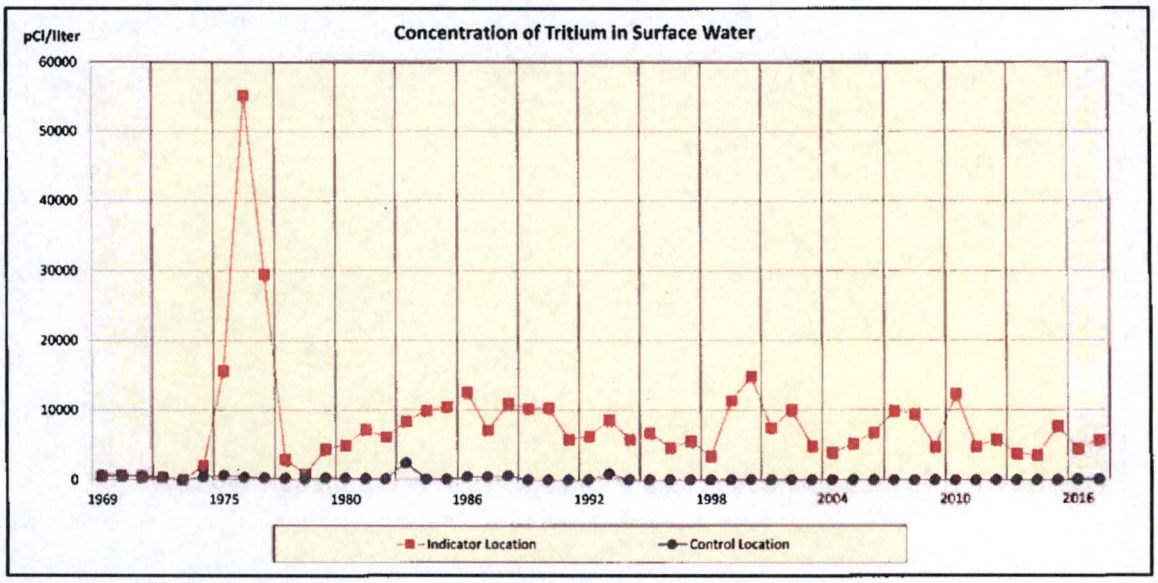
Tritium was detected in the five indicator location samples. The 2017 average concentration was 5,564 pCi/liter. The individual samples ranged from 2,580 to 10,900 pCi/liter. For comparison purposes, the 2016 mean concentration was 4,285 pCi/liter. Tritium was not detected in any control surface water samples.

Figure 3.3 shows the indicator and control annual means for Tritium since the preoperational period. Table 3.3 lists the indicator annual means.

Gamma spectroscopy analysis did not detect any station related gamma activity during 2017. No gamma emitting radionuclides attributable to station operation have been detected in surface water samples since 1999. Table 3.3 summarizes the indicator annual means of radionuclides detected since the change in the gamma spectroscopy analysis system in 1987. Visual inspection of the gamma spectroscopy tabular data covering the early operational period through 2017 did not reveal any increasing trends.

K-40 and Be-7 observed in surface water samples are naturally occurring radionuclides.

Figure 3.3



There is no reporting level for Tritium in surface water

Table 3.3 Mean Concentrations of Radionuclides in Surface Water

Year	Co-58 (pCi/l)	Co-60 (pCi/l)	Nb-95 (pCi/l)	Cs-137 (pCi/l)	H-3 pCi/l)
Preoperational 1969		Qualitative results reported			4.86E2
Preoperational 1970		Qualitative results reported			5.94E2
Preoperational 1971		Qualitative results reported			4.01E2
Preoperational 1972		Qualitative results reported			3.62E2
1973		Qualitative results reported			0.00E0
1974	0.00E0	1.32E1	0.00E0	1.60E1	1.99E3
Jan. 1975 – June 1975	0.00E0	0.00E0	0.00E0	0.00E0	1.56E4
July 1975 – Dec. 1975	0.00E0	1.34E1	0.00E0	0.00E0	5.52E4
1976	1.08E2	3.30E1	0.00E0	3.50E1	2.95E4
1977	2.60E1	1.80E1	0.00E0	3.10E1	2.90E3
1978	2.96E2	0.00E0	0.00E0	2.22E1	8.00E2
1979	1.33E0	2.60E0	1.78E0	2.82E0	4.37E3
1980	1.56E0	2.30E0	1.22E0	5.40E0	4.93E3
1981	1.10E0	6.10E-1	1.70E0	3.90E0	7.21E3
1982	6.14E-1	1.99E0	2.29E0	4.85E0	6.13E3
1983	6.99E-1	3.02E0	3.91E-1	6.83E-1	8.40E3
1984	9.40E-1	6.30E-1	7.90E-1	4.83E-1	9.90E3
1985	2.15E-1	6.27E-1	4.95E-1	9.90E-1	1.05E4
1986	3.28E0	1.23E0	1.14E0	3.07E-1	1.26E4
1987[1]	5.10E1	3.40E0	4.00E0	0.00E0	7.08E3
1988	6.20E0	5.00E0	2.50E0	3.50E0	1.10E4
1989	5.30E0	3.00E0	0.00E0	3.40E0	1.02E4
1990	1.70E0	1.60E0	0.00E0	0.00E0	1.03E4
1991	5.40E0	0.00E0	0.00E0	0.00E0	5.76E3
1992	2.50E0	0.00E0	0.00E0	0.00E0	6.22E3
1993	0.00E0	0.00E0	0.00E0	0.00E0	8.62E3
1994	0.00E0	0.00E0	0.00E0	0.00E0	5.75E3
1995	0.00E0	0.00E0	0.00E0	0.00E0	6.65E3
1996	0.00E0	0.00E0	0.00E0	0.00E0	4.54E3
1997	0.00E0	0.00E0	0.00E0	0.00E0	5.50E3
1998	0.00E0	0.00E0	0.00E0	0.00E0	3.35E3
1999	2.73E1	0.00E0	0.00E0	0.00E0	1.13E4
2000	0.00E0	0.00E0	0.00E0	0.00E0	1.48E4
2001	0.00E0	0.00E0	0.00E0	0.00E0	7.43E3
2002	0.00E0	0.00E0	0.00E0	0.00E0	1.00E4
2003	0.00E0	0.00E0	0.00E0	0.00E0	4.77E3
2004	0.00E0	0.00E0	0.00E0	0.00E0	3.86E3
2005	0.00E0	0.00E0	0.00E0	0.00E0	5.15E3
2006	0.00E0	0.00E0	0.00E0	0.00E0	6.72E3
2007	0.00E0	0.00E0	0.00E0	0.00E0	9.91E3
2008	0.00E0	0.00E0	0.00E0	0.00E0	9.43E3
2009	0.00E0	0.00E0	0.00E0	0.00E0	4.68E3
2010	0.00E0	0.00E0	0.00E0	0.00E0	1.23E4
2011	0.00E0	0.00E0	0.00E0	0.00E0	4.75E3
2012	0.00E0	0.00E0	0.00E0	0.00E0	5.76E3
2013	0.00E0	0.00E0	0.00E0	0.00E0	3.68E3
2014[2]	0.00E0	0.00E0	0.00E0	0.00E0	3.49E3
2015	0.00E0	0.00E0	0.00E0	0.00E0	7.73E3
2016	0.00E0	0.00E0	0.00E0	0.00E0	4.29E3
2017	0.00E0	0.00E0	0.00E0	0.00E0	5.56E3

0.00E0 indicates no detectable measurements

1979-1986 mean based on all net activity results

(1) 1987 – Gamma spectroscopy system change

(2) 2014 Gamma spectroscopy system was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995). No analytical changes were noted due to the 2014 gamma spectroscopy system change.

3.4 MILK

Gamma spectroscopy and low level iodine analysis was performed on 26 milk samples collected from the control location in 2017. No indicator dairies were sampled during 2017 and none were identified by the 2017 land use census (NCR # 02132422).

The milk animal found at 3.27 miles in the East sector during the 2016 LUC was not included in the ONS REMP and was no longer present during the 2017 LUC (NCR # 02045091). The milk animal found at 4.66 miles in the East sector during the 2016 LUC was still present during the 2017 LUC and appears on Figure 3.9, but the milk is not used for human consumption (NCR # 02132422) and the location is not included in the ONS REMP.

There were no gamma emitting radionuclides due to ONS plant operations identified in milk samples in 2017. Cs-137 is the only radionuclide, other than naturally occurring, reported in milk samples since 1988 (excluding Fukushima Daiichi). 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.

Table 3.4 lists the highest indicator location annual mean and control location annual mean for Cs-137 since the preoperational period. The table shows similar concentrations for both indicator and control locations.

K-40 observed in milk samples is a naturally occurring radionuclide.

Table 3.4 Mean Concentration of Radionuclides in Milk

Year	Cs-137 Indicator (pCi/l)	Cs-137 Control (pCi/l)
Preoperational	1.57E1	1.46E1
Feb. 1973 – June 1973	Qualitative results reported	Qualitative results reported
July 1973 – Dec. 1973	5.80E0	Qualitative results reported
Jan. 1974 – June 1974	5.30E0	0.00E0
July 1974 – Dec. 1974	1.11E1	0.00E0
Jan. 1975 – June 1975	1.51E1	9.45E0
July 1975 – Dec. 1975	0.00E0	0.00E0
1976	1.80E1	7.47E0
1977	0.00E0	0.00E0
1978	1.33E1	1.33E1
1979	7.25E0	2.52E0
1980	3.58E0	2.63E0
1981	5.52E0	5.51E0
1982	2.71E0	3.25E0
1983	5.04E0	-4.27E-1
1984	2.30E0	2.58E0
1985	2.38E0	1.31E0
1986	2.92E0	2.97E0
1987[1]	4.90E0	4.90E0
1988	3.90E0	3.20E0
1989	4.70E0	2.90E0
1990	6.40E0	0.00E0
1991	5.00E0	0.00E0
1992	6.60E0	0.00E0
1993	0.00E0	0.00E0
1994	0.00E0	1.80E0
1995	2.30E0	2.00E0
1996	0.00E0	4.10E0
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[2]	0.00E0	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[3]	No Indicator Location	0.00E0
2015	No Indicator Location	0.00E0
2016	No Indicator Location	0.00E0
2017	No Indicator Location	0.00E0

0.00E0 indicates no detectable measurements

1979 - 1986 mean based on all net activity results

(1) 1987 – Gamma spectroscopy system change

(2) The Oconee milk program was updated to align with NUREG-1301 during 2005 (NCR # 01753418). Location 071 was designated as the new control site effective with the 7/12/2005 sampling.

(3) 2014 Gamma spectroscopy system was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995). No analytical changes were noted due to the 2014 gamma spectroscopy system change.

3.5 BROADLEAF VEGETATION

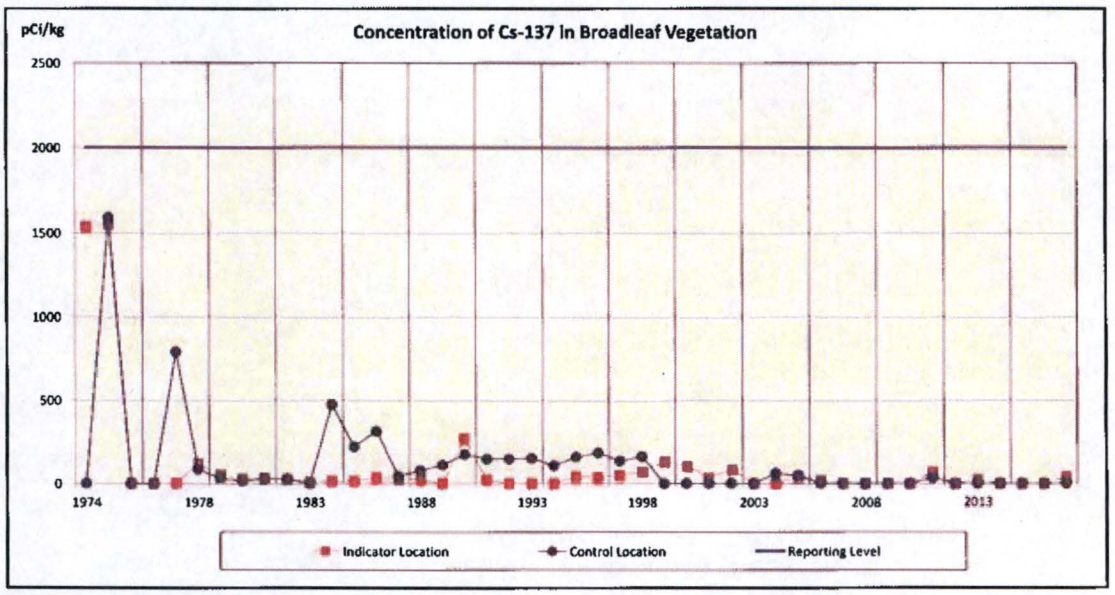
Gamma spectroscopy was performed on 48 broadleaf vegetation samples during 2017. Three indicator locations and one control location were sampled. Cs-137 was reported in one indicator sample at a concentration of 39.4 pCi/kg (1.97% of reporting level). Cs-137 was not detected in any of the control samples in 2017.

Cs-137 is the only radionuclide, other than naturally occurring, reported in vegetation samples since the change in gamma spectroscopy analysis systems in 1987. Figure 3.5 shows the indicator and control annual means for Cs-137 since the early operational period of the plant. Table 3.5 shows historical concentrations of Cs-137.

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 3.5 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.

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

Figure 3.5



2011 concentration affected by Fukushima Daiichi

Table 3.5 Mean Concentration of Radionuclides in Vegetation

Year	Cs-137 Indicator (pCi/kg)	Cs-137 Control (pCi/kg)
July 1974 - Dec. 1974	1.54E3	0.00E0
Jan. 1975 - June 1975	1.55E3	1.59E3
July 1975 - Dec. 1975	0.00E0	0.00E0
1976	0.00E0	0.00E0
1977	0.00E0	7.90E2
1978	1.19E2	8.19E1
1979	5.04E1	2.96E1
1980	2.80E1	1.55E1
1981	2.99E1	2.60E1
1982	2.42E1	2.62E1
1983	7.44E0	5.35E-1
1984	1.37E1	4.74E2†
1985	1.62E1	2.20E2
1986	3.28E1	3.12E2
1987(1)	2.70E1	4.20E1
1988	2.40E1	7.50E1
1989	0.00E0	1.08E2
1990	2.73E2	1.74E2
1991	2.20E1	1.45E2
1992	0.00E0	1.46E2
1993	0.00E0	1.49E2
1994	0.00E0	1.06E2
1995	4.30E1	1.58E2
1996	3.79E1	1.83E2
1997	4.73E1	1.35E2
1998	7.28E1	1.61E2††
1999	1.34E2	0.00E0†††
2000	1.06E2	0.00E0
2001	3.19E1	0.00E0
2002	8.44E1	0.00E0
2003	0.00E0	0.00E0
2004	0.00E0	5.96E1
2005	4.51E1	4.11E1
2006	1.77E1	0.00E0
2007	0.00E0	0.00E0
2008	0.00E0	0.00E0
2009	0.00E0	0.00E0
2010	0.00E0	0.00E0
2011	6.68E1††††	3.35E1††††
2012	0.00E0	0.00E0
2013	2.57E1	0.00E0
2014(2)	0.00E0	0.00E0
2015	0.00E0	0.00E0
2016	0.00E0	0.00E0
2017	3.94E1	0.00E0

0.00E0 indicates no detectable measurements
Qualitative results reported prior to 1974
1979 - 1986 mean based on all net activity
(1) 1987 – Gamma spectroscopy system change

† Control location changed to 073 in 1984
†† Control location 081 added in 1998
††† Control location 073 removed in 1999
†††† 2011 concentration affected by Fukushima Daiichi

(2) 2014 Gamma spectroscopy system was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995). No analytical changes were noted due to the 2014 gamma spectroscopy system change.

3.6 FISH

In 2017, gamma spectroscopy was performed on 12 fish samples. Two downstream indicator locations and one control location were sampled. Cs-137 was identified in one of the eight indicator location samples with an average concentration of 17.3 pCi/kg (0.87 % of reporting level). Cs-137 was not detected in any of the control location samples.

Figures 3.6-1 and 3.6-2 are graphs displaying the annual means for Cs-137 and Cs-134. Historically, both are contributors to the calculated dose from liquid effluents from ingestion of fish. Radioactivity concentrations in downstream fish samples are higher than those reported in preoperational fish samples, however, concentrations in fish have decreased over time with decreases in radioactive material releases from the plant.

One factor affecting the trend analysis is a change in sampling locations. In 1984, a second downstream fish location was added. Location 063 is closer to the liquid effluent discharge point and has been the highest mean indicator since it was added.

Table 3.6 lists the highest indicator location annual means since the preoperational period for radionuclides detected in 2017. Also included in the table are radionuclides that have been identified in this media since the change in analysis systems in 1987. Comparison of data to previous years does not indicate any increases in concentrations.

K-40 observed in fish samples is a naturally occurring radionuclide.

Figure 3.6-1

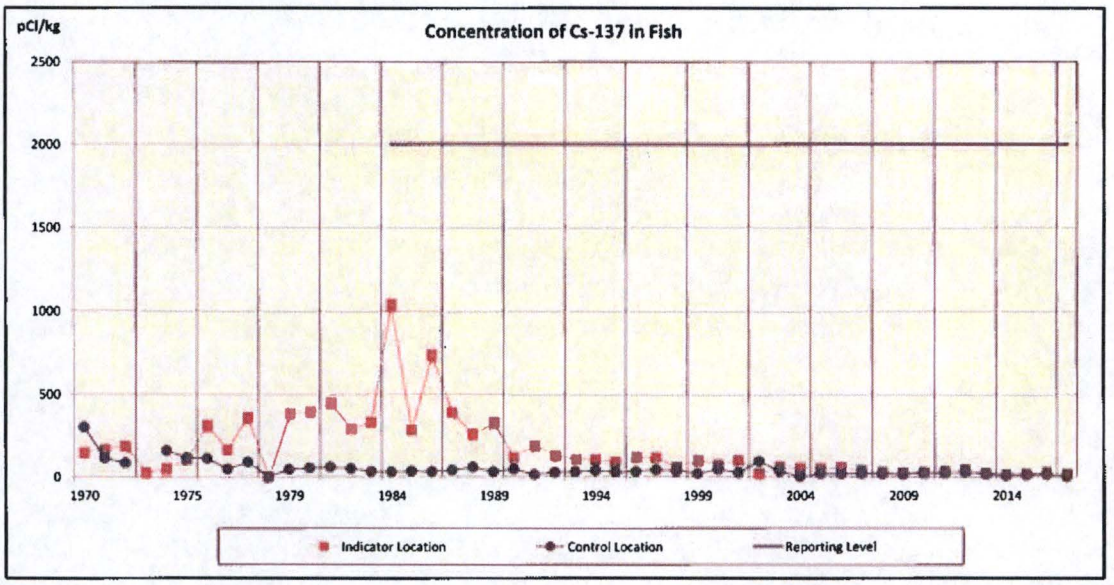
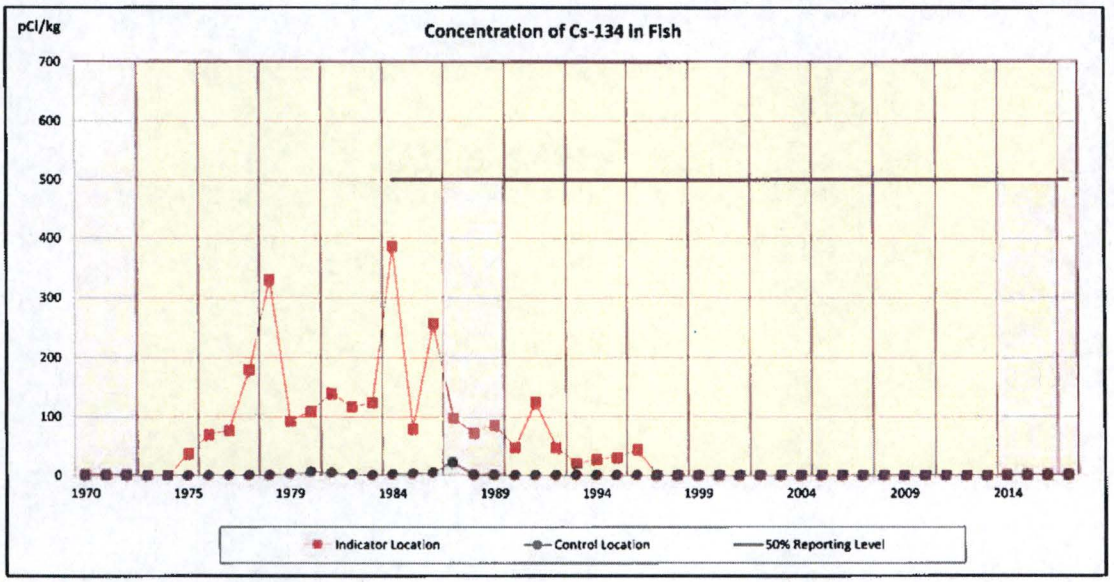


Figure 3.6-2



Current reporting levels implemented 1984

Table 3.6 Mean Concentrations of Radionuclides in Fish

Year	Co-58 (pCi/kg)	Co-60 (pCi/kg)	Cs-134 (pCi/kg)	Cs-137 (pCi/kg)
Preop ending Jan.1971	0.00E0	0.00E0	0.00E0	1.46E2
Preop ending Jan.1973	0.00E0	0.00E0	0.00E0	1.66E2
Feb. 1973 - June 1973	Qualitative results reported-no significant measurements above background			
July 1973 - Dec. 1973	0.00E0	0.00E0	0.00E0	1.89E2
Jan. 1974 - June 1974	0.00E0	0.00E0	0.00E0	2.47E1
July 1974 - Dec. 1974	0.00E0	0.00E0	0.00E0	4.85E1
Jan. 1975 - June 1975	0.00E0	0.00E0	3.81E1	1.05E2
July 1975 - Dec. 1975	8.50E1	0.00E0	7.00E1	3.13E2
1976	5.70E1	1.14E2	7.73E1	1.66E2
1977	0.00E0	0.00E0	1.80E2	3.60E2
1978	3.27E2	0.00E0	3.31E2	0.00E0
1979	1.91E0	1.56E1	9.26E1	3.88E2
1980	1.45E1	1.90E1	1.10E2	3.99E2
1981	2.25E1	1.49E1	1.40E2	4.51E2
1982	9.83E-1	8.03E0	1.17E2	2.94E2
1983	3.35E1	4.53E0	1.24E2	3.32E2
1984	1.21E2	6.23E1	3.87E2	1.04E3
1985	1.62E1	1.10E1	7.93E1	2.85E2
1986	9.56E1	2.59E1	2.57E2	7.36E2
1987[1]	1.63E2	6.30E1	9.80E1	3.93E2
1988	9.60E1	0.00E0	7.20E1	2.60E2
1989	4.30E1	1.50E1	8.60E1	3.36E2
1990	1.50E1	0.00E0	4.80E1	1.19E2
1991	4.59E1	0.00E0	1.25E2	1.94E2
1992	6.10E1	0.00E0	4.80E1	1.36E2
1993	0.00E0	0.00E0	2.10E1	1.10E2
1994	0.00E0	0.00E0	2.80E1	1.05E2
1995	0.00E0	0.00E0	3.10E1	9.20E1
1996	0.00E0	0.00E0	4.49E1	1.25E2
1997	0.00E0	0.00E0	0.00E0	1.18E2
1998	0.00E0	0.00E0	0.00E0	5.79E1
1999	0.00E0	0.00E0	0.00E0	1.04E2
2000	0.00E0	0.00E0	0.00E0	7.54E1
2001	1.72E1	0.00E0	0.00E0	9.92E1
2002	0.00E0	0.00E0	0.00E0	9.37E1
2003	5.02E1	0.00E0	0.00E0	6.04E1
2004	0.00E0	0.00E0	0.00E0	5.29E1
2005	0.00E0	0.00E0	0.00E0	5.14E1
2006	0.00E0	0.00E0	0.00E0	5.58E1
2007	0.00E0	0.00E0	0.00E0	4.10E1
2008	0.00E0	0.00E0	0.00E0	3.13E1
2009	9.01E0	0.00E0	0.00E0	2.68E1
2010	0.00E0	0.00E0	0.00E0	2.69E1
2011	0.00E0	0.00E0	0.00E0	3.53E1
2012	1.23E2	3.61E1	0.00E0	4.32E1
2013	0.00E0	0.00E0	0.00E0	2.44E1
2014[2]	0.00E0	0.00E0	0.00E0	1.40E1
2015	0.00E0	0.00E0	0.00E0	1.94E1
2016	0.00E0	0.00E0	0.00E0	2.74E1
2017	0.00E0	0.00E0	0.00E0	1.73E1

0.00E0 indicates no detectable measurements

1979 - 1986 mean based on all net activity

(1) 1987 – Gamma spectroscopy system change

(2) 2014 Gamma spectroscopy system was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995). No analytical changes were noted due to the 2014 gamma spectroscopy system change.

3.7 SHORELINE SEDIMENT

Gamma spectroscopy was performed on six sediment samples. Two downstream indicator locations and one control location were sampled. Four samples were taken from indicator locations and two from the control location.

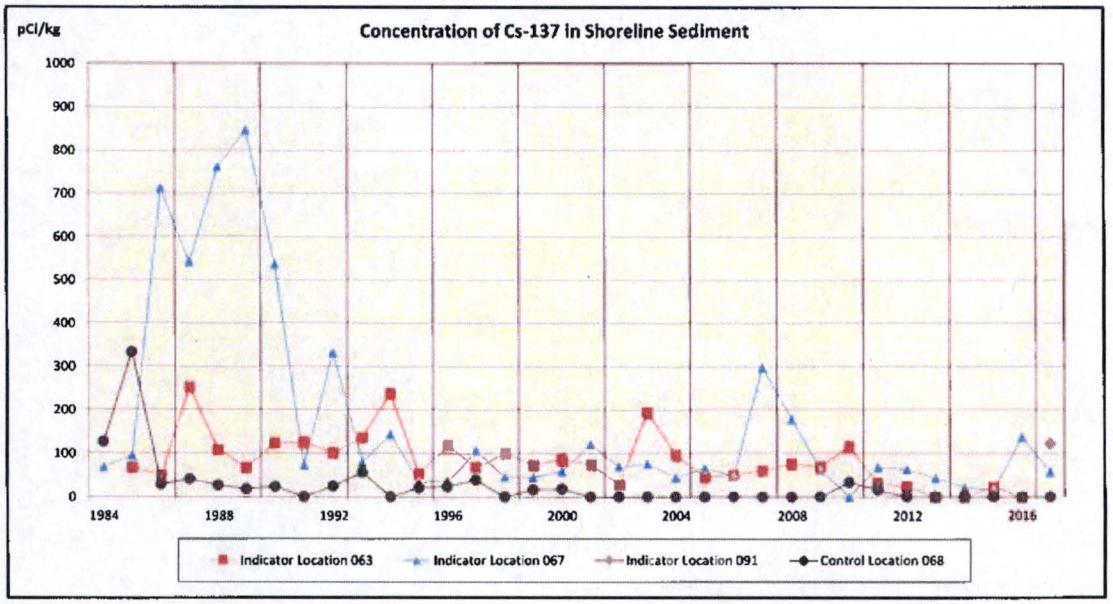
Indicator location 063 shoreline sediment (Lake Hartwell Hwy 183 Bridge (0.80 mi. ESE)) was replaced with indicator location 091 Shoreline Sediment (Holders Landing Road (2.09 mi. S)) due to indicator location 063 safety and access concerns (NCR # 02053661).

Cs-137 was identified in three of the four indicator location samples. Cs-137 was not identified in the control location samples. The highest 2017 individual sample Cs-137 concentration was 122 pCi/kg. Table 3.7 lists the highest indicator location annual means since shoreline sediment was initiated in 1984. Included in the table are radionuclides that have been identified in this media since the change in analysis systems in 1987.

Visual inspection of the tabular data did not reveal any trends. Figure 3.7 is a graph of the Cs-137 annual means. Historically, Cs-137 is a contributor to the calculated dose from liquid effluents from shoreline sediment. No trends are apparent.

K-40 and Be-7 observed in shoreline samples are naturally occurring radionuclides.

Figure 3.7



There are no reporting levels for shoreline sediment

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

Year	Mn-54	Co-58	Co-60	Zn-65	Cs-134	Cs-137	Ag-110m	Sb-125
1984	1.10E1	1.09E1	1.19E1	0.00E0	7.77E1	5.16E1	0.00E0	0.00E0
1985	9.39E0	1.27E0	4.79E0	0.00E0	7.63E1	9.47E1	0.00E0	0.00E0
1986	2.24E1	1.62E1	2.50E1	0.00E0	1.41E2	7.12E2	0.00E0	0.00E0
1987 (1)	5.40E1	4.70E2	5.07E2	0.00E0	1.01E2	6.22E2	3.46E2	0.00E0
1988	3.30E1	1.20E2	1.87E2	6.70E1	6.60E1	7.59E2	1.62E2	3.67E2
1989	2.30E1	1.24E2	1.96E2	0.00E0	5.40E1	8.48E2	5.50E1	1.86E2
1990	3.40E1	8.00E1	2.59E2	0.00E0	4.50E1	5.36E2	1.71E2	9.00E1
1991	3.26E1	5.60E1	8.57E1	0.00E0	6.91E1	1.24E2	1.10E2	1.78E2
1992	8.79E1	1.79E2	1.12E2	0.00E0	5.60E1	3.31E2	1.69E2	2.08E2
1993	8.20E1	8.20E1	6.50E1	0.00E0	3.20E1	1.36E2	5.63E1	1.11E2
1994	5.30E1	7.00E1	1.49E2	0.00E0	6.70E1	2.38E2	1.04E2	1.29E2
1995	1.43E2	3.90E1	2.40E1	0.00E0	1.10E1	5.20E1	0.00E0	0.00E0
1996	0.00E0	5.10E1	0.00E0	0.00E0	1.98E1	1.19E2	0.00E0	0.00E0
1997	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	1.06E2	0.00E0	0.00E0
1998	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	1.01E2	0.00E0	0.00E0
1999	6.96E1	0.00E0	0.00E0	0.00E0	0.00E0	7.38E1	0.00E0	0.00E0
2000	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	8.54E1	0.00E0	0.00E0
2001	0.00E0	2.10E1	0.00E0	0.00E0	0.00E0	1.20E2	0.00E0	0.00E0
2002	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	6.96E1	0.00E0	0.00E0
2003	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	1.93E2	0.00E0	0.00E0
2004	8.54E1	0.00E0	0.00E0	0.00E0	0.00E0	9.56E1	0.00E0	0.00E0
2005	2.00E2	0.00E0	0.00E0	0.00E0	0.00E0	6.53E1	0.00E0	0.00E0
2006	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	5.01E1	0.00E0	0.00E0
2007	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	2.97E2	0.00E0	0.00E0
2008	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	1.78E2	0.00E0	0.00E0
2009	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	6.97E1	0.00E0	0.00E0
2010	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	1.15E2	0.00E0	0.00E0
2011	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	6.83E1	0.00E0	0.00E0
2012	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	6.35E1	0.00E0	0.00E0
2013	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	4.37E1	0.00E0	0.00E0
2014 (2)	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	2.11E1	0.00E0	0.00E0
2015	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	2.24E1	0.00E0	0.00E0
2016	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	1.36E2	0.00E0	0.00E0
2017	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	1.22E2	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 was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995). No analytical changes were noted due to the 2014 gamma spectroscopy system change.

3.8 DIRECT GAMMA RADIATION

3.8.1 ENVIRONMENTAL TLD

Oconee is licensed with an exclusion area boundary defined by UFSAR Section 2.1.1.2 as a 1 mile 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" were placed within exclusion area upon inception of the REMP and all are used as indicators. Due to close proximity with Oconee, inner ring TLD locations are not good indicators of radiation exposure to a member of the public, but are good at determining nearby environmental effects due to plant operation. Based on their placement, inner ring TLD locations are expected to occasionally be influenced by normal plant operation. TLD locations designated as "outer ring" are outside the 1 mile exclusion area 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 13 mile radius from station center are designated as "special interest." The two "control" locations are greater than 9 miles from station center. These locations were chosen to reduce the probability of influence from Oconee 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 2017, 200 total TLDs were analyzed, 192 at indicator locations and 8 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 111 mrem at indicator location 024, 0.81 miles E of station center. Figure 3.8 and Table 3.8-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, historical inner and outer ring averages compare similarly, while control data is somewhat higher. This is most likely an artifact of the underlying geologic structures at the control locations. Comparing data from the 2017 Oconee Annual Radiological Effluent Release Report (ARERR), dose to a member of the public resulting from gaseous effluent releases at Oconee is a small fraction of measured TLD dose. Therefore, it can be concluded that gaseous effluents from Oconee 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 2017 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 2017, therefore no evaluation of dose to a member of the public from direct or scattered radiation was performed. Table 3.8-B summarizes the data.

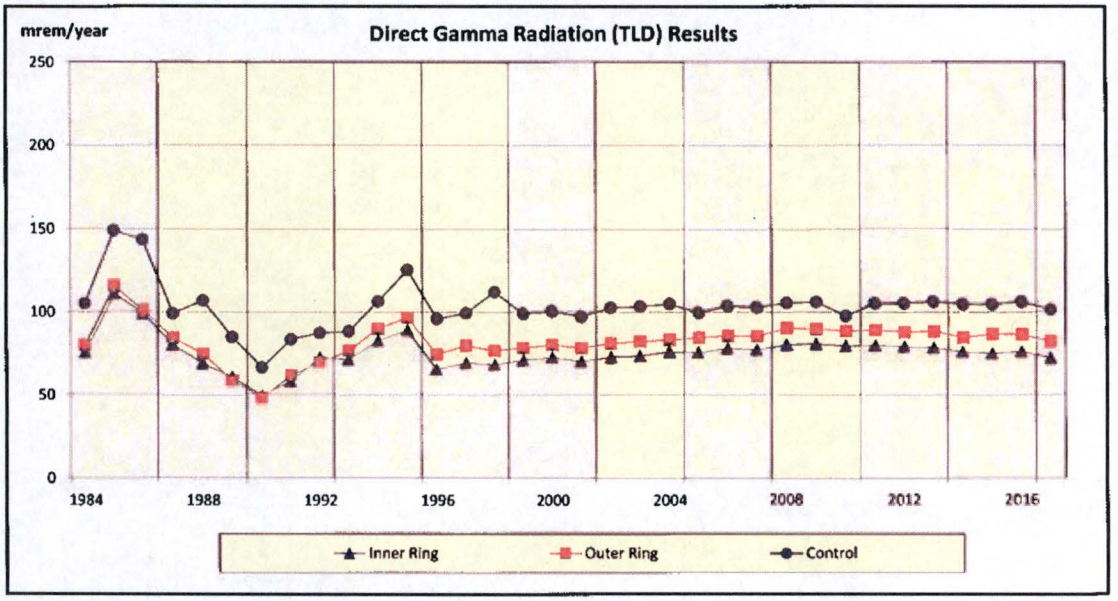
A TLD intercomparison program is conducted as part of the quality assurance program. Results of this program are included in section 5.7.

3.8.2 ISFSI

The Oconee ISFSI began operation in 1990. It is located 0.25 miles southwest of station center in a secured area specifically constructed to provide dry storage for spent nuclear fuel. The ISFSI employs the NUHOMS® horizontal storage module design. Irradiated fuel assemblies are confined, protected, and shielded by a reinforced concrete module. The system is completely passive and designed to provide shielding and safe confinement of spent fuel for a range of postulated accident conditions and natural phenomena. Decay heat is removed from the module by a passive ventilation system. 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.

The Oconee REMP serves as the operational program for the ISFSI. Several environmental TLD locations are presently located at the Oconee site boundary fence near the ISFSI. The closest of these is 0.3 miles from the ISFSI, well within the 1 mile exclusion boundary. In addition, dose rates at the ISFSI restricted area fence are monitored with TLDs as part of the routine REMP. These are used, in part, to control occupational exposure and augment the REMP according to the Oconee ISFSI UFSAR. The maximum TLD dose at the ISFSI fence, which is not accessible to the public, was 587 mrem per standard quarter. This is consistent with previous measurements.

Figure 3.8



There is no reporting level for Direct Radiation (TLD)

Table 3.8-A Direct Gamma Radiation (TLD) Results[1]

Year	Inner Ring Average (mrem/yr)	Outer Ring Average (mrem/yr)	Control Average (mrem/yr)
Preoperational	1.07E2	1.18E2	1.42E2
1984	7.54E1	7.96E1	1.05E2
1985	1.11E2	1.15E2	1.49E2
1986	9.90E1	1.01E2	1.43E2
1987	8.01E1	8.44E1	9.91E1
1988	6.87E1	7.47E1	1.07E2
1989	6.05E1	5.86E1	8.49E1
1990	4.96E1	4.82E1	6.66E1
1991	5.81E1	6.18E1	8.36E1
1992	7.24E1	6.95E1	8.74E1
1993	7.11E1	7.66E1	8.84E1
1994	8.25E1	9.00E1	1.06E2
1995	8.89E1	9.66E1	1.25E2
1996	6.51E1	7.44E1	9.60E1
1997	6.92E1	7.96E1	9.93E1
1998	6.81E1	7.68E1	1.12E2
1999	7.08E1	7.84E1	9.88E1
2000	7.24E1	8.03E1	1.00E2
2001	6.99E1	7.83E1	9.71E1
2002	7.28E1	8.11E1	1.03E2
2003	7.36E1	8.23E1	1.03E2
2004	7.61E1	8.31E1	1.05E2
2005	7.54E1	8.46E1	9.95E1
2006	7.79E1	8.57E1	1.04E2
2007	7.70E1	8.55E1	1.03E2
2008	8.04E1	9.03E1	1.05E2
2009	8.08E1	8.98E1	1.06E2
2010	7.94E1	8.85E1	9.77E1
2011	7.96E1	8.91E1	1.05E2
2012	7.89E1	8.79E1	1.05E2
2013	7.83E1	8.84E1	1.06E2
2014	7.58E1	8.46E1	1.05E2
2015	7.48E1	8.67E1	1.04E2
2016	7.59E1	8.65E1	1.06E2
2017	7.18E1	8.17E1	1.01E2

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

Table 3.8-B Direct Gamma Radiation (TLD) Oconee 2017 Investigation Level

Oconee 2017 MDD_Q: 7	Oconee 2017 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
20	18.9	20.6	17.4	12.7	18.0	ND	ND	ND	ND	75.7	68.7	ND
21	14.0	16.2	12.7	8.6	13.5	ND	ND	ND	ND	56.9	50.9	ND
22	21.8	24.9	21.1	17.2	22.2	ND	ND	ND	ND	89.7	85.4	ND
23	21.9	25.3	19.3	15.6	20.9	ND	ND	ND	ND	87.8	81.0	ND
24	22.8	32.9	25.6	23.7	28.6	10.1	ND	ND	ND	98.6	110.7	12.0
25	17.1	20.7	16.3	11.7	18.4	ND	ND	ND	ND	72.9	67.2	ND
26	16.5	19.0	15.8	11.7	17.1	ND	ND	ND	ND	67.2	63.6	ND
27	19.2	21.2	17.6	12.7	18.4	ND	ND	ND	ND	78.1	69.9	ND
28	17.0	17.9	14.3	10.6	16.3	ND	ND	ND	ND	68.3	59.2	ND
29	15.7	17.4	13.6	10.0	15.2	ND	ND	ND	ND	63.3	56.1	ND
30	17.0	19.4	17.1	12.9	19.7	ND	ND	ND	ND	70.6	69.1	ND
31	16.4	17.8	15.1	11.5	16.0	ND	ND	ND	ND	65.7	60.3	ND
32	22.9	21.9	17.8	13.8	17.1	ND	ND	ND	ND	94.5	70.6	ND
33	19.5	19.7	15.4	11.4	16.3	ND	ND	ND	ND	77.9	62.8	ND
34	21.5	19.3	15.9	12.6	16.6	ND	ND	ND	ND	86.0	64.4	ND
35	22.9	26.3	21.7	16.5	21.5	ND	ND	ND	ND	93.3	86.0	ND
36	26.5	29.3	22.3	20.7	26.2	ND	ND	ND	ND	105.1	98.5	ND
37	20.4	23.6	20.2	12.3	17.5	ND	ND	ND	ND	82.0	73.5	ND
38	21.9	24.9	20.7	16.2	21.8	ND	ND	ND	ND	87.5	83.5	ND
39	24.2	27.5	22.7	17.1	22.3	ND	ND	ND	ND	96.2	89.6	ND
40	23.7	29.7	23.9	19.5	24.2	ND	ND	ND	ND	101.1	97.4	ND
41	17.3	19.4	16.0	11.6	17.8	ND	ND	ND	ND	69.1	64.7	ND
42	25.0	27.1	25.5	18.9	24.1	ND	ND	ND	ND	102.2	95.6	ND
43	23.8	26.0	22.2	18.3	23.6	ND	ND	ND	ND	95.3	90.2	ND
44	18.3	19.9	18.0	13.8	18.7	ND	ND	ND	ND	80.0	70.3	ND
45	17.0	18.6	14.9	11.3	17.8	ND	ND	ND	ND	67.9	62.6	ND
46	21.5	25.2	21.4	17.1	21.9	ND	ND	ND	ND	91.8	85.6	ND
47	22.4	25.2	20.8	17.1	22.9	ND	ND	ND	ND	91.1	86.0	ND
48	25.3	27.3	23.9	18.4	24.8	ND	ND	ND	ND	101.3	94.4	ND
50	17.7	20.9	15.7	12.1	17.3	ND	ND	ND	ND	70.9	65.9	ND
51	19.0	21.5	17.5	12.1	17.7	ND	ND	ND	ND	76.2	68.7	ND
52	22.9	27.6	21.6	18.2	21.9	ND	ND	ND	ND	94.8	89.2	ND
53	25.1	28.6	21.9	16.2	25.1	ND	ND	ND	ND	102.3	91.9	ND
54	18.5	20.1	17.1	12.2	18.7	ND	ND	ND	ND	76.5	68.1	ND
55	15.5	17.5	14.3	10.4	15.4	ND	ND	ND	ND	65.1	57.6	ND
56	22.8	27.5	22.0	17.4	23.2	ND	ND	ND	ND	91.8	90.1	ND
57	22.4	27.7	21.9	18.9	25.2	ND	ND	ND	ND	93.6	93.7	ND
58	29.3	33.0	27.2	22.5	30.2	ND	ND	ND	ND	119.7	112.9	ND
59	24.1	26.3	22.2	18.1	24.3	ND	ND	ND	ND	98.5	90.9	ND
76	20.8	29.5	22.1	17.3	24.8	8.7	ND	ND	ND	89.0	93.8	ND
77**	17.9	18.0	11.8	---	9.6	ND	ND	ND	ND	69.6	52.4	ND
78.1**	24.9	26.7	21.0	12.0	17.9	ND	ND	ND	ND	97.8	77.5	ND
81	21.9	24.2	20.2	17.0	26.9	ND	ND	ND	ND	91.1	88.4	ND
85**	18.3	23.0	17.3	14.4	18.3	ND	ND	ND	ND	73.1	73.1	ND
86**	15.9	20.0	15.8	11.8	16.0	ND	ND	ND	ND	63.7	63.6	ND
87**	16.0	19.2	15.6	11.6	17.7	ND	ND	ND	ND	63.9	64.0	ND
88**	19.0	22.2	17.8	15.7	20.3	ND	ND	ND	ND	76.1	76.0	ND
89**	20.5	24.2	19.6	16.2	22.0	ND	ND	ND	ND	82.0	82.0	ND
90**	22.7	26.5	20.9	18.7	24.6	ND	ND	ND	ND	90.7	90.7	ND

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

** Test Locations added to ODCM for 2017Q1 (ONS ODCM Revision 58), baseline analysis ongoing (NCR # 02035669)

' --- ' 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 3.8-B definition of terms

- MDD_Q = minimum differential dose, quarterly, 3 times 90th percentile s_Q determined from analysis in mrem
- MDD_A = minimum differential dose, annual, 3 times 90th 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) averaged between multiple TLDs at each location.
- 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

3.9 LAND USE CENSUS

The Land Use Census was conducted during the growing season (5/24 – 5/25/2017) as required by SLC 16.11.6. Table 3.9 summarizes census results. A map indicating identified locations is shown in Figure 3.9. The nearest residence is located in the NNW sector at 1.03 miles. No program changes were required based on the results of the census.

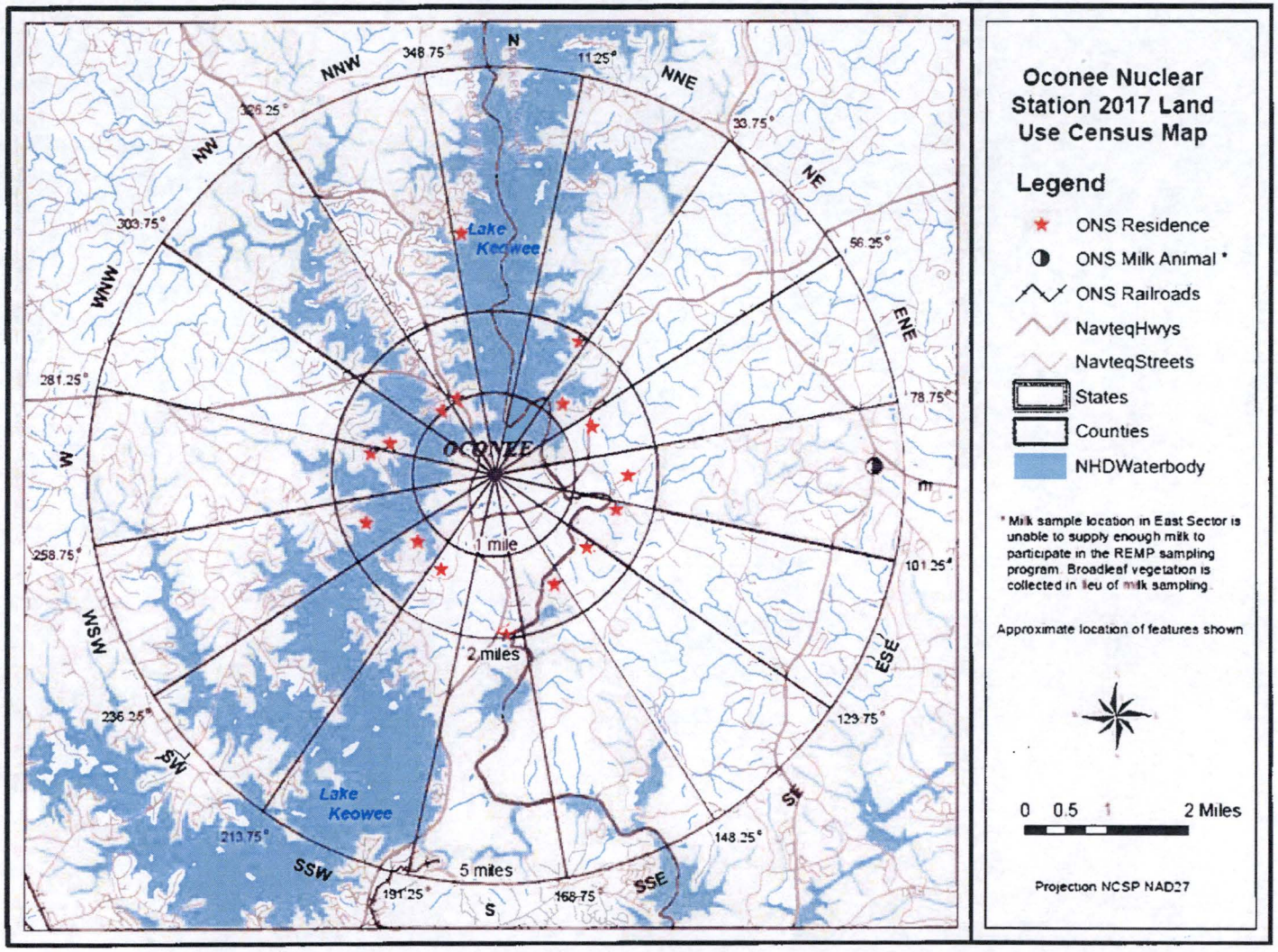
Table 3.9 Oconee 2017 Land Use Census Results*

Nearest Pathways (Miles)

SECTOR	RESIDENCE		MILK ANIMAL	
	2016	2017	2016	2017
North	2.98	2.98	---	---
North-Northeast	1.84	1.84	---	---
Northeast	1.20	1.20	---	---
East-Northeast	1.34	1.34	---	---
East	1.64	1.64	3.27	4.66*(1)
East-Southeast	1.57	1.57	---	---
Southeast	1.46	1.46	---	---
South-Southeast	1.54	1.54	---	---
South	1.96	1.96	---	---
South-Southwest	1.36	1.34*	---	---
Southwest	1.27	1.27	---	---
West-Southwest	1.76	1.76	---	---
West	1.58	1.58	---	---
West-Northwest	1.35	1.35	---	---
Northwest	1.04	1.04	---	---
North-Northwest	1.03	1.03	---	---

NOTE: Sector and distances were determined by Global Positioning System
* Represents a change from the previous year
--- Indicates no occurrences within the 5 mile radius .
(1) Goat milk used to feed goat kids. Milk not used for human consumption (NCR #02132422).

Figure 3.9


N
NNE
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SSW
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WSW
W
WNW
NW
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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°
Lake Keowee
OCONEE
1 mile
2 miles
5 miles
Lake Keowee
Oconee Nuclear Station 2017 Land Use Census Map
Legend
ONS Residence
ONS Milk Animal *
ONS Railroads
NavteqHwys
NavteqStreets
States
Counties
NHDWaterbody
* Milk sample location in East Sector is unable to supply enough milk to participate in the REMP sampling program. Broadleaf vegetation is collected in lieu of milk sampling.
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 2017 ONS REMP samples. The primary purpose of estimating doses based on sample results is to allow comparison to effluent program dose estimates. Doses based on sample results were conservatively calculated in a manner as equivalent as possible to effluent-based 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 calculated using drinking water, fish, and shoreline sediment results are reported in Table 4.1-A. The individual critical population and pathway dose calculations are contained in Table 4.1-B.

No radionuclides attributable to ONS operations were detected in milk, airborne radioiodine or airborne particulate samples. Naturally occurring K-40 and Be-7 were detected in some samples but were not included in any REMP-based dose estimates. Dose estimates were not calculated for surface water samples because surface water is not considered a potable drinking water source although surface water tritium concentrations are used in calculating doses from fish. REMP TLD exposure results are discussed in Section 3.8.

The maximum environmental organ dose estimate for any single sample type (excluding TLD results) collected during 2017 was 3.35E-1 mrem to the child bone from the consumption of vegetation.

4.2 ESTIMATED DOSE FROM RELEASES

Throughout the year, dose estimates were calculated based on actual 2017 liquid and gaseous effluent release data. Effluent-based dose estimates were calculated using OpenEMS 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 OpenEMS dose calculations are reported in the Annual Radioactive Effluent Release Report.

The effluent-based liquid release doses are summations of the dose contributions of 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, milk, inhalation and vegetation pathways.

4.3 COMPARISON OF DOSES

The liquid environmental and release data doses 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.

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 Oconee 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 liquid release effluent pathways, fish, drinking water, and shoreline sediment were the predominant dose pathways based on environmental and effluent samples. The maximum total organ dose based on 2017 environmental sample results was 8.78E-02 mrem to the child liver. The maximum total organ dose of 1.43E-1 mrem for liquid effluent-based estimates was to the child total body and GI-LLI.

The gaseous effluent dose is due to C-14 and tritium in broadleaf vegetation. The maximum total organ dose for gaseous effluent estimates was 3.49E-1 mrem to the child bone, with C-14 being the primary dose contributor. Vegetation was the only gaseous release pathway media that contained detectable activity. The maximum total organ dose for gaseous environmental estimates was 3.35E-1 mrem to the child bone.

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 ONS are being maintained well within regulatory limits and are described in the Annual Radiological Effluent Release Report (ARERR).

TABLE 4.1-A

OCONEE NUCLEAR STATION
2017 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	063 (0.80 mi ESE)	3.20E-04
Skin	Effluent	Teen	N/A	Discharge Pt.	4.15E-05
Bone	Environmental	Child	Fish	067 (4.34 mi SSE)	3.90E-02
Bone	Effluent	Child	N/A	Discharge Pt.	1.66E-04
Liver	Environmental	Child	Fish	067 (4.34 mi SSE)	8.78E-02
Liver	Effluent	Child	N/A	18.9 mi SSE	1.42E-01
T. Body	Environmental	Adult	Fish	067 (4.34 mi SSE)	6.91E-02
T. Body	Effluent	Child	N/A	18.9 mi SSE	1.43E-01
Thyroid	Environmental	Child	Drinking Water	066 (18.9 mi SSE)	5.04E-02
Thyroid	Effluent	Child	N/A	18.9 mi SSE	1.42E-01
Kidney	Environmental	Child	Drinking Water	066 (18.9 mi SSE)	6.26E-02
Kidney	Effluent	Child	N/A	18.9 mi SSE	1.42E-01
Lung	Environmental	Child	Drinking Water	066 (18.9 mi SSE)	5.48E-02
Lung	Effluent	Child	N/A	18.9 mi SSE	1.42E-01
GI-LLI	Environmental	Child	Drinking Water	066 (18.9 mi SSE)	5.07E-02
GI-LLI	Effluent	Child	N/A	18.9 mi SSE	1.43E-01

(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. Not available at time of report compilation.

(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	-	-	-	-
Skin	Effluent	Teen	N/A	1.0 mi. NE	4.71E-11
Bone	Environmental	Child	Vegetation	084 (2.58 mi NNE)	3.35E-01
Bone	Effluent	Child	N/A	1.0 mi. SW	3.49E-01
Liver	Environmental	Child	Vegetation	084 (2.58 mi NNE)	3.21E-01
Liver	Effluent	Child	N/A	1.0 mi. SW	1.01E-01
T. Body	Environmental	Adult	Vegetation	084 (2.58 mi NNE)	1.80E-01
T. Body	Effluent	Child	N/A	1.0 mi. SW	1.01E-01
Thyroid	Environmental	-	-	-	-
Thyroid	Effluent	Child	N/A	1.0 mi. SW	1.01E-01
Kidney	Environmental	Child	Vegetation	084 (2.58 mi NNE)	1.04E-01
Kidney	Effluent	Child	N/A	1.0 mi. SW	1.01E-01
Lung	Environmental	Child	Vegetation	084 (2.58 mi NNE)	3.76E-02
Lung	Effluent	Child	N/A	1.0 mi. SW	1.01E-01
GI-LLI	Environmental	Adult	Vegetation	084 (2.58 mi NNE)	5.32E-03
GI-LLI	Effluent	Child	N/A	1.0 mi. SW	1.01E-01

(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. Not available at time of report compilation.

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

TABLE 4.1-B

Maximum Individual Dose for 2017 based on Environmental Measurements (mrem) for Oconee Nuclear Station

Age	Sample Medium	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Skin
Infant	Airborne	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Drinking Water	0.00E+00	4.26E-02	4.26E-02	4.26E-02	4.26E-02	4.26E-02	4.26E-02	0.00E+00
	Milk	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	TOTAL	0.00E+00	4.26E-02	4.26E-02	4.26E-02	4.26E-02	4.26E-02	4.26E-02	0.00E+00
Child	Airborne	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Drinking Water	0.00E+00	4.34E-02	4.34E-02	4.34E-02	4.34E-02	4.34E-02	4.34E-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	3.35E-01	3.21E-01	4.73E-02	0.00E+00	1.04E-01	3.76E-02	2.01E-03	0.00E+00
	Fish	3.90E-02	4.44E-02	1.25E-02	7.01E-03	1.92E-02	1.14E-02	7.25E-03	0.00E+00
	Shoreline Sediment	0.00E+00	0.00E+00	5.74E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.70E-05
	TOTAL	3.74E-01	4.09E-01	1.03E-01	5.04E-02	1.67E-01	9.24E-02	5.27E-02	6.70E-05
Teen	Airborne	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Drinking Water	0.00E+00	2.27E-02	2.27E-02	2.27E-02	2.27E-02	2.27E-02	2.27E-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	1.85E-01	2.47E-01	8.59E-02	0.00E+00	8.39E-02	3.26E-02	3.51E-03	0.00E+00
	Fish	3.10E-02	4.97E-02	2.29E-02	8.49E-03	2.25E-02	1.39E-02	9.08E-03	0.00E+00
	Shoreline Sediment	0.00E+00	0.00E+00	2.75E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-04
	TOTAL	2.16E-01	3.19E-01	1.32E-01	3.12E-02	1.29E-01	6.92E-02	3.53E-02	3.20E-04
Adult	Airborne	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Drinking Water	0.00E+00	3.21E-02	3.21E-02	3.21E-02	3.21E-02	3.21E-02	3.21E-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	2.01E-01	2.75E-01	1.80E-01	0.00E+00	9.33E-02	3.10E-02	5.32E-03	0.00E+00
	Fish	2.90E-02	5.06E-02	3.70E-02	1.10E-02	2.45E-02	1.55E-02	1.18E-02	0.00E+00
	Shoreline Sediment	0.00E+00	0.00E+00	4.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.74E-05
	TOTAL	2.30E-01	3.58E-01	2.49E-01	4.31E-02	1.50E-01	7.86E-02	4.92E-02	5.74E-05

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

Oconee Nuclear Station
Dose from Drinking Water Pathway for 2017 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	066	419	0.00E+00	4.26E-02	4.26E-02	4.26E-02	4.26E-02	4.26E-02	4.26E-02
						Dose Commitment (mrem) =				0.00E+00	4.26E-02	4.26E-02	4.26E-02	4.26E-02	4.26E-02	4.26E-02

Oconee Nuclear Station
Dose from Drinking Water Pathway for 2017 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	066	419	0.00E+00	4.34E-02	4.34E-02	4.34E-02	4.34E-02	4.34E-02	4.34E-02
						Dose Commitment (mrem) =				0.00E+00	4.34E-02	4.34E-02	4.34E-02	4.34E-02	4.34E-02	4.34E-02

Oconee Nuclear Station

Dose from Broadleaf Vegetation Pathway for 2017 Data

Maximum Exposed Child

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

Usage (intake in one year) = **26 kg**

	Ingestion Dose Factor							Highest Annual Net Mean Concentration		Dose (mrem)						
Radionuclide	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Indicator Location	Food (pCi/kg)	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
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	084	39.4	3.35E-01	3.21E-01	4.73E-02	0.00E+00	1.04E-01	3.76E-02	2.01E-03
						Dose Commitment (mrem) =				3.35E-01	3.21E-01	4.73E-02	0.00E+00	1.04E-01	3.76E-02	2.01E-03

Oconee Nuclear Station
Dose from Fish Pathway for 2017 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 = 5564 pCi/l x 0.9 = 5008 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	067	17.3	3.90E-02	3.74E-02	5.51E-03	0.00E+00	1.22E-02	4.38E-03	2.34E-04
H-3	NO DATA	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	063	5008	0.00E+00	7.01E-03	7.01E-03	7.01E-03	7.01E-03	7.01E-03	7.01E-03
						Dose Commitment (mrem) =				3.90E-02	4.44E-02	1.25E-02	7.01E-03	1.92E-02	1.14E-02	7.25E-03

Oconee Nuclear Station
Dose from Shoreline Sediment Pathway for 2017 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**
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**	**091**	**122**	**5.74E-05**	**6.70E-05**
		Dose Commitment (mrem) =			**5.74E-05**	**6.70E-05**

Oconee Nuclear Station

Dose from Drinking Water Pathway for 2017 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	066	419	0.00E+00	2.27E-02	2.27E-02	2.27E-02	2.27E-02	2.27E-02	2.27E-02
						Dose Commitment (mrem)=				0.00E+00	2.27E-02	2.27E-02	2.27E-02	2.27E-02	2.27E-02	2.27E-02

Oconee Nuclear Station

Dose from Broadleaf Vegetation Pathway for 2017 Data

Maximum Exposed Teen

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

Usage (intake in one year) = 42 kg

	Ingestion Dose Factor							Highest Annual Net Mean Concentration		Dose (mrem)						
Radionuclide	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Indicator Location	Food (pCi/kg)	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
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	084	39.4	1.85E-01	2.47E-01	8.59E-02	0.00E+00	8.39E-02	3.26E-02	3.51E-03
						Dose Commitment (mrem) =				1.85E-01	2.47E-01	8.59E-02	0.00E+00	8.39E-02	3.26E-02	3.51E-03

Oconee Nuclear Station
Dose from Fish Pathway for 2017 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 = 5564 pCi/l x 0.9 = 5008 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	0.0	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	067	17.3	3.10E-02	4.12E-02	1.44E-02	0.00E+00	1.40E-02	5.45E-03	5.87E-04
H-3	NO DATA	1.06E-07	1.06E-07	1.06E-07	1.06E-07	1.06E-07	1.06E-07	063	5008	0.00E+00	8.49E-03	8.49E-03	8.49E-03	8.49E-03	8.49E-03	8.49E-03
						Dose Commitment (mrem) =				3.10E-02	4.97E-02	2.29E-02	8.49E-03	2.25E-02	1.39E-02	9.08E-03

Oconee Nuclear Station
Dose from Shoreline Sediment Pathway for 2017 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/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 (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
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	091	122	2.75E-04	3.20E-04
Dose Commitment (mrem) =					2.75E-04	3.20E-04

Oconee Nuclear Station
Dose from Drinking Water Pathway for 2017 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	066	419	0.00E+00	3.21E-02	3.21E-02	3.21E-02	3.21E-02	3.21E-02	3.21E-02
						Dose Commitment (mrem) =				0.00E+00	3.21E-02	3.21E-02	3.21E-02	3.21E-02	3.21E-02	3.21E-02

Oconee Nuclear Station

Dose from Broadleaf Vegetation Pathway for 2017 Data

Maximum Exposed Adult

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

Usage (intake in one year) = **64 kg**

	Ingestion Dose Factor							Highest Annual Net Mean Concentration		Dose (mrem)						
Radionuclide	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Indicator Location	Food (pCi/kg)	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
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	084	39.4	2.01E-01	2.75E-01	1.80E-01	0.00E+00	9.33E-02	3.10E-02	5.32E-03
						Dose Commitment (mrem) =				2.01E-01	2.75E-01	1.80E-01	0.00E+00	9.33E-02	3.10E-02	5.32E-03

Oconee Nuclear Station
Dose from Fish Pathway for 2017 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 = 5564 pCi/l x 0.9 = 5008 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	067	17.3	2.90E-02	3.96E-02	2.59E-02	0.00E+00	1.34E-02	4.47E-03	7.67E-04
H-3	NO DATA	1.05E-07	1.05E-07	1.05E-07	1.05E-07	1.05E-07	1.05E-07	063	5008	0.00E+00	1.10E-02	1.10E-02	1.10E-02	1.10E-02	1.10E-02	1.10E-02
						Dose Commitment (mrem) =				2.90E-02	5.06E-02	3.70E-02	1.10E-02	2.45E-02	1.55E-02	1.18E-02

Oconee Nuclear Station
Dose from Shoreline Sediment Pathway for 2017 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/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 (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
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	091	122	4.92E-05	5.74E-05
Dose Commitment (mrem) =					4.92E-05	5.74E-05

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 2017 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. The EnRad organization, in 2017, elected to voluntarily withdraw its North Carolina State Drinking Water Certification with the North Carolina Department of Health and Human Services, State Laboratory of Public Health. It was determined that there was no longer a business case for maintaining this certification (NCR # 02093319). Samples requiring this certification are sent to General Engineering Laboratories, LLC (GEL), which maintains the necessary certifications to meet regulatory commitments for drinking water.

EnRad Laboratory participated in an interlaboratory program with Eckert & Ziegler Analytics (EZA) in 2017. EZA results were evaluated against the NRC Inspection Manual Procedure 84750 (IP 84750) acceptance criteria stated in EnRad Procedure 515, Cross Check Program Administration. All regulatory requirements continue to be met by the EZA Cross Check Program.

Low-level Iodine-131 analysis of drinking water was not required during 2017 since the dose calculated for the consumption of the water was not greater than 1 mrem per year and there were no abnormal releases exceeding 1 pCi/liter I-131 in 2017 in the ONS program. This dose was calculated monthly during 2017 to ensure that low-level Iodine-131 analysis of drinking water samples was not required.

5.5.1 DUKE ENERGY INTERLABORATORY PROGRAM

EnRad Laboratories made the determination in 2017 to discontinue its participation in the Duke Energy Fleet Scientific Services (FSS) Interlaboratory Program, as EnRad already maintains a sufficient cross check program through EZA. Historically, Duke Energy FSS has maintained its own Interlaboratory Program supporting the Duke Energy Fleet. At EnRad, this has been a supplement to EnRad's participation in the EZA Cross Check Program. In 2017, FSS determined that shifting business needs had reduced the need for the FSS Interlaboratory Program and the majority of the Interlaboratory Program has been discontinued.

5.5.2 ECKERT & ZIEGLER ANALYTICS CROSS CHECK PROGRAM

EnRad Laboratories participated in the Eckert & Ziegler Analytics (EZA) Cross Check Program during 2017. Cross check samples including mixed gamma in liquid, mixed gamma in vegetation, low-level I-131 in liquid, mixed gamma air filters (single and composites), mixed gamma and I-131 air cartridges, strontium in water, gross alpha and beta in water, gross alpha and beta in filters, and tritium in water were analyzed at various times of the year. A summary of the EnRad Laboratory program results for 2017 is documented in Table 5.0-A.

Interlaboratory cross check samples from EZA were received and analyzed in all four quarters of 2017. Table 5.0-A lists the performance for specific samples. Eighty-seven nuclide results were reported to EZA of which eighty-six (98.9%) met the acceptance criteria based on IP 84750. One EZA cross check nuclide result did exhibit a high bias and EnRad proactively initiated an NCR to investigate this bias.

In the second quarter of 2017, a mixed gamma in filter cross check (E11890) yielded a disagreement on only the Zinc-65 nuclide value (ratio to the known of 130%). An overall high bias was noted across all other nuclides, primarily in the high energy range. NCR # 02138003 was written to investigate and document the failure. It was determined that the geometry used for gamma filter counting contained compounding biases, leading to consistently high results in the upper energy range. Following the implementation of a new filter geometry, an equivalent filter cross check (E12011) was analyzed in the fourth quarter of 2017. The cross check passed with reduced biases, and a Zinc-65 nuclide value of 111% of the known.

5.5.3 ERA PROFICIENCY TESTING

EnRad Laboratories made the determination in 2017 to discontinue its participation in the Environmental Resource Associates (ERA) Proficiency Testing program, as this program's participation was solely for the purpose of maintaining EnRad's North Carolina State Drinking Water Certification requirements (NCR # 02093319).

5.6 INTERCOMPARISON PROGRAM

Oconee 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 2017 Nuclear Technology Services Intercomparison Report is documented in Table 5.0-B.

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 first quarter of 2017 an environmental external TLD cross check failed and NCR # 02147847 was written to document the failure of the four individual TLDs; however, the overall result fell within both the Duke Energy and Nuclear Technology Services, Inc. acceptance criteria. To prevent recurrence, the four TLDs were pulled and visually inspected for abnormalities in the elements and overall integrity of the TLDs and no abnormalities were found. The four TLDs were checked per procedure and TLDs # 533830 and 103632 were both removed from service. Complete

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

5.7.2 INTERNAL CROSS CHECK (DUKE ENERGY)

Radiation Dosimetry and Records participates in a quarterly TLD internal comparison program administered internally by the Dosimetry Lab. The Dosimetry Lab Staff irradiates environmental dosimeters quarterly and submits them for analysis of the unknown estimated delivered exposure. A summary of the 2017 Internal Cross Check (Duke Energy) Program is documented in Table 5.0-B.

TABLE 5.0-A

ECKERT & ZIEGLER ANALYTICS

CROSS CHECK PROGRAM

2017 Cross Check Results for EnRad Laboratories

Interlaboratory cross check samples from EZA were received and analyzed in all four quarters of 2017. 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-A lists the performance for specific samples. Eighty-seven nuclide results were reported to EZA of which eighty-six (98.9%) 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	E11755	Cs-137	1	pCi	247	244	1.01	Agreement
	E11925A	Cs-137	3	pCi	191	199	0.96	Agreement
Gamma in Cartridge	E11924	Ce-141	3	pCi	58.8	60.0	0.98	Agreement
		Co-58	3	pCi	81.0	80.7	1.00	Agreement
		Co-60	3	pCi	182	181	1.01	Agreement
		Cr-51	3	pCi	144	150	0.96	Agreement
		Cs-134	3	pCi	132	138	0.95	Agreement
		Cs-137	3	pCi	123	119	1.04	Agreement
		Fe-59	3	pCi	88.3	86.5	1.02	Agreement
		Mn-54	3	pCi	89.7	84.7	1.06	Agreement
		Zn-65	3	pCi	141	127	1.11	Agreement
LLI-131 in Water	E12007	I-131	4	pCi/L	58.8	57.7	1.02	Agreement
LLI-131 in Milk	E11889	I-131	2	pCi/L	95.4	96.3	0.99	Agreement
I-131 in Charcoal Cartridge	E11754	I-131	1	pCi	98.1	93.5	1.05	Agreement
	E12003	I-131	3	pCi	64.7	64.5	1.00	Agreement
Gamma in Simulated Vegetation (Coffee Grounds)	E12010	Ce-141	4	pCi/g	0.202	0.195	1.04	Agreement
		Co-58	4	pCi/g	0.181	0.178	1.02	Agreement
		Co-60	4	pCi/g	0.334	0.342	0.98	Agreement
		Cr-51	4	pCi/g	0.423	0.479	0.88	Agreement
		Cs-134	4	pCi/g	0.220	0.247	0.89	Agreement
		Cs-137	4	pCi/g	0.281	0.280	1.00	Agreement
		Fe-59	4	pCi/g	0.227	0.224	1.01	Agreement
		Mn-54	4	pCi/g	0.337	0.318	1.06	Agreement
		Zn-65	4	pCi/g	0.447	0.418	1.07	Agreement

TABLE 5.0-A (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Gamma in Composite Filter	E11752	Ce-141	1	pCi	101	97.3	1.04	Agreement
		Cr-51	1	pCi	202	195	1.04	Agreement
		Cs-134	1	pCi	90.4	80.5	1.12	Agreement
		Cs-137	1	pCi	99.8	93.9	1.06	Agreement
		Co-58	1	pCi	106	100	1.06	Agreement
		Mn-54	1	pCi	126	110	1.14	Agreement
		Fe-59	1	pCi	101	86.4	1.17	Agreement
		Zn-65	1	pCi	164	134	1.22	Agreement
		Co-60	1	pCi	132	123	1.08	Agreement
Gamma in Water	E11753	I-131	1	pCi/L	101	97.8	1.03	Agreement
		Ce-141	1	pCi/L	149	145	1.03	Agreement
		Cr-51	1	pCi/L	282	291	0.97	Agreement
		Cs-134	1	pCi/L	117	120	0.97	Agreement
		Cs-137	1	pCi/L	142	140	1.01	Agreement
		Co-58	1	pCi/L	154	150	1.03	Agreement
		Mn-54	1	pCi/L	174	165	1.06	Agreement
		Fe-59	1	pCi/L	139	129	1.08	Agreement
		Zn-65	1	pCi/L	226	200	1.13	Agreement
		Co-60	1	pCi/L	189	183	1.03	Agreement
Gamma in Water	E12006	I-131	3	pCi/L	71.8	79.2	0.91	Agreement
		Ce-141	3	pCi/L	105	99.5	1.06	Agreement
		Cr-51	3	pCi/L	240	248	0.97	Agreement
		Cs-134	3	pCi/L	208	229	0.91	Agreement
		Cs-137	3	pCi/L	202	196	1.03	Agreement
		Co-58	3	pCi/L	135	134	1.01	Agreement
		Mn-54	3	pCi/L	148	140	1.05	Agreement
		Fe-59	3	pCi/L	148	143	1.03	Agreement
		Zn-65	3	pCi/L	238	210	1.13	Agreement
		Co-60	3	pCi/L	294	299	0.98	Agreement

TABLE 5.0-A (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Gamma in Filter (Falcon)	E11890	Ce-141	2	pCi	119	114	1.04	Agreement
		Co-58	2	pCi	124	117	1.06	Agreement
		Co-60	2	pCi	150	144	1.04	Agreement
		Cr-51	2	pCi	240	238	1.01	Agreement
		Cs-134	2	pCi	148	142	1.04	Agreement
		Cs-137	2	pCi	122	113	1.08	Agreement
		Fe-59	2	pCi	107	87.0	1.23	Agreement
		Mn-54	2	pCi	146	130	1.13	Agreement
		Zn-65	2	pCi	200	154	1.30	Non-Agreement[1]
Gamma in Filter (Falcon)	E12011	Ce-141	4	pCi	82.5	76.2	1.08	Agreement
		Co-58	4	pCi	70.8	69.6	1.02	Agreement
		Co-60	4	pCi	144	134	1.07	Agreement
		Cr-51	4	pCi	202	188	1.08	Agreement
		Cs-134	4	pCi	97.4	96.7	1.01	Agreement
		Cs-137	4	pCi	119	110	1.09	Agreement
		Fe-59	4	pCi	98.5	87.9	1.12	Agreement
		Mn-54	4	pCi	132	125	1.06	Agreement
		Zn-65	4	pCi	181	164	1.11	Agreement
Gamma in Milk	E11756	I-131	1	pCi/L	105	97.9	1.07	Agreement
		Ce-141	1	pCi/L	149	145	1.03	Agreement
		Cr-51	1	pCi/L	331	290	1.14	Agreement
		Cs-134	1	pCi/L	116	120	0.97	Agreement
		Cs-137	1	pCi/L	150	140	1.07	Agreement
		Co-58	1	pCi/L	152	150	1.02	Agreement
		Mn-54	1	pCi/L	177	164	1.08	Agreement
		Fe-59	1	pCi/L	148	129	1.15	Agreement
		Zn-65	1	pCi/L	224	199	1.12	Agreement
		Co-60	1	pCi/L	194	183	1.06	Agreement
Gross Beta in Water	E11892	Cs-137	2	pCi/L	255	270	0.94	Agreement
	E12009	Cs-137	4	pCi/L	250	265	0.94	Agreement
Tritium in Water	E11891	H-3	2	pCi/L	14300	14000	1.02	Agreement
	E12008	H-3	4	pCi/L	13200	13400	0.98	Agreement

1) NCR # 02138003

TABLE 5.0-B

2017ENVIRONMENTAL DOSIMETER

CROSS-CHECK RESULTS

Nuclear Technology Services

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

1st Quarter 2017

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
103469	79.16	72.16	9.70	<+/-15%	Pass
103632	83.94	72.16	16.32	<+/-15%	Fail**
103636	76.22	72.16	5.63	<+/-15%	Pass
103637	77.82	72.16	7.84	<+/-15%	Pass
103642	79.08	72.16	9.59	<+/-15%	Pass
	Average Bias (B)		9.82		
	Standard Deviation (S)		4.00		
	Measure Performance |B|+S		13.81	<15%	Pass

2nd Quarter 2017

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
103126	20.33	18.90	7.57	<+/-15%	Pass
103068	20.20	18.90	6.88	<+/-15%	Pass
103065	19.51	18.90	3.23	<+/-15%	Pass
102830	20.64	18.90	9.21	<+/-15%	Pass
103002	20.18	18.90	6.77	<+/-15%	Pass
	Average Bias (B)		6.73		
	Standard Deviation (S)		2.19		
	Measure Performance |B|+S		8.92	<15%	Pass

3rd Quarter 2017

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
102253	60.07	60.04	0.05	<+/-15%	Pass
101122	62.80	60.04	4.60	<+/-15%	Pass
103099	60.78	60.04	1.23	<+/-15%	Pass
102288	61.20	60.04	1.93	<+/-15%	Pass
100163	59.82	60.04	-0.37	<+/-15%	Pass
	Average Bias (B)		1.49		
	Standard Deviation (S)		1.96		
	Measure Performance |B|+S		3.45	<15%	Pass

4th Quarter 2017

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
102343	72.30	70.02	3.26	<+/-15%	Pass
102265	72.85	70.02	4.04	<+/-15%	Pass
102340	71.25	70.02	1.76	<+/-15%	Pass
103972	66.99	70.02	-4.33	<+/-15%	Pass
103921	68.54	70.02	-2.11	<+/-15%	Pass
	Average Bias (B)		0.52		
	Standard Deviation (S)		3.60		
	Measure Performance |B|+S		4.12	<15%	Pass

Fail** refers to NCR # 02147847

TABLE 5.0-B (Cont.)

2017 ENVIRONMENTAL DOSIMETER

CROSS CHECK RESULTS

Internal Crosscheck (Duke Energy)

Radiation Dosimetry and Records participates in a quarterly TLD internal comparison program administered internally by the Dosimetry Lab. The Dosimetry Lab Staff irradiates environmental dosimetry quarterly and submits them for analysis of the unknown estimated delivered exposure.

1st Quarter 2017

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
102207	49.22	48.0	2.54	<+/-15%	Pass
102208	47.57	48.0	-0.90	<+/-15%	Pass
103410	52.06	48.0	8.46	<+/-15%	Pass
102167	49.65	48.0	3.44	<+/-15%	Pass
102079	51.39	48.0	7.06	<+/-15%	Pass
103409	50.33	48.0	4.85	<+/-15%	Pass
102209	49.32	48.0	2.75	<+/-15%	Pass
102214	49.46	48.0	3.04	<+/-15%	Pass
102117	49.94	48.0	4.04	<+/-15%	Pass
102201	49.83	48.0	3.81	<+/-15%	Pass
		Average Bias (B)	3.91		
		Standard Deviation (S)	2.56		
		Measure Performance |B|+S	6.47	<15%	Pass

2nd Quarter 2017

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
102519	46.79	43.0	8.81	<+/-15%	Pass
102870	49.18	43.0	14.37	<+/-15%	Pass
103537	46.05	43.0	7.09	<+/-15%	Pass
103541	47.33	43.0	10.07	<+/-15%	Pass
103111	48.21	43.0	12.12	<+/-15%	Pass
102304	45.04	43.0	4.74	<+/-15%	Pass
102873	47.59	43.0	10.67	<+/-15%	Pass
102872	47.85	43.0	11.28	<+/-15%	Pass
102871	47.80	43.0	11.16	<+/-15%	Pass
102861	48.11	43.0	11.88	<+/-15%	Pass
		Average Bias (B)	10.22		
		Standard Deviation (S)	2.74		
		Measure Performance |B|+S	12.96	<15%	Pass

3rd Quarter 2017

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
101195	19.81	18.8	5.15	<+/-15%	Pass
103731	19.45	18.8	3.24	<+/-15%	Pass
101190	19.90	18.8	5.63	<+/-15%	Pass
103532	20.61	18.8	9.39	<+/-15%	Pass
100314	19.70	18.8	4.56	<+/-15%	Pass
101264	18.93	18.8	0.48	<+/-15%	Pass
101345	19.18	18.8	1.80	<+/-15%	Pass
101397	20.06	18.8	6.48	<+/-15%	Pass
100868	20.45	18.8	8.55	<+/-15%	Pass
103078	20.51	18.8	8.86	<+/-15%	Pass
		Average Bias (B)	5.41		
		Standard Deviation (S)	3.01		
		Measure Performance |B|+S	8.43	<15%	Pass

4th Quarter 2017

TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
103951	50.92	50.0	1.84	<+/-15%	Pass
103949	51.06	50.0	2.12	<+/-15%	Pass
103950	51.04	50.0	2.08	<+/-15%	Pass
104011	51.38	50.0	2.76	<+/-15%	Pass
103931	51.10	50.0	2.20	<+/-15%	Pass
104004	50.74	50.0	1.48	<+/-15%	Pass
103996	49.63	50.0	-0.74	<+/-15%	Pass
103963	52.97	50.0	5.94	<+/-15%	Pass
103947	49.17	50.0	-1.66	<+/-15%	Pass
103929	49.88	50.0	-0.24	<+/-15%	Pass
		Average Bias (B)	1.58		
		Standard Deviation (S)	2.12		
		Measure Performance |B|+S	3.70	<15%	Pass

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 Oconee Nuclear Station is 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, and the Environmental Water Resources Group.

Section IV of this appendix describes the environmental sampling frequencies and analysis procedures by media type.

I. CHANGE OF SAMPLING PROCEDURES

Location 063 Shoreline Sediment (Lake Hartwell Hwy 183 Bridge (0.80 mi. ESE)) was replaced with location 091 Shoreline Sediment (Holders Landing Road (2.09 mi. S)) due to location 063 safety and access concerns (NCR # 02053661).

II. DESCRIPTION OF ANALYSIS PROCEDURES

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

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

Tritium analyses are performed 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

The tritium preparation procedure was modified during 2017 to align with ASTM Method D4107-08, Standard Test Method for Tritium in Drinking Water; Water and Environmental Technology, Volume 11.02. 2014 Edition. Tritium dark adaptation times were also reduced (NCR # 02134015).

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 077 = Skimmer Wall (1.00 mi. SW)
Location 078.1 = Recreation Site (0.53 mi. WSW)
Location 079 = Keowee Dam (0.56 mi. NE)
Location 081 = Clemson Operations Center (9.33 mi. SE)(Control)
Location 084 = Sue Craig Road (2.58 mi. NNE)
Location 085 = Lake Services / Building B9125 (0.88 mi. NNW)

A.2 DRINKING WATER

Monthly composite samplers were operated to collect an aliquot at least every two hours. Gross beta and 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 060 = Greenville Water Intake Rd. (3.23 mi. NE)
Location 064 = Seneca (6.67 mi. SSW)(Control)
Location 066 = Anderson (18.9 mi SSE)

A.3 SURFACE WATER

Monthly composite samplers were operated to collect an aliquot at least every two hours. Gamma analysis was performed on the monthly composites. Tritium analysis was performed on the quarterly composites sample. The composites were collected monthly from the locations listed below.

Location 062 = Lake Keowee Hydro Intake (0.85 mi. ENE)(Control)
Location 063.1 = Lake Hartwell Hwy 183 Bridge (0.79 mi. E)

A.4 MILK

Biweekly grab samples were collected at one location although the Oconee ODCM requires semimonthly samples. Biweekly grab samples are taken to meet the required sample frequency for scheduling purposes. 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 071 = Clemson Dairy (10.2 mi. SSE)(Control)

A.5 BROADLEAF VEGETATION

Monthly samples were collected and a gamma analysis was performed on each sample. The samples were collected from the locations listed below.

Location 077 = Skimmer Wall (1.00 mi. SW)
Location 079 = Keowee Dam (0.56 mi. NE)
Location 081 = Clemson Operations Center (9.33 mi. SE)(Control)
Location 084 = Sue Craig Road (2.58 mi. NNE)

A.6 FISH

Semiannual samples were collected and a gamma analysis was performed on the edible portions of each sample. The samples were collected from the locations listed below.

Location 060 = Greenville Water Intake Rd. (2.28 mi. NE)(Control)
Location 063 = Lake Hartwell Hwy 183 Bridge (0.80 mi. ESE)
Location 067 = Lawrence Ramsey Bridge Hwy 27 (4.34 mi. SSE)

A.7 SHORELINE SEDIMENT

Semiannual samples were collected and 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 067 = Lawrence Ramsey Bridge Hwy 27 (4.34 mi. SSE)
Location 068 = High Falls County Park (1.82 mi. W)(Control)

Location 091 = Holders Landing Road (2.09 mi. S)

A.8 DIRECT GAMMA RADIATION (TLD)

Thermoluminescent dosimeters (TLD) were collected quarterly at fifty locations. A gamma exposure rate was determined for each TLD. The TLDs were placed as indicated below.

* An inner ring of 17 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 control locations.

TLD Locations are listed in Table 2.1-B.

A.9 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 following locations in each of the sixteen meteorological sectors:

* The Nearest Residence

* The Nearest Milk-giving Animal (cow, goat, etc.) where milk is used for human consumption

The census was conducted during the growing season 5/24 – 5/25/2017. Results are shown in Table 3.9. No changes were made to the sampling procedures during 2017 as a result of the 2017 census.

V. GLOBAL POSITIONING SYSTEM (GPS) ANALYSIS

The Oconee site centerline used for GPS measurements was referenced from the Oconee Nuclear Station Updated Final Safety Analysis Report (UFSAR), section 2.1.1.1, Specification of Location. Waypoint coordinates used for ONS GPS measurements were latitude 34°-47'-38.2"N and longitude 82°-53'-55.4"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. 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

OCONEE NUCLEAR STATION
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY

Oconee Nuclear Station
Oconee County, South Carolina

Docket Numbers 50-269, 270, 287
Calendar Year 2017

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 318[4][6]	See Table 2.2-C	2.36E-2 (265/265) 1.02E-2 – 4.87E-2	077 (1.00 mi SW)	2.58E-2 (53/53) 1.39E-2 – 4.87E-2	081 (9.33 mi SE) 2.28E-2 (53/53) 1.10E-2 – 4.48E-2	0
	Gamma 30[4][6]	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
Air Radioiodine (pCi/m^3)	Gamma 318[4][6]	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
Drinking Water (pCi/l)	Gross Beta 42[4][7]	4	1.20 (18/28) 0.69 – 1.90	066 (18.9 mi SSE)	1.25 (14/14) 0.71 – 1.90	064 (6.67 mi SSW) 1.19 (9/14) 0.80 – 1.86	0
	Gamma 42[4][7]	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
	Tritium 15[4][7]	2000	419 (5/10) 289 - 563	066 (18.9 mi SSE)	419 (5/5) 289 - 563	All less than LLD	0
Surface Water (pCi/l)	Gamma 28[4][7]	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
	Tritium 10[4][7]	2000	5564 (5/5) 2580 - 10900	063.1 (0.79 mi E)	5564 (5/5) 2580 - 10900	All less than LLD	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

OCONEE NUCLEAR STATION
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY

Oconee Nuclear Station
Oconee County, South Carolina

Docket Numbers 50-269, 270, 287
Calendar Year 2017

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 48	See Table 2.2-C	39.4 (1/36)	084	39.4 (1/12)	All less than LLD	0
	Cs-137 80		39.4 – 39.4	(2.58 mi NNE)	39.4 – 39.4		
Fish (pCi/kg, wet)	Gamma 12	See Table 2.2-C	17.3 (1/8)	067	17.3 (1/4)	All less than LLD	0
	Cs-137	150	17.3 – 17.3	(4.34 mi SSE)	17.3 – 17.3		
Sediments--Shoreline (pCi/kg, dry)	Gamma 6	See Table 2.2-C	78.9 (3/4)	091	122 (1/2)	All less than LLD	0
	Cs-137	180	38.6 – 122	(2.09 mi S)	122 – 122		
TLD (mR per quarter)[5]	TLD Readout 200	-----	20.4 (192/192) 8.99 – 34.7	024 (0.81 mi E)	29.2 (4/4) 25.0 – 34.7	058 (9.39 mi WSW) 081 (9.33 mi SE) 26.5 (8/8) 17.9 – 34.7	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 3.8 (Direct Gamma Radiation) are reported in mrem /yr (n * 0.95 ergs/g-Roentgen) [2].

6. Gamma filter composite calendar reconciliation period, 2017 (NCR # 02174505).

7. Tritium composite calendar reconciliation period, 2017 (NCR # 02174946).

[2] Cember, H. (2009). Introduction to Health Physics, 4th Edition. United States: McGraw-Hill Companies, Inc.

APPENDIX C

SAMPLING DEVIATIONS
&
UNAVAILABLE ANALYSES

APPENDIX C

OCONEE 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 air samplers operated for a total of 99.1% availability in 2017.

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
079	1/3 – 1/9/2017	PI	3.23 hours downtime, undetermined cause.	NCR # 02090890
077	2/27 – 3/6/2017	PI	4.78 hours downtime due to severe thunderstorm/high winds.	NCR # 02106181
078.1	2/27 – 3/6/2017	PI	4.77 hours downtime due to severe thunderstorm/high winds.	NCR # 02106182
079	2/27 – 3/6/2017	PI	2.54 hours downtime due to severe thunderstorm/high winds.	NCR # 02106183
084	6/19 – 6/26/2017	PI	2.67 hours downtime due to severe thunderstorm.	NCR # 02133946
078.1	7/10 – 7/17/2017	PI	14.28 hours downtime due to severe thunderstorm.	NCR # 02137725
079	7/31 – 8/7/2017	CN	1.05 hours downtime due to Keowee main step-up transformer relocation.	NCR # 02142061
079	8/7 – 8/14/2017	CN	0.93 hours downtime due to old Keowee step-up transformer removal.	NCR # 02144093
078.1	9/11 – 9/18/2017	IW	38.22 hours downtime due to severe weather/high winds associated with Hurricane Irma remnants.	NCR # 02151980
077	9/11 – 9/18/2017	IW	38.25 hours downtime due to severe weather/high winds associated with Hurricane Irma remnants.	NCR # 02151979
085	9/11 – 9/18/2017	IW	8.64 hours downtime due to severe weather/high winds associated with Hurricane Irma remnants.	NCR # 02151981
078.1	10/2 – 10/9/2017	PI	142.95 hours downtime due to power line short.	NCR # 02157384
078.1	10/9 – 10/16/2017	PO	149.78 hours downtime due to power line short.	NCR # 02158886
078.1	10/16 – 10/23/2017	PI	4.30 hours downtime due to power line short.	NCR # 02160541
077	10/23 – 10/30/2017	PI	1.59 hours downtime due to severe storms/high winds.	NCR # 02161951
078.1	10/23 – 10/30/2017	PI	1.58 hours downtime due to severe storms/high winds.	NCR # 02161952
085	12/11 – 12/18/2017	PI	0.48 hours downtime, undetermined cause.	NCR # 02174842

Drinking Water and Surface Water

REMP monthly drinking water samples (Drinking Water (DW)) or surface water samples (Surface Water (SW)) 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 drinking and surface water samplers operated for a total of 98.3% availability in 2017.

Drinking Water

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
060	5/22 – 6/19/2017	PS	Pump failure during composite period caused 200 hours of downtime. Available composite collected and a grab sample was taken. Pump was replaced and normal sampling resumed.	NCR # 02132275

Surface Water

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
063.1	5/22 – 6/19/2017	PI	Power interruption attributable to severe weather on 5/22/2017 caused the sampler pump to switch to halt mode. A grab sample was taken and pump was returned to normal operation on 6/19/2017.	NCR # 02132276
062	9/11 – 10/9/2017	PS	The reservoir pump was inoperable at time of collection. Work request # 20086506 initiated. The reservoir pump was replaced and normal sampling resumed.	NCR # 02157381

C.2 UNAVAILABLE ANALYSES

There were no unavailable analyses during 2017.

APPENDIX D

ANALYTICAL DEVIATIONS

No Analytical deviations were incurred for the
2017 Radiological Environmental Monitoring Program

APPENDIX E

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM RESULTS

2017

This appendix includes sample analysis report summaries and supportive data generated from each sample medium for 2017.

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431833	12/27/2016 - 1/3/2017	Beta	1.78E-02	2.81E-03	2.97E-03
432240	1/3/2017 - 1/9/2017	Beta	2.01E-02	3.56E-03	4.13E-03
432934	1/9/2017 - 1/16/2017	Beta	2.16E-02	3.18E-03	3.43E-03
433330	1/16/2017 - 1/23/2017	Beta	1.70E-02	2.69E-03	3.06E-03
433749	1/23/2017 - 1/30/2017	Beta	1.79E-02	2.69E-03	2.99E-03
434489	1/30/2017 - 2/6/2017	Beta	2.66E-02	3.37E-03	3.30E-03
435135	2/6/2017 - 2/13/2017	Beta	2.65E-02	3.32E-03	3.07E-03
435836	2/13/2017 - 2/20/2017	Beta	1.95E-02	2.78E-03	2.97E-03
436288	2/20/2017 - 2/27/2017	Beta	2.47E-02	2.87E-03	2.69E-03
436744	2/27/2017 - 3/6/2017	Beta	2.32E-02	3.18E-03	3.01E-03
437615	3/6/2017 - 3/13/2017	Beta	2.13E-02	3.07E-03	3.18E-03
438328	3/13/2017 - 3/20/2017	Beta	2.13E-02	2.91E-03	3.17E-03
438833	3/20/2017 - 3/27/2017	Beta	2.54E-02	2.90E-03	2.66E-03
439215	12/27/2016 - 3/27/2017	Cs-134	<5.99E-04	0.00E+00	5.99E-04
		Cs-137	<5.18E-04	0.00E+00	5.18E-04
		Be-7	1.91E-01	2.77E-02	9.86E-03
		K-40	<1.16E-02	0.00E+00	1.16E-02
439209	3/27/2017 - 4/3/2017	Beta	1.91E-02	3.02E-03	3.29E-03
440037	4/3/2017 - 4/10/2017	Beta	2.07E-02	3.12E-03	3.31E-03
440625	4/10/2017 - 4/17/2017	Beta	2.94E-02	3.49E-03	3.34E-03
441441	4/17/2017 - 4/24/2017	Beta	1.74E-02	2.89E-03	3.16E-03
441890	4/24/2017 - 5/1/2017	Beta	1.46E-02	2.92E-03	3.61E-03
442351	5/1/2017 - 5/8/2017	Beta	2.06E-02	2.71E-03	2.68E-03
442894	5/8/2017 - 5/15/2017	Beta	2.88E-02	3.45E-03	3.28E-03
443334	5/15/2017 - 5/22/2017	Beta	3.06E-02	3.12E-03	2.64E-03
443886	5/22/2017 - 5/30/2017	Beta	1.68E-02	2.70E-03	2.98E-03
444293	5/30/2017 - 6/5/2017	Beta	3.47E-02	4.19E-03	4.06E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
445355	6/5/2017 - 6/12/2017	Beta	1.97E-02	2.77E-03	2.95E-03
446355	6/12/2017 - 6/19/2017	Beta	2.12E-02	2.75E-03	2.76E-03
446853	6/19/2017 - 6/26/2017	Beta	1.44E-02	2.84E-03	3.40E-03
447227	3/27/2017 - 6/26/2017	Cs-134	<4.59E-04	0.00E+00	4.59E-04
		Cs-137	<4.70E-04	0.00E+00	4.70E-04
		Be-7	1.88E-01	2.72E-02	8.15E-03
		K-40	<1.09E-02	0.00E+00	1.09E-02
447221	6/26/2017 - 7/3/2017	Beta	2.40E-02	2.89E-03	2.76E-03
447837	7/3/2017 - 7/10/2017	Beta	2.15E-02	3.14E-03	3.24E-03
448305	7/10/2017 - 7/17/2017	Beta	2.90E-02	3.46E-03	3.22E-03
448921	7/17/2017 - 7/24/2017	Beta	3.94E-02	3.95E-03	3.45E-03
449250	7/24/2017 - 7/31/2017	Beta	3.04E-02	3.57E-03	3.43E-03
449970	7/31/2017 - 8/7/2017	Beta	2.75E-02	3.07E-03	2.86E-03
450237	8/7/2017 - 8/14/2017	Beta	2.13E-02	3.06E-03	3.06E-03
450754	8/14/2017 - 8/21/2017	Beta	3.25E-02	3.62E-03	3.25E-03
451218	8/21/2017 - 8/28/2017	Beta	3.82E-02	3.91E-03	3.39E-03
451561	8/28/2017 - 9/5/2017	Beta	2.03E-02	2.51E-03	2.45E-03
452395	9/5/2017 - 9/11/2017	Beta	2.67E-02	3.78E-03	3.96E-03
452814	9/11/2017 - 9/18/2017	Beta	3.62E-02	3.93E-03	3.51E-03
452969	9/18/2017 - 9/25/2017	Beta	4.87E-02	4.34E-03	3.49E-03
454248	6/26/2017 - 9/25/2017	Cs-134	<1.42E-03	0.00E+00	1.42E-03
		Cs-137	<1.52E-03	0.00E+00	1.52E-03
		Be-7	2.05E-01	4.30E-02	2.85E-02
		K-40	<2.72E-02	0.00E+00	2.72E-02
453473	9/25/2017 - 10/2/2017	Beta	3.68E-02	3.82E-03	3.39E-03
454242	10/2/2017 - 10/9/2017	Beta	2.29E-02	3.27E-03	3.57E-03
455105	10/9/2017 - 10/16/2017	Beta	2.02E-02	2.71E-03	2.72E-03
455441	10/16/2017 - 10/23/2017	Beta	2.39E-02	2.83E-03	2.57E-03
456071	10/23/2017 - 10/30/2017	Beta	1.39E-02	2.48E-03	2.88E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID:	461437	Sample Dates: 10/30/2017 - 11/6/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.84E-02	2.96E-03	2.46E-03
Sample ID:	461993	Sample Dates: 11/6/2017 - 11/13/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.52E-02	3.01E-03	2.89E-03
Sample ID:	462632	Sample Dates: 11/13/2017 - 11/20/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	3.18E-02	3.58E-03	3.19E-03
Sample ID:	463121	Sample Dates: 11/20/2017 - 11/27/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	3.25E-02	3.58E-03	3.13E-03
Sample ID:	463531	Sample Dates: 11/27/2017 - 12/4/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	4.04E-02	3.85E-03	3.07E-03
Sample ID:	464172	Sample Dates: 12/4/2017 - 12/11/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	3.42E-02	3.64E-03	3.09E-03
Sample ID:	464729	Sample Dates: 12/11/2017 - 12/18/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.55E-02	3.33E-03	3.38E-03
Sample ID:	464995	Sample Dates: 12/18/2017 - 12/26/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.45E-02	3.05E-03	3.01E-03
Sample ID:	465652	Sample Dates: 9/25/2017 - 12/26/2017	Nuclide	Activity	2 Sigma Error	MDA
			Cs-134	<1.40E-03	0.00E+00	1.40E-03
			Cs-137	<1.51E-03	0.00E+00	1.51E-03
			Be-7	1.57E-01	3.52E-02	2.40E-02
			K-40	<2.41E-02	0.00E+00	2.41E-02
Sample ID:	465231	Sample Dates: 12/26/2017 - 1/2/2018	Nuclide	Activity	2 Sigma Error	MDA
			Beta	4.03E-02	3.83E-03	3.04E-03
			Cs-134	<1.31E-02	0.00E+00	1.31E-02
			Cs-137	<8.08E-03	0.00E+00	8.08E-03
			Be-7	<1.55E-01	0.00E+00	1.55E-01
			K-40	<1.69E-01	0.00E+00	1.69E-01

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]

Sample ID:	431834	Sample Dates: 12/27/2016 - 1/3/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.34E-02	2.57E-03	2.97E-03
Sample ID:	432241	Sample Dates: 1/3/2017 - 1/9/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.78E-02	3.45E-03	4.14E-03
Sample ID:	432935	Sample Dates: 1/9/2017 - 1/16/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.74E-02	2.97E-03	3.43E-03
Sample ID:	433331	Sample Dates: 1/16/2017 - 1/23/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.56E-02	2.62E-03	3.06E-03
Sample ID:	433750	Sample Dates: 1/23/2017 - 1/30/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.55E-02	2.58E-03	2.99E-03
Sample ID:	434490	Sample Dates: 1/30/2017 - 2/6/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.36E-02	3.24E-03	3.30E-03
Sample ID:	435136	Sample Dates: 2/6/2017 - 2/13/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.43E-02	3.21E-03	3.07E-03
Sample ID:	435837	Sample Dates: 2/13/2017 - 2/20/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.51E-02	2.57E-03	2.98E-03
Sample ID:	436289	Sample Dates: 2/20/2017 - 2/27/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.27E-02	2.78E-03	2.69E-03
Sample ID:	436745	Sample Dates: 2/27/2017 - 3/6/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	2.37E-02	3.21E-03	3.01E-03
Sample ID:	437616	Sample Dates: 3/6/2017 - 3/13/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.68E-02	2.84E-03	3.18E-03
Sample ID:	438329	Sample Dates: 3/13/2017 - 3/20/2017	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.85E-02	2.82E-03	3.22E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
438834	3/20/2017 - 3/27/2017	Beta	2.04E-02	2.69E-03	2.66E-03
439216	12/27/2016 - 3/27/2017	Cs-134	<4.93E-04	0.00E+00	4.93E-04
		Cs-137	<5.52E-04	0.00E+00	5.52E-04
		Be-7	1.66E-01	2.59E-02	1.06E-02
		K-40	<1.34E-02	0.00E+00	1.34E-02
439210	3/27/2017 - 4/3/2017	Beta	1.60E-02	2.86E-03	3.28E-03
440038	4/3/2017 - 4/10/2017	Beta	1.72E-02	2.95E-03	3.31E-03
440626	4/10/2017 - 4/17/2017	Beta	2.40E-02	3.26E-03	3.34E-03
441442	4/17/2017 - 4/24/2017	Beta	1.30E-02	2.65E-03	3.17E-03
441891	4/24/2017 - 5/1/2017	Beta	1.54E-02	2.96E-03	3.61E-03
442352	5/1/2017 - 5/8/2017	Beta	1.83E-02	2.60E-03	2.68E-03
442895	5/8/2017 - 5/15/2017	Beta	2.21E-02	3.16E-03	3.28E-03
443335	5/15/2017 - 5/22/2017	Beta	2.59E-02	2.94E-03	2.64E-03
443887	5/22/2017 - 5/30/2017	Beta	1.48E-02	2.60E-03	2.98E-03
444294	5/30/2017 - 6/5/2017	Beta	2.61E-02	3.81E-03	4.06E-03
445356	6/5/2017 - 6/12/2017	Beta	1.81E-02	2.70E-03	2.96E-03
446356	6/12/2017 - 6/19/2017	Beta	2.00E-02	2.70E-03	2.76E-03
446854	6/19/2017 - 6/26/2017	Beta	1.42E-02	2.83E-03	3.40E-03
447228	3/27/2017 - 6/26/2017	Cs-134	<5.77E-04	0.00E+00	5.77E-04
		Cs-137	<5.37E-04	0.00E+00	5.37E-04
		Be-7	1.70E-01	2.45E-02	8.84E-03
		K-40	1.05E-02	6.04E-03	6.19E-03
447222	6/26/2017 - 7/3/2017	Beta	1.96E-02	2.69E-03	2.76E-03
447838	7/3/2017 - 7/10/2017	Beta	2.01E-02	3.07E-03	3.25E-03
448306	7/10/2017 - 7/16/2017	Beta	2.22E-02	3.34E-03	3.51E-03
448922	7/17/2017 - 7/24/2017	Beta	3.44E-02	3.76E-03	3.45E-03
449251	7/24/2017 - 7/31/2017	Beta	2.28E-02	3.24E-03	3.43E-03
449971	7/31/2017 - 8/7/2017	Beta	2.38E-02	2.92E-03	2.86E-03
450238	8/7/2017 - 8/14/2017	Beta	1.50E-02	2.73E-03	3.06E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
450755	8/14/2017 - 8/21/2017	Beta	2.27E-02	3.19E-03	3.25E-03
451219	8/21/2017 - 8/28/2017	Beta	3.22E-02	3.66E-03	3.39E-03
451562	8/28/2017 - 9/5/2017	Beta	1.71E-02	2.37E-03	2.45E-03
452396	9/5/2017 - 9/11/2017	Beta	2.01E-02	3.47E-03	3.96E-03
452815	9/11/2017 - 9/18/2017	Beta	2.68E-02	3.56E-03	3.55E-03
452970	9/18/2017 - 9/25/2017	Beta	3.71E-02	3.89E-03	3.46E-03
454249	6/26/2017 - 9/25/2017	Cs-134	<1.65E-03	0.00E+00	1.65E-03
		Cs-137	<1.46E-03	0.00E+00	1.46E-03
		Be-7	1.56E-01	3.74E-02	2.77E-02
		K-40	<3.52E-02	0.00E+00	3.52E-02
453474	9/25/2017 - 10/2/2017	Beta	2.93E-02	3.51E-03	3.38E-03
454243	10/2/2017 - 10/3/2017	Beta	1.63E-02	4.36E-03	6.73E-03
455106	10/13/2017 - 10/14/2017	Beta	1.02E-02	4.81E-03	7.83E-03
455442	10/16/2017 - 10/23/2017	Beta	2.46E-02	2.92E-03	2.64E-03
456072	10/23/2017 - 10/30/2017	Beta	1.30E-02	2.43E-03	2.88E-03
461438	10/30/2017 - 11/6/2017	Beta	2.77E-02	2.92E-03	2.46E-03
461994	11/6/2017 - 11/13/2017	Beta	2.05E-02	2.81E-03	2.89E-03
462633	11/13/2017 - 11/20/2017	Beta	2.99E-02	3.51E-03	3.19E-03
463122	11/20/2017 - 11/27/2017	Beta	2.98E-02	3.46E-03	3.13E-03
463532	11/27/2017 - 12/4/2017	Beta	4.25E-02	3.94E-03	3.07E-03
464173	12/4/2017 - 12/11/2017	Beta	2.81E-02	3.38E-03	3.10E-03
464730	12/11/2017 - 12/18/2017	Beta	2.32E-02	3.23E-03	3.38E-03
464996	12/18/2017 - 12/26/2017	Beta	2.28E-02	2.97E-03	3.01E-03
465653	9/25/2017 - 12/26/2017	Cs-134	<1.47E-03	0.00E+00	1.47E-03
		Cs-137	<1.56E-03	0.00E+00	1.56E-03
		Be-7	1.25E-01	4.26E-02	5.21E-02
		K-40	<4.45E-02	0.00E+00	4.45E-02
465232	12/26/2017 - 1/2/2018	Beta	3.50E-02	3.63E-03	3.04E-03
		Cs-134	<1.52E-02	0.00E+00	1.52E-02
		Cs-137	<1.21E-02	0.00E+00	1.21E-02
		Be-7	1.67E-01	1.11E-01	1.67E-01
		K-40	<2.89E-01	0.00E+00	2.89E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431835	12/27/2016 - 1/3/2017	Beta	1.08E-02	2.42E-03	2.95E-03
432242	1/3/2017 - 1/9/2017	Beta	2.14E-02	3.70E-03	4.25E-03
432936	1/9/2017 - 1/16/2017	Beta	1.84E-02	3.03E-03	3.43E-03
433332	1/16/2017 - 1/23/2017	Beta	1.82E-02	2.74E-03	3.06E-03
433751	1/23/2017 - 1/30/2017	Beta	1.42E-02	2.51E-03	2.98E-03
434491	1/30/2017 - 2/6/2017	Beta	2.47E-02	3.29E-03	3.31E-03
435137	2/6/2017 - 2/13/2017	Beta	2.10E-02	3.04E-03	3.05E-03
435838	2/13/2017 - 2/20/2017	Beta	1.59E-02	2.62E-03	2.99E-03
436290	2/20/2017 - 2/27/2017	Beta	2.23E-02	2.75E-03	2.67E-03
436746	2/27/2017 - 3/6/2017	Beta	2.25E-02	3.14E-03	3.00E-03
437617	3/6/2017 - 3/13/2017	Beta	1.79E-02	2.89E-03	3.17E-03
438330	3/13/2017 - 3/20/2017	Beta	2.37E-02	3.03E-03	3.20E-03
438835	3/20/2017 - 3/27/2017	Beta	2.55E-02	2.91E-03	2.67E-03
439217	12/27/2016 - 3/27/2017	Cs-134	<5.72E-04	0.00E+00	5.72E-04
		Cs-137	<5.53E-04	0.00E+00	5.53E-04
		Be-7	1.59E-01	2.50E-02	9.10E-03
		K-40	<1.23E-02	0.00E+00	1.23E-02
439211	3/27/2017 - 4/3/2017	Beta	1.55E-02	2.80E-03	3.24E-03
440039	4/3/2017 - 4/10/2017	Beta	1.66E-02	2.95E-03	3.36E-03
440627	4/10/2017 - 4/17/2017	Beta	2.64E-02	3.38E-03	3.35E-03
441443	4/17/2017 - 4/24/2017	Beta	1.35E-02	2.67E-03	3.15E-03
441892	4/24/2017 - 5/1/2017	Beta	1.55E-02	2.98E-03	3.62E-03
442353	5/1/2017 - 5/8/2017	Beta	1.76E-02	2.57E-03	2.68E-03
442896	5/8/2017 - 5/15/2017	Beta	2.63E-02	3.33E-03	3.27E-03
443336	5/15/2017 - 5/22/2017	Beta	2.76E-02	3.00E-03	2.64E-03
443888	5/22/2017 - 5/30/2017	Beta	1.50E-02	2.62E-03	2.99E-03
444295	5/30/2017 - 6/5/2017	Beta	2.77E-02	3.87E-03	4.05E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
445357	6/5/2017 - 6/12/2017	Beta	1.66E-02	2.62E-03	2.96E-03
446357	6/12/2017 - 6/19/2017	Beta	1.91E-02	2.63E-03	2.72E-03
446855	6/19/2017 - 6/26/2017	Beta	1.36E-02	2.83E-03	3.45E-03
447229	3/27/2017 - 6/26/2017	Cs-134	<7.59E-04	0.00E+00	7.59E-04
		Cs-137	<3.71E-04	0.00E+00	3.71E-04
		Be-7	1.48E-01	2.36E-02	1.34E-02
		K-40	1.94E-02	8.10E-03	6.43E-03
447223	6/26/2017 - 7/3/2017	Beta	2.14E-02	2.78E-03	2.76E-03
447839	7/3/2017 - 7/10/2017	Beta	1.86E-02	2.99E-03	3.24E-03
448307	7/10/2017 - 7/17/2017	Beta	2.38E-02	3.21E-03	3.20E-03
448923	7/17/2017 - 7/24/2017	Beta	3.12E-02	3.65E-03	3.47E-03
449252	7/24/2017 - 7/31/2017	Beta	2.19E-02	3.19E-03	3.43E-03
449972	7/31/2017 - 8/7/2017	Beta	2.84E-02	3.13E-03	2.89E-03
450239	8/7/2017 - 8/14/2017	Beta	1.67E-02	2.82E-03	3.06E-03
450756	8/14/2017 - 8/21/2017	Beta	2.52E-02	3.32E-03	3.26E-03
451220	8/21/2017 - 8/28/2017	Beta	3.33E-02	3.72E-03	3.40E-03
451563	8/28/2017 - 9/5/2017	Beta	1.78E-02	2.40E-03	2.45E-03
452397	9/5/2017 - 9/11/2017	Beta	2.35E-02	3.60E-03	3.90E-03
452816	9/11/2017 - 9/18/2017	Beta	2.51E-02	2.94E-03	2.75E-03
452971	9/18/2017 - 9/25/2017	Beta	4.05E-02	4.03E-03	3.49E-03
454250	6/26/2017 - 9/25/2017	Cs-134	<1.32E-03	0.00E+00	1.32E-03
		Cs-137	<1.64E-03	0.00E+00	1.64E-03
		Be-7	1.78E-01	4.29E-02	3.72E-02
		K-40	<3.28E-02	0.00E+00	3.28E-02
453475	9/25/2017 - 10/2/2017	Beta	3.26E-02	3.64E-03	3.36E-03
454244	10/2/2017 - 10/9/2017	Beta	1.75E-02	3.04E-03	3.58E-03
455107	10/9/2017 - 10/16/2017	Beta	1.75E-02	2.60E-03	2.75E-03
455443	10/16/2017 - 10/23/2017	Beta	2.89E-02	3.02E-03	2.54E-03
456073	10/23/2017 - 10/30/2017	Beta	1.80E-02	2.66E-03	2.86E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
461439	10/30/2017 - 11/6/2017	Beta	3.14E-02	3.07E-03	2.45E-03
461995	11/6/2017 - 11/13/2017	Beta	2.48E-02	3.00E-03	2.90E-03
462634	11/13/2017 - 11/20/2017	Beta	2.78E-02	3.42E-03	3.21E-03
463123	11/20/2017 - 11/27/2017	Beta	3.51E-02	3.69E-03	3.13E-03
463533	11/27/2017 - 12/4/2017	Beta	4.28E-02	3.93E-03	3.06E-03
464174	12/4/2017 - 12/11/2017	Beta	3.54E-02	3.70E-03	3.11E-03
464731	12/11/2017 - 12/18/2017	Beta	3.15E-02	3.60E-03	3.38E-03
464997	12/18/2017 - 12/26/2017	Beta	2.80E-02	3.19E-03	3.01E-03
465654	9/25/2017 - 12/26/2017	Cs-134	<1.38E-03	0.00E+00	1.38E-03
		Cs-137	<1.13E-03	0.00E+00	1.13E-03
		Be-7	1.48E-01	3.74E-02	3.63E-02
		K-40	<2.77E-02	0.00E+00	2.77E-02
465233	12/26/2017 - 1/2/2018	Beta	3.78E-02	3.73E-03	3.03E-03
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.16E-02	0.00E+00	1.16E-02
		Be-7	1.06E-01	9.98E-02	1.59E-01
		K-40	<2.00E-01	0.00E+00	2.00E-01

Sample Point 081 [CONTROL - SE @ 9.33 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431836	12/27/2016 - 1/3/2017	Beta	1.58E-02	2.71E-03	2.98E-03
432243	1/3/2017 - 1/9/2017	Beta	1.88E-02	3.50E-03	4.14E-03
432937	1/9/2017 - 1/16/2017	Beta	1.77E-02	2.98E-03	3.42E-03
433333	1/16/2017 - 1/23/2017	Beta	1.60E-02	2.65E-03	3.07E-03
433752	1/23/2017 - 1/30/2017	Beta	1.88E-02	2.74E-03	3.00E-03
434492	1/30/2017 - 2/6/2017	Beta	2.32E-02	3.21E-03	3.29E-03
435138	2/6/2017 - 2/13/2017	Beta	2.71E-02	3.35E-03	3.07E-03
435839	2/13/2017 - 2/20/2017	Beta	1.52E-02	2.57E-03	2.96E-03
436291	2/20/2017 - 2/27/2017	Beta	2.31E-02	2.82E-03	2.71E-03
436747	2/27/2017 - 3/6/2017	Beta	2.07E-02	2.99E-03	2.91E-03
437618	3/6/2017 - 3/13/2017	Beta	1.56E-02	2.78E-03	3.18E-03
438331	3/13/2017 - 3/20/2017	Beta	2.02E-02	2.90E-03	3.23E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 081 [CONTROL - SE @ 9.33 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
438836	3/20/2017 - 3/27/2017	Beta	2.45E-02	2.87E-03	2.67E-03
439218	12/27/2016 - 3/27/2017	Cs-134	<4.63E-04	0.00E+00	4.63E-04
		Cs-137	<3.67E-04	0.00E+00	3.67E-04
		Be-7	1.66E-01	2.48E-02	7.90E-03
		K-40	<9.77E-03	0.00E+00	9.77E-03
439212	3/27/2017 - 4/3/2017	Beta	1.71E-02	2.90E-03	3.27E-03
440040	4/3/2017 - 4/10/2017	Beta	1.63E-02	2.90E-03	3.31E-03
440628	4/10/2017 - 4/17/2017	Beta	2.50E-02	3.32E-03	3.36E-03
441444	4/17/2017 - 4/24/2017	Beta	1.41E-02	2.70E-03	3.14E-03
441893	4/24/2017 - 5/1/2017	Beta	1.10E-02	2.74E-03	3.62E-03
442354	5/1/2017 - 5/8/2017	Beta	1.68E-02	2.53E-03	2.68E-03
442897	5/8/2017 - 5/15/2017	Beta	2.40E-02	3.23E-03	3.27E-03
443337	5/15/2017 - 5/22/2017	Beta	2.55E-02	2.92E-03	2.63E-03
443889	5/22/2017 - 5/30/2017	Beta	1.36E-02	2.54E-03	2.99E-03
444296	5/30/2017 - 6/5/2017	Beta	2.73E-02	3.86E-03	4.07E-03
445358	6/5/2017 - 6/12/2017	Beta	1.64E-02	2.61E-03	2.95E-03
446358	6/12/2017 - 6/19/2017	Beta	1.99E-02	2.70E-03	2.78E-03
446856	6/19/2017 - 6/26/2017	Beta	1.33E-02	2.77E-03	3.38E-03
447230	3/27/2017 - 6/26/2017	Cs-134	<5.65E-04	0.00E+00	5.65E-04
		Cs-137	<4.46E-04	0.00E+00	4.46E-04
		Be-7	1.48E-01	2.24E-02	1.07E-02
		K-40	6.31E-03	4.97E-03	6.32E-03
447224	6/26/2017 - 7/3/2017	Beta	1.76E-02	2.60E-03	2.76E-03
447840	7/3/2017 - 7/10/2017	Beta	2.05E-02	3.10E-03	3.25E-03
448308	7/10/2017 - 7/17/2017	Beta	2.32E-02	3.18E-03	3.20E-03
448924	7/17/2017 - 7/24/2017	Beta	3.11E-02	3.64E-03	3.46E-03
449253	7/24/2017 - 7/31/2017	Beta	2.37E-02	3.27E-03	3.43E-03
449973	7/31/2017 - 8/7/2017	Beta	2.28E-02	2.88E-03	2.86E-03
450240	8/7/2017 - 8/14/2017	Beta	1.85E-02	2.92E-03	3.07E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 081 [CONTROL - SE @ 9.33 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
450757	8/14/2017 - 8/21/2017	Beta	2.55E-02	3.31E-03	3.25E-03
451221	8/21/2017 - 8/28/2017	Beta	3.00E-02	3.57E-03	3.38E-03
451564	8/28/2017 - 9/5/2017	Beta	1.92E-02	2.47E-03	2.45E-03
452398	9/5/2017 - 9/11/2017	Beta	2.02E-02	3.49E-03	3.99E-03
452817	9/11/2017 - 9/18/2017	Beta	2.27E-02	2.84E-03	2.74E-03
452972	9/18/2017 - 9/25/2017	Beta	4.48E-02	4.16E-03	3.45E-03
454251	6/26/2017 - 9/25/2017	Cs-134	<1.46E-03	0.00E+00	1.46E-03
		Cs-137	<1.33E-03	0.00E+00	1.33E-03
		Be-7	1.55E-01	3.58E-02	2.05E-02
		K-40	<2.66E-02	0.00E+00	2.66E-02
453476	9/25/2017 - 10/2/2017	Beta	3.43E-02	3.72E-03	3.39E-03
454245	10/2/2017 - 10/9/2017	Beta	1.72E-02	3.01E-03	3.57E-03
455108	10/9/2017 - 10/16/2017	Beta	1.63E-02	2.55E-03	2.76E-03
455444	10/16/2017 - 10/23/2017	Beta	3.10E-02	3.11E-03	2.53E-03
456074	10/23/2017 - 10/30/2017	Beta	1.47E-02	2.50E-03	2.86E-03
461440	10/30/2017 - 11/6/2017	Beta	2.88E-02	2.97E-03	2.46E-03
461996	11/6/2017 - 11/13/2017	Beta	2.49E-02	2.99E-03	2.88E-03
462635	11/13/2017 - 11/20/2017	Beta	2.90E-02	3.46E-03	3.20E-03
463124	11/20/2017 - 11/27/2017	Beta	3.58E-02	3.71E-03	3.13E-03
463534	11/27/2017 - 12/4/2017	Beta	4.03E-02	3.85E-03	3.07E-03
464175	12/4/2017 - 12/11/2017	Beta	3.21E-02	3.57E-03	3.10E-03
464732	12/11/2017 - 12/18/2017	Beta	3.17E-02	3.60E-03	3.37E-03
464998	12/18/2017 - 12/26/2017	Beta	2.71E-02	3.15E-03	3.02E-03
465655	9/25/2017 - 12/26/2017	Cs-134	<9.70E-04	0.00E+00	9.70E-04
		Cs-137	<1.62E-03	0.00E+00	1.62E-03
		Be-7	1.22E-01	3.50E-02	3.70E-02
		K-40	<2.61E-02	0.00E+00	2.61E-02
465234	12/26/2017 - 1/2/2018	Beta	3.05E-02	3.44E-03	3.04E-03
		Cs-134	<1.12E-02	0.00E+00	1.12E-02
		Cs-137	<8.33E-03	0.00E+00	8.33E-03
		Be-7	2.03E-01	9.41E-02	1.28E-01
		K-40	1.49E-01	1.12E-01	1.59E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431837	12/27/2016 - 1/3/2017	Beta	1.43E-02	2.63E-03	2.97E-03
432244	1/3/2017 - 1/9/2017	Beta	2.17E-02	3.64E-03	4.13E-03
432938	1/9/2017 - 1/16/2017	Beta	1.56E-02	2.88E-03	3.43E-03
433334	1/16/2017 - 1/23/2017	Beta	1.63E-02	2.66E-03	3.06E-03
433753	1/23/2017 - 1/30/2017	Beta	1.62E-02	2.61E-03	2.99E-03
434493	1/30/2017 - 2/6/2017	Beta	2.51E-02	3.30E-03	3.30E-03
435139	2/6/2017 - 2/13/2017	Beta	2.64E-02	3.31E-03	3.07E-03
435840	2/13/2017 - 2/20/2017	Beta	1.59E-02	2.60E-03	2.96E-03
436292	2/20/2017 - 2/27/2017	Beta	2.14E-02	2.73E-03	2.70E-03
436748	2/27/2017 - 3/6/2017	Beta	2.59E-02	3.25E-03	2.92E-03
437619	3/6/2017 - 3/13/2017	Beta	1.88E-02	2.94E-03	3.18E-03
438332	3/13/2017 - 3/20/2017	Beta	1.93E-02	2.86E-03	3.24E-03
438837	3/20/2017 - 3/27/2017	Beta	2.29E-02	2.79E-03	2.65E-03
439219	12/27/2016 - 3/27/2017	Cs-134	<6.21E-04	0.00E+00	6.21E-04
		Cs-137	<2.76E-04	0.00E+00	2.76E-04
		Be-7	1.60E-01	2.38E-02	1.26E-02
		K-40	<1.55E-02	0.00E+00	1.55E-02
439213	3/27/2017 - 4/3/2017	Beta	1.58E-02	2.85E-03	3.29E-03
440041	4/3/2017 - 4/10/2017	Beta	1.69E-02	2.93E-03	3.31E-03
440629	4/10/2017 - 4/17/2017	Beta	2.46E-02	3.28E-03	3.34E-03
441445	4/17/2017 - 4/24/2017	Beta	1.31E-02	2.65E-03	3.16E-03
441894	4/24/2017 - 5/1/2017	Beta	1.71E-02	3.05E-03	3.61E-03
442355	5/1/2017 - 5/8/2017	Beta	1.63E-02	2.51E-03	2.68E-03
442898	5/8/2017 - 5/15/2017	Beta	2.66E-02	3.36E-03	3.27E-03
443338	5/15/2017 - 5/22/2017	Beta	3.05E-02	3.12E-03	2.64E-03
443890	5/22/2017 - 5/30/2017	Beta	1.46E-02	2.59E-03	2.98E-03
444297	5/30/2017 - 6/5/2017	Beta	2.74E-02	3.86E-03	4.06E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
445359	6/5/2017 - 6/12/2017	Beta	1.70E-02	2.64E-03	2.95E-03
446359	6/12/2017 - 6/19/2017	Beta	1.88E-02	2.64E-03	2.76E-03
446857	6/19/2017 - 6/26/2017	Beta	1.34E-02	2.82E-03	3.46E-03
447231	3/27/2017 - 6/26/2017	Cs-134	<5.09E-04	0.00E+00	5.09E-04
		Cs-137	<4.49E-04	0.00E+00	4.49E-04
		Be-7	1.40E-01	2.21E-02	1.21E-02
		K-40	<1.42E-02	0.00E+00	1.42E-02
447225	6/26/2017 - 7/3/2017	Beta	2.24E-02	2.82E-03	2.76E-03
447841	7/3/2017 - 7/10/2017	Beta	1.98E-02	3.06E-03	3.25E-03
448309	7/10/2017 - 7/17/2017	Beta	2.51E-02	3.28E-03	3.21E-03
448925	7/17/2017 - 7/24/2017	Beta	3.50E-02	3.78E-03	3.45E-03
449254	7/24/2017 - 7/31/2017	Beta	2.50E-02	3.34E-03	3.43E-03
449974	7/31/2017 - 8/7/2017	Beta	2.70E-02	3.05E-03	2.86E-03
450241	8/7/2017 - 8/14/2017	Beta	1.90E-02	2.94E-03	3.07E-03
450758	8/14/2017 - 8/21/2017	Beta	2.40E-02	3.25E-03	3.24E-03
451222	8/21/2017 - 8/28/2017	Beta	3.68E-02	3.85E-03	3.39E-03
451565	8/28/2017 - 9/5/2017	Beta	1.87E-02	2.45E-03	2.45E-03
452399	9/5/2017 - 9/11/2017	Beta	2.41E-02	3.66E-03	3.96E-03
452818	9/11/2017 - 9/18/2017	Beta	2.78E-02	3.03E-03	2.72E-03
452973	9/18/2017 - 9/25/2017	Beta	4.56E-02	4.22E-03	3.49E-03
454252	6/26/2017 - 9/25/2017	Cs-134	<4.01E-04	0.00E+00	4.01E-04
		Cs-137	<1.59E-03	0.00E+00	1.59E-03
		Be-7	1.64E-01	4.62E-02	5.04E-02
		K-40	<2.73E-02	0.00E+00	2.73E-02
453477	9/25/2017 - 10/2/2017	Beta	3.37E-02	3.70E-03	3.39E-03
454246	10/2/2017 - 10/9/2017	Beta	1.45E-02	2.87E-03	3.56E-03
455109	10/9/2017 - 10/16/2017	Beta	1.86E-02	2.65E-03	2.75E-03
455445	10/16/2017 - 10/23/2017	Beta	2.07E-02	2.67E-03	2.54E-03
456075	10/23/2017 - 10/30/2017	Beta	1.41E-02	2.47E-03	2.86E-03

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
461441	10/30/2017 - 11/6/2017	Beta	2.68E-02	2.89E-03	2.46E-03
461997	11/6/2017 - 11/13/2017	Beta	1.94E-02	2.75E-03	2.89E-03
462636	11/13/2017 - 11/20/2017	Beta	2.29E-02	3.18E-03	3.19E-03
463125	11/20/2017 - 11/27/2017	Beta	2.57E-02	3.28E-03	3.13E-03
463535	11/27/2017 - 12/4/2017	Beta	3.45E-02	3.62E-03	3.07E-03
464176	12/4/2017 - 12/11/2017	Beta	2.86E-02	3.41E-03	3.10E-03
464733	12/11/2017 - 12/18/2017	Beta	2.52E-02	3.32E-03	3.37E-03
464999	12/18/2017 - 12/26/2017	Beta	2.16E-02	2.92E-03	3.02E-03
465656	9/25/2017 - 12/26/2017	Cs-134	<2.10E-03	0.00E+00	2.10E-03
		Cs-137	<1.62E-03	0.00E+00	1.62E-03
		Be-7	1.34E-01	3.38E-02	2.58E-02
		K-40	<2.43E-02	0.00E+00	2.43E-02
465235	12/26/2017 - 1/2/2018	Beta	3.09E-02	3.45E-03	3.04E-03
		Cs-134	<1.64E-02	0.00E+00	1.64E-02
		Cs-137	<1.01E-02	0.00E+00	1.01E-02
		Be-7	1.01E-01	7.58E-02	1.14E-01
		K-40	3.36E-01	1.31E-01	1.09E-01

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
431838	12/27/2016 - 1/3/2017	Beta	1.50E-02	2.67E-03	2.97E-03
432245	1/3/2017 - 1/9/2017	Beta	2.25E-02	3.68E-03	4.14E-03
432939	1/9/2017 - 1/16/2017	Beta	1.93E-02	3.07E-03	3.43E-03
433335	1/16/2017 - 1/23/2017	Beta	1.68E-02	2.68E-03	3.06E-03
433754	1/23/2017 - 1/30/2017	Beta	1.74E-02	2.67E-03	2.99E-03
434494	1/30/2017 - 2/6/2017	Beta	2.90E-02	3.48E-03	3.30E-03
435140	2/6/2017 - 2/13/2017	Beta	2.38E-02	3.19E-03	3.07E-03
435841	2/13/2017 - 2/20/2017	Beta	1.93E-02	2.77E-03	2.98E-03
436293	2/20/2017 - 2/27/2017	Beta	2.27E-02	2.78E-03	2.69E-03
436749	2/27/2017 - 3/6/2017	Beta	2.84E-02	3.36E-03	2.93E-03
437620	3/6/2017 - 3/13/2017	Beta	1.91E-02	2.96E-03	3.18E-03
438333	3/13/2017 - 3/20/2017	Beta	2.34E-02	3.03E-03	3.22E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
438838	3/20/2017 - 3/27/2017	Beta	2.81E-02	3.01E-03	2.66E-03
439220	12/27/2016 - 3/27/2017	Cs-134	<6.23E-04	0.00E+00	6.23E-04
		Cs-137	<3.50E-04	0.00E+00	3.50E-04
		Be-7	1.85E-01	2.63E-02	1.00E-02
		K-40	1.35E-02	6.85E-03	6.84E-03
439214	3/27/2017 - 4/3/2017	Beta	1.71E-02	2.90E-03	3.28E-03
440042	4/3/2017 - 4/10/2017	Beta	2.07E-02	3.13E-03	3.32E-03
440630	4/10/2017 - 4/17/2017	Beta	2.94E-02	3.49E-03	3.34E-03
441446	4/17/2017 - 4/24/2017	Beta	1.36E-02	2.68E-03	3.17E-03
441895	4/24/2017 - 5/1/2017	Beta	1.54E-02	2.97E-03	3.61E-03
442356	5/1/2017 - 5/8/2017	Beta	1.80E-02	2.59E-03	2.68E-03
442899	5/8/2017 - 5/15/2017	Beta	2.62E-02	3.34E-03	3.28E-03
443339	5/15/2017 - 5/22/2017	Beta	2.95E-02	3.08E-03	2.64E-03
443891	5/22/2017 - 5/30/2017	Beta	1.61E-02	2.67E-03	2.98E-03
444298	5/30/2017 - 6/5/2017	Beta	3.03E-02	4.00E-03	4.06E-03
445360	6/5/2017 - 6/12/2017	Beta	1.91E-02	2.74E-03	2.96E-03
446360	6/12/2017 - 6/19/2017	Beta	2.32E-02	2.84E-03	2.76E-03
446858	6/19/2017 - 6/26/2017	Beta	1.44E-02	2.85E-03	3.40E-03
447232	3/27/2017 - 6/26/2017	Cs-134	<6.84E-04	0.00E+00	6.84E-04
		Cs-137	<5.42E-04	0.00E+00	5.42E-04
		Be-7	1.76E-01	2.66E-02	1.30E-02
		K-40	1.37E-02	7.57E-03	8.64E-03
447226	6/26/2017 - 7/3/2017	Beta	2.35E-02	2.86E-03	2.76E-03
447842	7/3/2017 - 7/10/2017	Beta	1.65E-02	2.88E-03	3.24E-03
448310	7/10/2017 - 7/17/2017	Beta	2.24E-02	3.16E-03	3.22E-03
448926	7/17/2017 - 7/24/2017	Beta	3.54E-02	3.79E-03	3.45E-03
449255	7/24/2017 - 7/31/2017	Beta	2.48E-02	3.32E-03	3.43E-03
449975	7/31/2017 - 8/7/2017	Beta	2.69E-02	3.05E-03	2.86E-03
450242	8/7/2017 - 8/14/2017	Beta	2.04E-02	3.01E-03	3.06E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
450759	8/14/2017 - 8/21/2017	Beta	2.33E-02	3.22E-03	3.25E-03
451223	8/21/2017 - 8/28/2017	Beta	2.92E-02	3.54E-03	3.39E-03
451566	8/28/2017 - 9/5/2017	Beta	1.85E-02	2.44E-03	2.45E-03
452400	9/5/2017 - 9/11/2017	Beta	1.92E-02	3.42E-03	3.96E-03
452819	9/11/2017 - 9/18/2017	Beta	2.71E-02	3.10E-03	2.86E-03
452974	9/18/2017 - 9/25/2017	Beta	3.95E-02	4.00E-03	3.49E-03
454253	6/26/2017 - 9/25/2017	Cs-134	<1.40E-03	0.00E+00	1.40E-03
		Cs-137	<1.77E-03	0.00E+00	1.77E-03
		Be-7	1.59E-01	3.73E-02	2.74E-02
		K-40	<3.14E-02	0.00E+00	3.14E-02
453478	9/25/2017 - 10/2/2017	Beta	3.43E-02	3.72E-03	3.38E-03
454247	10/2/2017 - 10/9/2017	Beta	1.49E-02	2.91E-03	3.58E-03
455110	10/9/2017 - 10/16/2017	Beta	1.69E-02	2.55E-03	2.72E-03
455446	10/16/2017 - 10/23/2017	Beta	2.59E-02	2.93E-03	2.57E-03
456076	10/23/2017 - 10/30/2017	Beta	1.69E-02	2.61E-03	2.86E-03
461442	10/30/2017 - 11/6/2017	Beta	3.34E-02	3.16E-03	2.46E-03
461998	11/6/2017 - 11/13/2017	Beta	2.41E-02	2.96E-03	2.89E-03
462637	11/13/2017 - 11/20/2017	Beta	3.44E-02	3.69E-03	3.20E-03
463126	11/20/2017 - 11/27/2017	Beta	3.44E-02	3.65E-03	3.13E-03
463536	11/27/2017 - 12/4/2017	Beta	4.12E-02	3.88E-03	3.07E-03
464177	12/4/2017 - 12/11/2017	Beta	3.35E-02	3.62E-03	3.10E-03
464734	12/11/2017 - 12/18/2017	Beta	2.55E-02	3.34E-03	3.39E-03
465000	12/18/2017 - 12/26/2017	Beta	2.39E-02	3.02E-03	3.01E-03
465657	9/25/2017 - 12/26/2017	Cs-134	<1.71E-03	0.00E+00	1.71E-03
		Cs-137	<1.51E-03	0.00E+00	1.51E-03
		Be-7	1.65E-01	3.59E-02	2.31E-02
		K-40	<2.41E-02	0.00E+00	2.41E-02
465236	12/26/2017 - 1/2/2018	Beta	3.63E-02	3.68E-03	3.04E-03
		Cs-134	<1.06E-02	0.00E+00	1.06E-02
		Cs-137	<1.02E-02	0.00E+00	1.02E-02
		Be-7	8.91E-02	7.92E-02	1.24E-01
		K-40	<1.92E-01	0.00E+00	1.92E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID: 431845 **Sample Dates: 12/27/2016 - 1/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.50E-03	0.00E+00	9.50E-03
Cs-134	<7.60E-03	0.00E+00	7.60E-03
Cs-137	<8.77E-03	0.00E+00	8.77E-03
Be-7	<4.06E-02	0.00E+00	4.06E-02
K-40	3.72E-01	1.33E-01	3.06E-02

Sample ID: 432246 **Sample Dates: 1/3/2017 - 1/9/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.75E-03	0.00E+00	9.75E-03
Cs-134	<7.13E-03	0.00E+00	7.13E-03
Cs-137	<7.95E-03	0.00E+00	7.95E-03
Be-7	<7.07E-02	0.00E+00	7.07E-02
K-40	4.61E-01	1.56E-01	3.37E-02

Sample ID: 432940 **Sample Dates: 1/9/2017 - 1/16/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.49E-03	0.00E+00	8.49E-03
Cs-134	<9.34E-03	0.00E+00	9.34E-03
Cs-137	<9.45E-03	0.00E+00	9.45E-03
Be-7	<5.80E-02	0.00E+00	5.80E-02
K-40	3.48E-01	1.23E-01	2.77E-02

Sample ID: 433336 **Sample Dates: 1/16/2017 - 1/23/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.59E-03	0.00E+00	9.59E-03
Cs-134	<4.68E-03	0.00E+00	4.68E-03
Cs-137	<6.75E-03	0.00E+00	6.75E-03
Be-7	<5.67E-02	0.00E+00	5.67E-02
K-40	5.71E-01	1.62E-01	2.86E-02

Sample ID: 433755 **Sample Dates: 1/23/2017 - 1/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.45E-03	0.00E+00	6.45E-03
Cs-134	<7.56E-03	0.00E+00	7.56E-03
Cs-137	<7.76E-03	0.00E+00	7.76E-03
Be-7	<7.02E-02	0.00E+00	7.02E-02
K-40	2.17E-01	1.16E-01	1.35E-01

Sample ID: 434495 **Sample Dates: 1/30/2017 - 2/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.08E-02	0.00E+00	1.08E-02
Cs-134	<7.59E-03	0.00E+00	7.59E-03
Cs-137	<8.77E-03	0.00E+00	8.77E-03
Be-7	<5.65E-02	0.00E+00	5.65E-02
K-40	4.79E-01	1.68E-01	1.47E-01

Sample ID: 435141 **Sample Dates: 2/6/2017 - 2/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.76E-03	0.00E+00	6.76E-03
Cs-134	<6.78E-03	0.00E+00	6.78E-03
Cs-137	<7.83E-03	0.00E+00	7.83E-03
Be-7	<6.13E-02	0.00E+00	6.13E-02
K-40	3.69E-01	1.28E-01	2.78E-02

Sample ID: 435842 **Sample Dates: 2/13/2017 - 2/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.07E-02	0.00E+00	1.07E-02
Cs-134	<8.29E-03	0.00E+00	8.29E-03
Cs-137	<1.33E-02	0.00E+00	1.33E-02
Be-7	<6.25E-02	0.00E+00	6.25E-02
K-40	<2.26E-01	0.00E+00	2.26E-01

Sample ID: 436294 **Sample Dates: 2/20/2017 - 2/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.19E-02	0.00E+00	1.19E-02
Cs-134	<6.85E-03	0.00E+00	6.85E-03
Cs-137	<5.61E-03	0.00E+00	5.61E-03
Be-7	<5.08E-02	0.00E+00	5.08E-02
K-40	<2.23E-01	0.00E+00	2.23E-01

Sample ID: 436750 **Sample Dates: 2/27/2017 - 3/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.43E-03	0.00E+00	8.43E-03
Cs-134	<6.11E-03	0.00E+00	6.11E-03
Cs-137	<1.00E-02	0.00E+00	1.00E-02
Be-7	<5.78E-02	0.00E+00	5.78E-02
K-40	2.17E-01	9.91E-02	2.94E-02

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID: 437621 **Sample Dates: 3/6/2017 - 3/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.73E-03	0.00E+00	6.73E-03
Cs-134	<6.24E-03	0.00E+00	6.24E-03
Cs-137	<1.03E-02	0.00E+00	1.03E-02
Be-7	<6.08E-02	0.00E+00	6.08E-02
K-40	2.23E-01	9.74E-02	2.75E-02

Sample ID: 438334 **Sample Dates: 3/13/2017 - 3/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.19E-02	0.00E+00	1.19E-02
Cs-134	<7.65E-03	0.00E+00	7.65E-03
Cs-137	<1.00E-02	0.00E+00	1.00E-02
Be-7	<6.53E-02	0.00E+00	6.53E-02
K-40	2.58E-01	1.21E-01	1.21E-01

Sample ID: 438839 **Sample Dates: 3/20/2017 - 3/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.15E-03	0.00E+00	7.15E-03
Cs-134	<7.06E-03	0.00E+00	7.06E-03
Cs-137	<1.06E-02	0.00E+00	1.06E-02
Be-7	<5.24E-02	0.00E+00	5.24E-02
K-40	1.58E-01	8.53E-02	3.05E-02

Sample ID: 439221 **Sample Dates: 3/27/2017 - 4/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.10E-02	0.00E+00	1.10E-02
Cs-134	<7.62E-03	0.00E+00	7.62E-03
Cs-137	<9.46E-03	0.00E+00	9.46E-03
Be-7	<5.72E-02	0.00E+00	5.72E-02
K-40	2.17E-01	1.13E-01	1.17E-01

Sample ID: 440043 **Sample Dates: 4/3/2017 - 4/10/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.96E-03	0.00E+00	8.96E-03
Cs-134	<6.80E-03	0.00E+00	6.80E-03
Cs-137	<1.04E-02	0.00E+00	1.04E-02
Be-7	<5.47E-02	0.00E+00	5.47E-02
K-40	<2.07E-01	0.00E+00	2.07E-01

Sample ID: 440631 **Sample Dates: 4/10/2017 - 4/17/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.10E-03	0.00E+00	7.10E-03
Cs-134	<1.03E-02	0.00E+00	1.03E-02
Cs-137	<7.65E-03	0.00E+00	7.65E-03
Be-7	<3.01E-02	0.00E+00	3.01E-02
K-40	5.88E-01	1.84E-01	1.54E-01

Sample ID: 441447 **Sample Dates: 4/17/2017 - 4/24/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.47E-03	0.00E+00	7.47E-03
Cs-134	<8.53E-03	0.00E+00	8.53E-03
Cs-137	<7.18E-03	0.00E+00	7.18E-03
Be-7	<5.18E-02	0.00E+00	5.18E-02
K-40	2.89E-01	1.43E-01	1.68E-01

Sample ID: 441896 **Sample Dates: 4/24/2017 - 5/1/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.74E-03	0.00E+00	7.74E-03
Cs-134	<8.37E-03	0.00E+00	8.37E-03
Cs-137	<6.43E-03	0.00E+00	6.43E-03
Be-7	<4.81E-02	0.00E+00	4.81E-02
K-40	4.39E-01	1.62E-01	1.43E-01

Sample ID: 442357 **Sample Dates: 5/1/2017 - 5/8/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.11E-03	0.00E+00	8.11E-03
Cs-134	<3.67E-03	0.00E+00	3.67E-03
Cs-137	<6.68E-03	0.00E+00	6.68E-03
Be-7	<6.94E-02	0.00E+00	6.94E-02
K-40	3.23E-01	1.31E-01	1.19E-01

Sample ID: 442900 **Sample Dates: 5/8/2017 - 5/15/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.95E-03	0.00E+00	7.95E-03
Cs-134	<7.20E-03	0.00E+00	7.20E-03
Cs-137	<6.40E-03	0.00E+00	6.40E-03
Be-7	<6.20E-02	0.00E+00	6.20E-02
K-40	3.87E-01	1.48E-01	1.44E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID: 443340 **Sample Dates: 5/15/2017 - 5/22/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.55E-03	0.00E+00	8.55E-03
Cs-134	<5.37E-03	0.00E+00	5.37E-03
Cs-137	<4.56E-03	0.00E+00	4.56E-03
Be-7	<4.32E-02	0.00E+00	4.32E-02
K-40	3.59E-01	1.43E-01	1.39E-01

Sample ID: 443892 **Sample Dates: 5/22/2017 - 5/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.95E-03	0.00E+00	7.95E-03
Cs-134	<3.26E-03	0.00E+00	3.26E-03
Cs-137	<7.21E-03	0.00E+00	7.21E-03
Be-7	<5.39E-02	0.00E+00	5.39E-02
K-40	2.66E-01	1.16E-01	1.16E-01

Sample ID: 444299 **Sample Dates: 5/30/2017 - 6/5/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.40E-03	0.00E+00	8.40E-03
Cs-134	<9.67E-03	0.00E+00	9.67E-03
Cs-137	<8.67E-03	0.00E+00	8.67E-03
Be-7	<6.04E-02	0.00E+00	6.04E-02
K-40	<2.52E-01	0.00E+00	2.53E-01

Sample ID: 445361 **Sample Dates: 6/5/2017 - 6/12/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.16E-03	0.00E+00	6.16E-03
Cs-134	<5.41E-03	0.00E+00	5.41E-03
Cs-137	<6.73E-03	0.00E+00	6.73E-03
Be-7	<5.65E-02	0.00E+00	5.65E-02
K-40	<1.99E-01	0.00E+00	1.99E-01

Sample ID: 446361 **Sample Dates: 6/12/2017 - 6/19/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.46E-03	0.00E+00	6.46E-03
Cs-134	<6.68E-03	0.00E+00	6.68E-03
Cs-137	<7.71E-03	0.00E+00	7.71E-03
Be-7	<5.79E-02	0.00E+00	5.79E-02
K-40	<2.38E-01	0.00E+00	2.38E-01

Sample ID: 446859 **Sample Dates: 6/19/2017 - 6/26/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.67E-03	0.00E+00	7.67E-03
Cs-134	<6.10E-03	0.00E+00	6.10E-03
Cs-137	<5.87E-03	0.00E+00	5.87E-03
Be-7	<6.44E-02	0.00E+00	6.44E-02
K-40	2.02E-01	9.43E-02	2.88E-02

Sample ID: 447233 **Sample Dates: 6/26/2017 - 7/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.03E-02	0.00E+00	1.03E-02
Cs-134	<7.03E-03	0.00E+00	7.03E-03
Cs-137	<8.12E-03	0.00E+00	8.12E-03
Be-7	<6.04E-02	0.00E+00	6.04E-02
K-40	<1.97E-01	0.00E+00	1.97E-01

Sample ID: 447843 **Sample Dates: 7/3/2017 - 7/10/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.43E-03	0.00E+00	7.43E-03
Cs-134	<4.97E-03	0.00E+00	4.97E-03
Cs-137	<7.99E-03	0.00E+00	7.99E-03
Be-7	<5.62E-02	0.00E+00	5.62E-02
K-40	2.02E-01	1.15E-01	1.32E-01

Sample ID: 448311 **Sample Dates: 7/10/2017 - 7/17/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.53E-03	0.00E+00	8.53E-03
Cs-134	<6.34E-03	0.00E+00	6.34E-03
Cs-137	<1.04E-02	0.00E+00	1.04E-02
Be-7	<3.96E-02	0.00E+00	3.96E-02
K-40	<2.48E-01	0.00E+00	2.48E-01

Sample ID: 448927 **Sample Dates: 7/17/2017 - 7/24/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.71E-03	0.00E+00	7.71E-03
Cs-134	<5.14E-03	0.00E+00	5.14E-03
Cs-137	<9.70E-03	0.00E+00	9.70E-03
Be-7	<8.06E-02	0.00E+00	8.06E-02
K-40	<2.34E-01	0.00E+00	2.34E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID: 449256 **Sample Dates: 7/24/2017 - 7/31/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.83E-03	0.00E+00	8.83E-03
Cs-134	<8.19E-03	0.00E+00	8.19E-03
Cs-137	<8.12E-03	0.00E+00	8.12E-03
Be-7	<4.10E-02	0.00E+00	4.10E-02
K-40	9.48E-02	1.12E-01	1.80E-01

Sample ID: 449976 **Sample Dates: 7/31/2017 - 8/7/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.65E-03	0.00E+00	7.65E-03
Cs-134	<8.22E-03	0.00E+00	8.22E-03
Cs-137	<1.13E-02	0.00E+00	1.13E-02
Be-7	<4.08E-02	0.00E+00	4.08E-02
K-40	<2.16E-01	0.00E+00	2.16E-01

Sample ID: 450243 **Sample Dates: 8/7/2017 - 8/14/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.56E-03	0.00E+00	8.56E-03
Cs-134	<6.97E-03	0.00E+00	6.97E-03
Cs-137	<9.75E-03	0.00E+00	9.75E-03
Be-7	<5.62E-02	0.00E+00	5.62E-02
K-40	<1.88E-01	0.00E+00	1.88E-01

Sample ID: 450760 **Sample Dates: 8/14/2017 - 8/21/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.91E-03	0.00E+00	6.91E-03
Cs-134	<9.68E-03	0.00E+00	9.68E-03
Cs-137	<1.09E-02	0.00E+00	1.09E-02
Be-7	<6.29E-02	0.00E+00	6.29E-02
K-40	1.61E-01	1.03E-01	1.20E-01

Sample ID: 451224 **Sample Dates: 8/21/2017 - 8/28/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.26E-03	0.00E+00	5.26E-03
Cs-134	<7.93E-03	0.00E+00	7.93E-03
Cs-137	<9.34E-03	0.00E+00	9.34E-03
Be-7	<4.79E-02	0.00E+00	4.79E-02
K-40	<2.30E-01	0.00E+00	2.30E-01

Sample ID: 451567 **Sample Dates: 8/28/2017 - 9/5/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.51E-03	0.00E+00	8.51E-03
Cs-134	<4.37E-03	0.00E+00	4.37E-03
Cs-137	<9.27E-03	0.00E+00	9.27E-03
Be-7	<6.31E-02	0.00E+00	6.31E-02
K-40	<2.46E-01	0.00E+00	2.46E-01

Sample ID: 452401 **Sample Dates: 9/5/2017 - 9/11/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.16E-02	0.00E+00	1.16E-02
Cs-134	<8.86E-03	0.00E+00	8.86E-03
Cs-137	<1.43E-02	0.00E+00	1.43E-02
Be-7	<4.39E-02	0.00E+00	4.39E-02
K-40	<3.20E-01	0.00E+00	3.20E-01

Sample ID: 452820 **Sample Dates: 9/11/2017 - 9/18/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.41E-02	0.00E+00	1.41E-02
Cs-134	<1.22E-02	0.00E+00	1.22E-02
Cs-137	<1.23E-02	0.00E+00	1.23E-02
Be-7	<6.04E-02	0.00E+00	6.04E-02
K-40	1.76E-01	1.03E-01	3.97E-02

Sample ID: 452975 **Sample Dates: 9/18/2017 - 9/25/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.10E-03	0.00E+00	8.10E-03
Cs-134	<1.12E-02	0.00E+00	1.12E-02
Cs-137	<1.26E-02	0.00E+00	1.26E-02
Be-7	<6.45E-02	0.00E+00	6.45E-02
K-40	1.61E-01	1.05E-01	1.28E-01

Sample ID: 453479 **Sample Dates: 9/25/2017 - 10/2/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.90E-02	0.00E+00	1.90E-02
Cs-134	<1.29E-02	0.00E+00	1.29E-02
Cs-137	<1.38E-02	0.00E+00	1.38E-02
Be-7	<1.08E-01	0.00E+00	1.08E-01
K-40	<2.54E-01	0.00E+00	2.54E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID: 454254 **Sample Dates: 10/2/2017 - 10/9/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.90E-02	0.00E+00	1.90E-02
Cs-134	<1.01E-02	0.00E+00	1.01E-02
Cs-137	<1.36E-02	0.00E+00	1.36E-02
Be-7	<1.05E-01	0.00E+00	1.05E-01
K-40	1.61E-01	1.22E-01	1.71E-01

Sample ID: 455111 **Sample Dates: 10/9/2017 - 10/16/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.17E-02	0.00E+00	1.17E-02
Cs-134	<1.55E-02	0.00E+00	1.55E-02
Cs-137	<1.80E-02	0.00E+00	1.80E-02
Be-7	<1.15E-01	0.00E+00	1.15E-01
K-40	<2.71E-01	0.00E+00	2.71E-01

Sample ID: 455447 **Sample Dates: 10/16/2017 - 10/23/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.98E-02	0.00E+00	1.98E-02
Cs-134	<1.54E-02	0.00E+00	1.54E-02
Cs-137	<1.55E-02	0.00E+00	1.55E-02
Be-7	<1.32E-01	0.00E+00	1.32E-01
K-40	4.02E-01	2.05E-01	2.69E-01

Sample ID: 456077 **Sample Dates: 10/23/2017 - 10/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.33E-02	0.00E+00	2.33E-02
Cs-134	<2.08E-02	0.00E+00	2.08E-02
Cs-137	<1.51E-02	0.00E+00	1.51E-02
Be-7	<1.20E-01	0.00E+00	1.20E-01
K-40	6.17E-01	1.96E-01	1.35E-01

Sample ID: 461443 **Sample Dates: 10/30/2017 - 11/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.28E-02	0.00E+00	2.28E-02
Cs-134	<1.62E-02	0.00E+00	1.62E-02
Cs-137	<1.73E-02	0.00E+00	1.73E-02
Be-7	<1.18E-01	0.00E+00	1.18E-01
K-40	5.23E-01	1.88E-01	1.76E-01

Sample ID: 461999 **Sample Dates: 11/6/2017 - 11/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.42E-02	0.00E+00	2.42E-02
Cs-134	<2.10E-02	0.00E+00	2.10E-02
Cs-137	<1.40E-02	0.00E+00	1.40E-02
Be-7	<1.11E-01	0.00E+00	1.11E-01
K-40	5.93E-01	2.15E-01	2.21E-01

Sample ID: 462638 **Sample Dates: 11/13/2017 - 11/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.91E-02	0.00E+00	1.91E-02
Cs-134	<1.34E-02	0.00E+00	1.34E-02
Cs-137	<1.63E-02	0.00E+00	1.63E-02
Be-7	<1.08E-01	0.00E+00	1.08E-01
K-40	4.35E-01	1.99E-01	2.45E-01

Sample ID: 463127 **Sample Dates: 11/20/2017 - 11/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.35E-02	0.00E+00	2.35E-02
Cs-134	<1.61E-02	0.00E+00	1.61E-02
Cs-137	<1.80E-02	0.00E+00	1.80E-02
Be-7	<1.25E-01	0.00E+00	1.25E-01
K-40	4.42E-01	1.89E-01	2.13E-01

Sample ID: 463537 **Sample Dates: 11/27/2017 - 12/4/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.16E-02	0.00E+00	2.16E-02
Cs-134	<1.42E-02	0.00E+00	1.42E-02
Cs-137	<1.47E-02	0.00E+00	1.47E-02
Be-7	<1.29E-01	0.00E+00	1.29E-01
K-40	3.65E-01	1.95E-01	2.60E-01

Sample ID: 464178 **Sample Dates: 12/4/2017 - 12/11/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.26E-02	0.00E+00	2.26E-02
Cs-134	<2.17E-02	0.00E+00	2.17E-02
Cs-137	<1.50E-02	0.00E+00	1.50E-02
Be-7	<1.19E-01	0.00E+00	1.19E-01
K-40	5.86E-01	1.90E-01	1.33E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID: 464735 **Sample Dates: 12/11/2017 - 12/18/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.80E-02	0.00E+00	1.80E-02
Cs-134	<1.72E-02	0.00E+00	1.72E-02
Cs-137	<1.53E-02	0.00E+00	1.53E-02
Be-7	<1.20E-01	0.00E+00	1.20E-01
K-40	5.89E-01	1.98E-01	1.73E-01

Sample ID: 465001 **Sample Dates: 12/18/2017 - 12/26/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<3.20E-02	0.00E+00	3.20E-02
Cs-134	<1.41E-02	0.00E+00	1.41E-02
Cs-137	<1.45E-02	0.00E+00	1.45E-02
Be-7	<1.13E-01	0.00E+00	1.13E-01
K-40	3.61E-01	1.57E-01	1.75E-01

Sample ID: 465237 **Sample Dates: 12/26/2017 - 1/2/2018**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.67E-02	0.00E+00	2.67E-02
Cs-134	<1.78E-02	0.00E+00	1.78E-02
Cs-137	<1.81E-02	0.00E+00	1.81E-02
Be-7	<1.32E-01	0.00E+00	1.32E-01
K-40	4.70E-01	1.91E-01	2.11E-01

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]

Sample ID: 431846 **Sample Dates: 12/27/2016 - 1/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.00E-03	0.00E+00	9.00E-03
Cs-134	<6.68E-03	0.00E+00	6.68E-03
Cs-137	<7.71E-03	0.00E+00	7.71E-03
Be-7	<4.63E-02	0.00E+00	4.63E-02
K-40	3.64E-01	1.47E-01	1.52E-01

Sample ID: 432247 **Sample Dates: 1/3/2017 - 1/9/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.60E-03	0.00E+00	9.60E-03
Cs-134	<9.08E-03	0.00E+00	9.08E-03
Cs-137	<7.66E-03	0.00E+00	7.66E-03
Be-7	<5.99E-02	0.00E+00	5.99E-02
K-40	<3.45E-01	0.00E+00	3.45E-01

Sample ID: 432941 **Sample Dates: 1/9/2017 - 1/16/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.96E-03	0.00E+00	8.96E-03
Cs-134	<6.26E-03	0.00E+00	6.26E-03
Cs-137	<7.77E-03	0.00E+00	7.77E-03
Be-7	<5.05E-02	0.00E+00	5.05E-02
K-40	3.86E-01	1.30E-01	2.75E-02

Sample ID: 433337 **Sample Dates: 1/16/2017 - 1/23/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.17E-02	0.00E+00	1.17E-02
Cs-134	<7.29E-03	0.00E+00	7.29E-03
Cs-137	<6.49E-03	0.00E+00	6.49E-03
Be-7	<5.50E-02	0.00E+00	5.50E-02
K-40	3.93E-01	1.42E-01	1.13E-01

Sample ID: 433756 **Sample Dates: 1/23/2017 - 1/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.98E-03	0.00E+00	9.98E-03
Cs-134	<6.70E-03	0.00E+00	6.70E-03
Cs-137	<7.08E-03	0.00E+00	7.08E-03
Be-7	<5.07E-02	0.00E+00	5.07E-02
K-40	<2.62E-01	0.00E+00	2.62E-01

Sample ID: 434496 **Sample Dates: 1/30/2017 - 2/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.14E-02	0.00E+00	1.14E-02
Cs-134	<7.75E-03	0.00E+00	7.75E-03
Cs-137	<6.34E-03	0.00E+00	6.34E-03
Be-7	<7.67E-02	0.00E+00	7.67E-02
K-40	3.31E-01	1.66E-01	2.08E-01

Sample ID: 435142 **Sample Dates: 2/6/2017 - 2/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.43E-03	0.00E+00	8.43E-03
Cs-134	<7.96E-03	0.00E+00	7.96E-03
Cs-137	<7.13E-03	0.00E+00	7.13E-03
Be-7	<1.04E-02	0.00E+00	1.04E-02
K-40	4.19E-01	1.44E-01	1.04E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]

Sample ID: 435843 **Sample Dates: 2/13/2017 - 2/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<4.41E-03	0.00E+00	4.41E-03
Cs-134	<6.79E-03	0.00E+00	6.79E-03
Cs-137	<8.45E-03	0.00E+00	8.45E-03
Be-7	<6.57E-02	0.00E+00	6.57E-02
K-40	3.85E-01	1.34E-01	2.98E-02

Sample ID: 436295 **Sample Dates: 2/20/2017 - 2/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.07E-02	0.00E+00	1.07E-02
Cs-134	<7.01E-03	0.00E+00	7.01E-03
Cs-137	<9.21E-03	0.00E+00	9.21E-03
Be-7	<5.96E-02	0.00E+00	5.96E-02
K-40	<1.94E-01	0.00E+00	1.94E-01

Sample ID: 436751 **Sample Dates: 2/27/2017 - 3/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.44E-03	0.00E+00	8.44E-03
Cs-134	<9.20E-03	0.00E+00	9.20E-03
Cs-137	<8.25E-03	0.00E+00	8.25E-03
Be-7	<4.92E-02	0.00E+00	4.92E-02
K-40	<1.96E-01	0.00E+00	1.96E-01

Sample ID: 437622 **Sample Dates: 3/6/2017 - 3/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.83E-03	0.00E+00	6.83E-03
Cs-134	<4.50E-03	0.00E+00	4.50E-03
Cs-137	<8.48E-03	0.00E+00	8.48E-03
Be-7	<5.12E-02	0.00E+00	5.12E-02
K-40	1.76E-01	8.68E-02	2.81E-02

Sample ID: 438335 **Sample Dates: 3/13/2017 - 3/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.49E-03	0.00E+00	7.49E-03
Cs-134	<5.94E-03	0.00E+00	5.94E-03
Cs-137	<1.07E-02	0.00E+00	1.07E-02
Be-7	<6.39E-02	0.00E+00	6.39E-02
K-40	1.93E-01	1.03E-01	1.06E-01

Sample ID: 438840 **Sample Dates: 3/20/2017 - 3/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.90E-03	0.00E+00	8.90E-03
Cs-134	<7.52E-03	0.00E+00	7.52E-03
Cs-137	<1.15E-02	0.00E+00	1.15E-02
Be-7	<4.14E-02	0.00E+00	4.14E-02
K-40	<2.16E-01	0.00E+00	2.16E-01

Sample ID: 439222 **Sample Dates: 3/27/2017 - 4/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.01E-02	0.00E+00	1.01E-02
Cs-134	<8.75E-03	0.00E+00	8.75E-03
Cs-137	<9.65E-03	0.00E+00	9.65E-03
Be-7	<6.69E-02	0.00E+00	6.69E-02
K-40	2.27E-01	1.25E-01	1.45E-01

Sample ID: 440044 **Sample Dates: 4/3/2017 - 4/10/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.07E-02	0.00E+00	1.07E-02
Cs-134	<8.55E-03	0.00E+00	8.55E-03
Cs-137	<1.11E-02	0.00E+00	1.11E-02
Be-7	<5.38E-02	0.00E+00	5.38E-02
K-40	2.80E-01	1.31E-01	1.37E-01

Sample ID: 440632 **Sample Dates: 4/10/2017 - 4/17/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.94E-03	0.00E+00	8.94E-03
Cs-134	<8.72E-03	0.00E+00	8.72E-03
Cs-137	<5.55E-03	0.00E+00	5.55E-03
Be-7	<4.65E-02	0.00E+00	4.65E-02
K-40	4.48E-01	1.53E-01	1.22E-01

Sample ID: 441448 **Sample Dates: 4/17/2017 - 4/24/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.29E-03	0.00E+00	7.29E-03
Cs-134	<6.90E-03	0.00E+00	6.90E-03
Cs-137	<9.83E-03	0.00E+00	9.83E-03
Be-7	<6.33E-02	0.00E+00	6.33E-02
K-40	<3.38E-01	0.00E+00	3.38E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]

Sample ID: 441897 **Sample Dates: 4/24/2017 - 5/1/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.16E-02	0.00E+00	1.16E-02
Cs-134	<7.30E-03	0.00E+00	7.30E-03
Cs-137	<7.45E-03	0.00E+00	7.45E-03
Be-7	<5.86E-02	0.00E+00	5.86E-02
K-40	5.14E-01	1.61E-01	3.16E-02

Sample ID: 442358 **Sample Dates: 5/1/2017 - 5/8/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.81E-03	0.00E+00	6.81E-03
Cs-134	<9.08E-03	0.00E+00	9.08E-03
Cs-137	<1.07E-02	0.00E+00	1.07E-02
Be-7	<6.57E-02	0.00E+00	6.57E-02
K-40	<2.97E-01	0.00E+00	2.97E-01

Sample ID: 442901 **Sample Dates: 5/8/2017 - 5/15/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.30E-03	0.00E+00	9.30E-03
Cs-134	<4.97E-03	0.00E+00	4.97E-03
Cs-137	<7.98E-03	0.00E+00	7.98E-03
Be-7	<5.19E-02	0.00E+00	5.19E-02
K-40	5.48E-01	1.64E-01	3.03E-02

Sample ID: 443341 **Sample Dates: 5/15/2017 - 5/22/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.64E-03	0.00E+00	9.64E-03
Cs-134	<6.41E-03	0.00E+00	6.41E-03
Cs-137	<7.96E-03	0.00E+00	7.96E-03
Be-7	<5.21E-02	0.00E+00	5.21E-02
K-40	4.80E-01	1.48E-01	2.83E-02

Sample ID: 443893 **Sample Dates: 5/22/2017 - 5/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.21E-03	0.00E+00	8.21E-03
Cs-134	<7.90E-03	0.00E+00	7.90E-03
Cs-137	<7.39E-03	0.00E+00	7.39E-03
Be-7	<4.42E-02	0.00E+00	4.42E-02
K-40	5.48E-01	1.53E-01	2.61E-02

Sample ID: 444300 **Sample Dates: 5/30/2017 - 6/5/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.71E-03	0.00E+00	9.71E-03
Cs-134	<7.45E-03	0.00E+00	7.45E-03
Cs-137	<1.34E-02	0.00E+00	1.34E-02
Be-7	<6.48E-02	0.00E+00	6.48E-02
K-40	<2.69E-01	0.00E+00	2.69E-01

Sample ID: 445362 **Sample Dates: 6/5/2017 - 6/12/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.03E-02	0.00E+00	1.03E-02
Cs-134	<9.36E-03	0.00E+00	9.36E-03
Cs-137	<1.11E-02	0.00E+00	1.11E-02
Be-7	<5.63E-02	0.00E+00	5.63E-02
K-40	2.18E-01	1.11E-01	1.08E-01

Sample ID: 446362 **Sample Dates: 6/12/2017 - 6/19/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.30E-02	0.00E+00	1.30E-02
Cs-134	<9.14E-03	0.00E+00	9.14E-03
Cs-137	<1.14E-02	0.00E+00	1.14E-02
Be-7	<4.38E-02	0.00E+00	4.38E-02
K-40	<2.57E-01	0.00E+00	2.57E-01

Sample ID: 446860 **Sample Dates: 6/19/2017 - 6/26/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.91E-03	0.00E+00	6.91E-03
Cs-134	<5.87E-03	0.00E+00	5.87E-03
Cs-137	<9.12E-03	0.00E+00	9.12E-03
Be-7	<5.16E-02	0.00E+00	5.16E-02
K-40	<2.40E-01	0.00E+00	2.40E-01

Sample ID: 447234 **Sample Dates: 6/26/2017 - 7/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.70E-03	0.00E+00	9.70E-03
Cs-134	<6.76E-03	0.00E+00	6.76E-03
Cs-137	<9.92E-03	0.00E+00	9.92E-03
Be-7	<5.86E-02	0.00E+00	5.86E-02
K-40	8.43E-02	1.13E-01	1.86E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]

Sample ID: 447844 **Sample Dates: 7/3/2017 - 7/10/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.00E-02	0.00E+00	1.00E-02
Cs-134	<6.58E-03	0.00E+00	6.58E-03
Cs-137	<1.18E-02	0.00E+00	1.18E-02
Be-7	<4.08E-02	0.00E+00	4.08E-02
K-40	<2.38E-01	0.00E+00	2.38E-01

Sample ID: 448312 **Sample Dates: 7/10/2017 - 7/16/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.72E-03	0.00E+00	8.72E-03
Cs-134	<5.58E-03	0.00E+00	5.58E-03
Cs-137	<6.93E-03	0.00E+00	6.93E-03
Be-7	<5.54E-02	0.00E+00	5.54E-02
K-40	1.53E-01	1.06E-01	1.38E-01

Sample ID: 448928 **Sample Dates: 7/17/2017 - 7/24/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.55E-03	0.00E+00	5.55E-03
Cs-134	<9.04E-03	0.00E+00	9.04E-03
Cs-137	<9.70E-03	0.00E+00	9.70E-03
Be-7	<6.92E-02	0.00E+00	6.92E-02
K-40	<2.65E-01	0.00E+00	2.65E-01

Sample ID: 449257 **Sample Dates: 7/24/2017 - 7/31/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.05E-02	0.00E+00	1.05E-02
Cs-134	<8.10E-03	0.00E+00	8.10E-03
Cs-137	<1.06E-02	0.00E+00	1.06E-02
Be-7	<3.03E-02	0.00E+00	3.03E-02
K-40	2.93E-01	1.16E-01	2.94E-02

Sample ID: 449977 **Sample Dates: 7/31/2017 - 8/7/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.79E-03	0.00E+00	7.79E-03
Cs-134	<7.70E-03	0.00E+00	7.70E-03
Cs-137	<1.01E-02	0.00E+00	1.01E-02
Be-7	<6.16E-02	0.00E+00	6.16E-02
K-40	1.94E-01	1.17E-01	1.46E-01

Sample ID: 450244 **Sample Dates: 8/7/2017 - 8/14/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.92E-03	0.00E+00	7.92E-03
Cs-134	<6.48E-03	0.00E+00	6.48E-03
Cs-137	<8.67E-03	0.00E+00	8.67E-03
Be-7	<6.32E-02	0.00E+00	6.32E-02
K-40	1.83E-01	9.58E-02	8.87E-02

Sample ID: 450761 **Sample Dates: 8/14/2017 - 8/21/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.44E-03	0.00E+00	6.44E-03
Cs-134	<8.68E-03	0.00E+00	8.68E-03
Cs-137	<1.13E-02	0.00E+00	1.13E-02
Be-7	<5.87E-02	0.00E+00	5.87E-02
K-40	<2.60E-01	0.00E+00	2.60E-01

Sample ID: 451225 **Sample Dates: 8/21/2017 - 8/28/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.37E-03	0.00E+00	8.37E-03
Cs-134	<6.78E-03	0.00E+00	6.78E-03
Cs-137	<8.43E-03	0.00E+00	8.43E-03
Be-7	<3.59E-02	0.00E+00	3.59E-02
K-40	2.15E-01	1.12E-01	1.22E-01

Sample ID: 451568 **Sample Dates: 8/28/2017 - 9/5/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.00E-03	0.00E+00	8.00E-03
Cs-134	<7.84E-03	0.00E+00	7.84E-03
Cs-137	<8.24E-03	0.00E+00	8.24E-03
Be-7	<4.97E-02	0.00E+00	4.97E-02
K-40	<2.16E-01	0.00E+00	2.16E-01

Sample ID: 452402 **Sample Dates: 9/5/2017 - 9/11/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.28E-03	0.00E+00	7.28E-03
Cs-134	<5.24E-03	0.00E+00	5.24E-03
Cs-137	<9.89E-03	0.00E+00	9.89E-03
Be-7	<6.43E-02	0.00E+00	6.43E-02
K-40	<2.27E-01	0.00E+00	2.27E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]

Sample ID: 452821 **Sample Dates: 9/11/2017 - 9/18/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.21E-02	0.00E+00	1.21E-02
Cs-134	<1.10E-02	0.00E+00	1.10E-02
Cs-137	<1.24E-02	0.00E+00	1.24E-02
Be-7	<5.70E-02	0.00E+00	5.70E-02
K-40	3.05E-01	1.99E-01	2.80E-01

Sample ID: 452976 **Sample Dates: 9/18/2017 - 9/25/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.36E-03	0.00E+00	7.36E-03
Cs-134	<8.50E-03	0.00E+00	8.50E-03
Cs-137	<1.25E-02	0.00E+00	1.25E-02
Be-7	<7.10E-02	0.00E+00	7.10E-02
K-40	2.62E-01	1.42E-01	1.78E-01

Sample ID: 453480 **Sample Dates: 9/25/2017 - 10/2/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.90E-02	0.00E+00	1.90E-02
Cs-134	<1.62E-02	0.00E+00	1.62E-02
Cs-137	<1.46E-02	0.00E+00	1.46E-02
Be-7	<1.17E-01	0.00E+00	1.17E-01
K-40	4.02E-01	1.72E-01	1.84E-01

Sample ID: 454255 **Sample Dates: 10/2/2017 - 10/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<4.60E-02	0.00E+00	4.60E-02
Cs-134	<3.98E-02	0.00E+00	3.98E-02
Cs-137	<4.62E-02	0.00E+00	4.62E-02
Be-7	<3.18E-01	0.00E+00	3.18E-01
K-40	9.25E-01	5.15E-01	7.70E-01

Sample ID: 455112 **Sample Dates: 10/13/2017 - 10/14/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.10E-02	0.00E+00	5.10E-02
Cs-134	<4.92E-02	0.00E+00	4.92E-02
Cs-137	<4.81E-02	0.00E+00	4.81E-02
Be-7	<3.00E-01	0.00E+00	3.00E-01
K-40	3.94E+00	7.08E-01	7.12E-01

Sample ID: 455448 **Sample Dates: 10/16/2017 - 10/23/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.52E-02	0.00E+00	2.52E-02
Cs-134	<1.80E-02	0.00E+00	1.80E-02
Cs-137	<1.60E-02	0.00E+00	1.60E-02
Be-7	<1.39E-01	0.00E+00	1.39E-01
K-40	7.59E-01	2.10E-01	3.61E-02

Sample ID: 456078 **Sample Dates: 10/23/2017 - 10/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.83E-02	0.00E+00	1.83E-02
Cs-134	<1.70E-02	0.00E+00	1.70E-02
Cs-137	<1.82E-02	0.00E+00	1.82E-02
Be-7	<1.38E-01	0.00E+00	1.38E-01
K-40	5.05E-01	2.06E-01	2.34E-01

Sample ID: 461444 **Sample Dates: 10/30/2017 - 11/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.84E-02	0.00E+00	1.84E-02
Cs-134	<1.47E-02	0.00E+00	1.47E-02
Cs-137	<1.49E-02	0.00E+00	1.49E-02
Be-7	<1.31E-01	0.00E+00	1.31E-01
K-40	6.10E-01	2.00E-01	1.77E-01

Sample ID: 462000 **Sample Dates: 11/6/2017 - 11/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.19E-02	0.00E+00	2.19E-02
Cs-134	<1.79E-02	0.00E+00	1.79E-02
Cs-137	<2.18E-02	0.00E+00	2.18E-02
Be-7	<1.30E-01	0.00E+00	1.30E-01
K-40	4.35E-01	1.69E-01	1.45E-01

Sample ID: 462639 **Sample Dates: 11/13/2017 - 11/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.38E-02	0.00E+00	2.38E-02
Cs-134	<1.97E-02	0.00E+00	1.97E-02
Cs-137	<1.58E-02	0.00E+00	1.58E-02
Be-7	<1.42E-01	0.00E+00	1.42E-01
K-40	5.86E-01	2.20E-01	2.46E-01

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

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]

Sample ID:	463128	Sample Dates: 11/20/2017 - 11/27/2017	Nuclide	Activity	2 Sigma Error	MDA
			I-131	<2.05E-02	0.00E+00	2.05E-02
			Cs-134	<2.00E-02	0.00E+00	2.00E-02
			Cs-137	<1.85E-02	0.00E+00	1.85E-02
			Be-7	<1.19E-01	0.00E+00	1.19E-01
			K-40	6.05E-01	2.25E-01	2.51E-01
Sample ID:	463538	Sample Dates: 11/27/2017 - 12/4/2017	Nuclide	Activity	2 Sigma Error	MDA
			I-131	<2.67E-02	0.00E+00	2.67E-02
			Cs-134	<1.78E-02	0.00E+00	1.78E-02
			Cs-137	<1.72E-02	0.00E+00	1.72E-02
			Be-7	<1.23E-01	0.00E+00	1.23E-01
			K-40	4.82E-01	1.61E-01	3.43E-02
Sample ID:	464179	Sample Dates: 12/4/2017 - 12/11/2017	Nuclide	Activity	2 Sigma Error	MDA
			I-131	<2.05E-02	0.00E+00	2.05E-02
			Cs-134	<1.82E-02	0.00E+00	1.82E-02
			Cs-137	<1.71E-02	0.00E+00	1.71E-02
			Be-7	<1.22E-01	0.00E+00	1.22E-01
			K-40	5.80E-01	1.94E-01	1.55E-01
Sample ID:	464736	Sample Dates: 12/11/2017 - 12/18/2017	Nuclide	Activity	2 Sigma Error	MDA
			I-131	<2.18E-02	0.00E+00	2.18E-02
			Cs-134	<1.66E-02	0.00E+00	1.66E-02
			Cs-137	<1.68E-02	0.00E+00	1.68E-02
			Be-7	1.34E-02	9.33E-02	1.66E-01
			K-40	4.74E-01	1.70E-01	1.31E-01
Sample ID:	465002	Sample Dates: 12/18/2017 - 12/26/2017	Nuclide	Activity	2 Sigma Error	MDA
			I-131	<3.57E-02	0.00E+00	3.57E-02
			Cs-134	<1.48E-02	0.00E+00	1.48E-02
			Cs-137	<1.73E-02	0.00E+00	1.73E-02
			Be-7	<1.07E-01	0.00E+00	1.07E-01
			K-40	4.53E-01	1.67E-01	1.58E-01
Sample ID:	465238	Sample Dates: 12/26/2017 - 1/2/2018	Nuclide	Activity	2 Sigma Error	MDA
			I-131	<2.54E-02	0.00E+00	2.54E-02
			Cs-134	<1.64E-02	0.00E+00	1.64E-02
			Cs-137	<1.97E-02	0.00E+00	1.97E-02
			Be-7	<1.24E-01	0.00E+00	1.24E-01
			K-40	4.03E-01	1.97E-01	2.52E-01

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	431847	Sample Dates: 12/27/2016 - 1/3/2017	Nuclide	Activity	2 Sigma Error	MDA
			I-131	<1.17E-02	0.00E+00	1.17E-02
			Cs-134	<1.01E-02	0.00E+00	1.01E-02
			Cs-137	<8.80E-03	0.00E+00	8.80E-03
			Be-7	<3.76E-02	0.00E+00	3.76E-02
			K-40	3.81E-01	1.44E-01	1.24E-01
Sample ID:	432248	Sample Dates: 1/3/2017 - 1/9/2017	Nuclide	Activity	2 Sigma Error	MDA
			I-131	<7.37E-03	0.00E+00	7.37E-03
			Cs-134	<9.40E-03	0.00E+00	9.40E-03
			Cs-137	<1.36E-02	0.00E+00	1.36E-02
			Be-7	<7.00E-02	0.00E+00	7.00E-02
			K-40	5.73E-01	1.92E-01	1.40E-01
Sample ID:	432942	Sample Dates: 1/9/2017 - 1/16/2017	Nuclide	Activity	2 Sigma Error	MDA
			I-131	<7.53E-03	0.00E+00	7.53E-03
			Cs-134	<7.76E-03	0.00E+00	7.76E-03
			Cs-137	<4.47E-03	0.00E+00	4.47E-03
			Be-7	<3.66E-02	0.00E+00	3.66E-02
			K-40	<2.81E-01	0.00E+00	2.81E-01
Sample ID:	433338	Sample Dates: 1/16/2017 - 1/23/2017	Nuclide	Activity	2 Sigma Error	MDA
			I-131	<8.33E-03	0.00E+00	8.33E-03
			Cs-134	<8.60E-03	0.00E+00	8.60E-03
			Cs-137	<9.06E-03	0.00E+00	9.06E-03
			Be-7	<6.19E-02	0.00E+00	6.19E-02
			K-40	4.12E-01	1.55E-01	1.43E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID: 433757 **Sample Dates: 1/23/2017 - 1/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.06E-02	0.00E+00	1.06E-02
Cs-134	<7.27E-03	0.00E+00	7.27E-03
Cs-137	<7.88E-03	0.00E+00	7.88E-03
Be-7	<5.16E-02	0.00E+00	5.16E-02
K-40	4.13E-01	1.46E-01	1.14E-01

Sample ID: 434497 **Sample Dates: 1/30/2017 - 2/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.79E-03	0.00E+00	6.79E-03
Cs-134	<8.46E-03	0.00E+00	8.46E-03
Cs-137	<7.92E-03	0.00E+00	7.92E-03
Be-7	<7.35E-02	0.00E+00	7.35E-02
K-40	3.45E-01	1.32E-01	1.04E-01

Sample ID: 435143 **Sample Dates: 2/6/2017 - 2/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.43E-03	0.00E+00	9.43E-03
Cs-134	<7.71E-03	0.00E+00	7.71E-03
Cs-137	<7.91E-03	0.00E+00	7.91E-03
Be-7	<5.52E-02	0.00E+00	5.52E-02
K-40	3.60E-01	1.59E-01	1.87E-01

Sample ID: 435844 **Sample Dates: 2/13/2017 - 2/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.64E-03	0.00E+00	8.64E-03
Cs-134	<5.25E-03	0.00E+00	5.25E-03
Cs-137	<1.01E-02	0.00E+00	1.01E-02
Be-7	<5.16E-02	0.00E+00	5.16E-02
K-40	<2.09E-01	0.00E+00	2.09E-01

Sample ID: 436296 **Sample Dates: 2/20/2017 - 2/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.97E-03	0.00E+00	7.97E-03
Cs-134	<3.63E-03	0.00E+00	3.63E-03
Cs-137	<9.20E-03	0.00E+00	9.20E-03
Be-7	<4.73E-02	0.00E+00	4.73E-02
K-40	2.82E-01	1.11E-01	2.83E-02

Sample ID: 436752 **Sample Dates: 2/27/2017 - 3/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.57E-03	0.00E+00	9.57E-03
Cs-134	<7.75E-03	0.00E+00	7.75E-03
Cs-137	<9.63E-03	0.00E+00	9.63E-03
Be-7	<4.99E-02	0.00E+00	4.99E-02
K-40	<2.22E-01	0.00E+00	2.22E-01

Sample ID: 437623 **Sample Dates: 3/6/2017 - 3/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.97E-03	0.00E+00	7.97E-03
Cs-134	<4.90E-03	0.00E+00	4.90E-03
Cs-137	<7.06E-03	0.00E+00	7.06E-03
Be-7	<5.54E-02	0.00E+00	5.54E-02
K-40	4.32E-02	7.93E-02	1.39E-01

Sample ID: 438336 **Sample Dates: 3/13/2017 - 3/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.69E-03	0.00E+00	8.69E-03
Cs-134	<8.07E-03	0.00E+00	8.07E-03
Cs-137	<1.16E-02	0.00E+00	1.16E-02
Be-7	<8.46E-02	0.00E+00	8.46E-02
K-40	<2.26E-01	0.00E+00	2.26E-01

Sample ID: 438841 **Sample Dates: 3/20/2017 - 3/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.30E-03	0.00E+00	9.30E-03
Cs-134	<7.14E-03	0.00E+00	7.14E-03
Cs-137	<1.10E-02	0.00E+00	1.10E-02
Be-7	<5.35E-02	0.00E+00	5.35E-02
K-40	<2.53E-01	0.00E+00	2.53E-01

Sample ID: 439223 **Sample Dates: 3/27/2017 - 4/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.35E-03	0.00E+00	6.35E-03
Cs-134	<7.98E-03	0.00E+00	7.98E-03
Cs-137	<8.93E-03	0.00E+00	8.93E-03
Be-7	<5.82E-02	0.00E+00	5.82E-02
K-40	<2.46E-01	0.00E+00	2.46E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID: 440045 **Sample Dates: 4/3/2017 - 4/10/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.39E-02	0.00E+00	1.39E-02
Cs-134	<8.33E-03	0.00E+00	8.33E-03
Cs-137	<9.72E-03	0.00E+00	9.72E-03
Be-7	<4.79E-02	0.00E+00	4.79E-02
K-40	1.89E-01	1.08E-01	1.17E-01

Sample ID: 440633 **Sample Dates: 4/10/2017 - 4/17/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.90E-03	0.00E+00	6.90E-03
Cs-134	<7.38E-03	0.00E+00	7.38E-03
Cs-137	<8.00E-03	0.00E+00	8.00E-03
Be-7	<5.94E-02	0.00E+00	5.94E-02
K-40	3.47E-01	1.35E-01	1.13E-01

Sample ID: 441449 **Sample Dates: 4/17/2017 - 4/24/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.75E-03	0.00E+00	6.75E-03
Cs-134	<6.78E-03	0.00E+00	6.78E-03
Cs-137	<7.82E-03	0.00E+00	7.82E-03
Be-7	<5.07E-02	0.00E+00	5.07E-02
K-40	2.94E-01	1.47E-01	1.82E-01

Sample ID: 441898 **Sample Dates: 4/24/2017 - 5/1/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.68E-03	0.00E+00	7.68E-03
Cs-134	<7.08E-03	0.00E+00	7.08E-03
Cs-137	<7.48E-03	0.00E+00	7.48E-03
Be-7	<7.03E-02	0.00E+00	7.03E-02
K-40	4.18E-01	1.39E-01	2.90E-02

Sample ID: 442359 **Sample Dates: 5/1/2017 - 5/8/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.03E-02	0.00E+00	1.03E-02
Cs-134	<7.53E-03	0.00E+00	7.53E-03
Cs-137	<9.35E-03	0.00E+00	9.35E-03
Be-7	<6.03E-02	0.00E+00	6.03E-02
K-40	5.26E-01	1.68E-01	1.16E-01

Sample ID: 442902 **Sample Dates: 5/8/2017 - 5/15/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.02E-03	0.00E+00	8.02E-03
Cs-134	<5.87E-03	0.00E+00	5.87E-03
Cs-137	<9.62E-03	0.00E+00	9.62E-03
Be-7	<4.77E-02	0.00E+00	4.77E-02
K-40	4.90E-01	1.50E-01	2.83E-02

Sample ID: 443342 **Sample Dates: 5/15/2017 - 5/22/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.31E-03	0.00E+00	9.31E-03
Cs-134	<8.50E-03	0.00E+00	8.50E-03
Cs-137	<6.83E-03	0.00E+00	6.83E-03
Be-7	<7.16E-02	0.00E+00	7.16E-02
K-40	4.59E-01	1.54E-01	1.05E-01

Sample ID: 443894 **Sample Dates: 5/22/2017 - 5/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.87E-03	0.00E+00	9.87E-03
Cs-134	<6.85E-03	0.00E+00	6.85E-03
Cs-137	<8.50E-03	0.00E+00	8.50E-03
Be-7	<5.58E-02	0.00E+00	5.58E-02
K-40	<3.04E-01	0.00E+00	3.04E-01

Sample ID: 444301 **Sample Dates: 5/30/2017 - 6/5/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.84E-03	0.00E+00	5.84E-03
Cs-134	<8.84E-03	0.00E+00	8.84E-03
Cs-137	<1.04E-02	0.00E+00	1.04E-02
Be-7	<6.70E-02	0.00E+00	6.70E-02
K-40	7.08E-02	1.25E-01	2.14E-01

Sample ID: 445363 **Sample Dates: 6/5/2017 - 6/12/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.62E-03	0.00E+00	8.62E-03
Cs-134	<8.21E-03	0.00E+00	8.21E-03
Cs-137	<1.11E-02	0.00E+00	1.11E-02
Be-7	<5.20E-02	0.00E+00	5.20E-02
K-40	<1.84E-01	0.00E+00	1.84E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID: 446363 **Sample Dates: 6/12/2017 - 6/19/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.60E-03	0.00E+00	8.60E-03
Cs-134	<7.47E-03	0.00E+00	7.47E-03
Cs-137	<9.27E-03	0.00E+00	9.27E-03
Be-7	<6.44E-02	0.00E+00	6.44E-02
K-40	1.52E-01	9.83E-02	1.17E-01

Sample ID: 446861 **Sample Dates: 6/19/2017 - 6/26/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.56E-03	0.00E+00	8.56E-03
Cs-134	<9.93E-03	0.00E+00	9.93E-03
Cs-137	<1.19E-02	0.00E+00	1.19E-02
Be-7	<5.53E-02	0.00E+00	5.53E-02
K-40	<2.81E-01	0.00E+00	2.81E-01

Sample ID: 447235 **Sample Dates: 6/26/2017 - 7/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.24E-02	0.00E+00	1.24E-02
Cs-134	<8.64E-03	0.00E+00	8.64E-03
Cs-137	<9.53E-03	0.00E+00	9.53E-03
Be-7	<4.75E-02	0.00E+00	4.75E-02
K-40	<1.90E-01	0.00E+00	1.90E-01

Sample ID: 447845 **Sample Dates: 7/3/2017 - 7/10/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.98E-03	0.00E+00	7.98E-03
Cs-134	<7.61E-03	0.00E+00	7.61E-03
Cs-137	<9.92E-03	0.00E+00	9.92E-03
Be-7	<5.46E-02	0.00E+00	5.46E-02
K-40	<1.92E-01	0.00E+00	1.92E-01

Sample ID: 448313 **Sample Dates: 7/10/2017 - 7/17/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.08E-03	0.00E+00	8.08E-03
Cs-134	<6.60E-03	0.00E+00	6.60E-03
Cs-137	<1.18E-02	0.00E+00	1.18E-02
Be-7	<6.44E-02	0.00E+00	6.44E-02
K-40	<2.15E-01	0.00E+00	2.15E-01

Sample ID: 448929 **Sample Dates: 7/17/2017 - 7/24/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.91E-03	0.00E+00	6.91E-03
Cs-134	<7.75E-03	0.00E+00	7.75E-03
Cs-137	<7.95E-03	0.00E+00	7.95E-03
Be-7	<5.56E-02	0.00E+00	5.56E-02
K-40	2.14E-01	1.04E-01	9.15E-02

Sample ID: 449258 **Sample Dates: 7/24/2017 - 7/31/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.52E-03	0.00E+00	9.52E-03
Cs-134	<3.51E-03	0.00E+00	3.51E-03
Cs-137	<8.89E-03	0.00E+00	8.89E-03
Be-7	<3.61E-02	0.00E+00	3.61E-02
K-40	<2.17E-01	0.00E+00	2.17E-01

Sample ID: 449978 **Sample Dates: 7/31/2017 - 8/7/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.51E-03	0.00E+00	7.51E-03
Cs-134	<7.68E-03	0.00E+00	7.68E-03
Cs-137	<9.53E-03	0.00E+00	9.53E-03
Be-7	<5.12E-02	0.00E+00	5.12E-02
K-40	9.26E-02	8.46E-02	1.22E-01

Sample ID: 450245 **Sample Dates: 8/7/2017 - 8/14/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.98E-03	0.00E+00	9.98E-03
Cs-134	<7.08E-03	0.00E+00	7.08E-03
Cs-137	<8.79E-03	0.00E+00	8.79E-03
Be-7	<4.06E-02	0.00E+00	4.06E-02
K-40	2.07E-01	1.10E-01	1.13E-01

Sample ID: 450762 **Sample Dates: 8/14/2017 - 8/21/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.56E-03	0.00E+00	9.56E-03
Cs-134	<6.41E-03	0.00E+00	6.41E-03
Cs-137	<8.56E-03	0.00E+00	8.56E-03
Be-7	<4.74E-02	0.00E+00	4.74E-02
K-40	<2.34E-01	0.00E+00	2.34E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID: 451226 **Sample Dates: 8/21/2017 - 8/28/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.71E-03	0.00E+00	9.71E-03
Cs-134	<8.93E-03	0.00E+00	8.93E-03
Cs-137	<1.11E-02	0.00E+00	1.11E-02
Be-7	<6.49E-02	0.00E+00	6.49E-02
K-40	3.05E-01	1.18E-01	2.95E-02

Sample ID: 451569 **Sample Dates: 8/28/2017 - 9/5/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.62E-03	0.00E+00	7.62E-03
Cs-134	<5.17E-03	0.00E+00	5.17E-03
Cs-137	<9.46E-03	0.00E+00	9.46E-03
Be-7	<2.85E-02	0.00E+00	2.85E-02
K-40	2.16E-01	1.03E-01	9.17E-02

Sample ID: 452403 **Sample Dates: 9/5/2017 - 9/11/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.32E-03	0.00E+00	9.32E-03
Cs-134	<7.30E-03	0.00E+00	7.30E-03
Cs-137	<1.37E-02	0.00E+00	1.37E-02
Be-7	<7.74E-02	0.00E+00	7.74E-02
K-40	2.30E-01	1.26E-01	1.35E-01

Sample ID: 452822 **Sample Dates: 9/11/2017 - 9/18/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.07E-03	0.00E+00	6.07E-03
Cs-134	<5.18E-03	0.00E+00	5.18E-03
Cs-137	<1.27E-02	0.00E+00	1.27E-02
Be-7	<6.16E-02	0.00E+00	6.16E-02
K-40	<2.19E-01	0.00E+00	2.19E-01

Sample ID: 452977 **Sample Dates: 9/18/2017 - 9/25/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.07E-03	0.00E+00	8.07E-03
Cs-134	<5.49E-03	0.00E+00	5.49E-03
Cs-137	<1.09E-02	0.00E+00	1.09E-02
Be-7	<6.98E-02	0.00E+00	6.98E-02
K-40	<2.31E-01	0.00E+00	2.31E-01

Sample ID: 453481 **Sample Dates: 9/25/2017 - 10/2/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.42E-02	0.00E+00	1.42E-02
Cs-134	<1.28E-02	0.00E+00	1.28E-02
Cs-137	<1.42E-02	0.00E+00	1.42E-02
Be-7	<8.82E-02	0.00E+00	8.82E-02
K-40	2.38E-01	1.27E-01	1.43E-01

Sample ID: 454256 **Sample Dates: 10/2/2017 - 10/9/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.61E-02	0.00E+00	1.61E-02
Cs-134	<1.80E-02	0.00E+00	1.80E-02
Cs-137	<1.44E-02	0.00E+00	1.44E-02
Be-7	<1.10E-01	0.00E+00	1.10E-01
K-40	<3.79E-01	0.00E+00	3.79E-01

Sample ID: 455113 **Sample Dates: 10/9/2017 - 10/16/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.80E-02	0.00E+00	1.80E-02
Cs-134	<1.30E-02	0.00E+00	1.30E-02
Cs-137	<1.55E-02	0.00E+00	1.55E-02
Be-7	<8.49E-02	0.00E+00	8.49E-02
K-40	2.75E-01	1.46E-01	1.76E-01

Sample ID: 455449 **Sample Dates: 10/16/2017 - 10/23/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.46E-02	0.00E+00	2.46E-02
Cs-134	<1.60E-02	0.00E+00	1.60E-02
Cs-137	<1.64E-02	0.00E+00	1.64E-02
Be-7	<1.51E-01	0.00E+00	1.51E-01
K-40	3.85E-01	1.44E-01	3.47E-02

Sample ID: 456079 **Sample Dates: 10/23/2017 - 10/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.29E-02	0.00E+00	2.29E-02
Cs-134	<1.45E-02	0.00E+00	1.45E-02
Cs-137	<1.71E-02	0.00E+00	1.71E-02
Be-7	<1.19E-01	0.00E+00	1.19E-01
K-40	4.67E-01	2.16E-01	2.75E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID: 461445 **Sample Dates: 10/30/2017 - 11/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.35E-02	0.00E+00	2.35E-02
Cs-134	<1.21E-02	0.00E+00	1.21E-02
Cs-137	<1.81E-02	0.00E+00	1.81E-02
Be-7	<1.12E-01	0.00E+00	1.12E-01
K-40	6.63E-01	2.12E-01	1.92E-01

Sample ID: 462001 **Sample Dates: 11/6/2017 - 11/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.43E-02	0.00E+00	2.43E-02
Cs-134	<1.86E-02	0.00E+00	1.86E-02
Cs-137	<2.02E-02	0.00E+00	2.02E-02
Be-7	<1.42E-01	0.00E+00	1.42E-01
K-40	4.04E-01	2.07E-01	2.72E-01

Sample ID: 462640 **Sample Dates: 11/13/2017 - 11/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.93E-02	0.00E+00	1.93E-02
Cs-134	<1.59E-02	0.00E+00	1.59E-02
Cs-137	<1.87E-02	0.00E+00	1.87E-02
Be-7	<1.15E-01	0.00E+00	1.15E-01
K-40	5.54E-01	1.82E-01	1.24E-01

Sample ID: 463129 **Sample Dates: 11/20/2017 - 11/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.02E-02	0.00E+00	2.02E-02
Cs-134	<1.68E-02	0.00E+00	1.68E-02
Cs-137	<1.55E-02	0.00E+00	1.55E-02
Be-7	<1.12E-01	0.00E+00	1.12E-01
K-40	6.42E-01	2.12E-01	1.93E-01

Sample ID: 463539 **Sample Dates: 11/27/2017 - 12/4/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.19E-02	0.00E+00	2.19E-02
Cs-134	<1.49E-02	0.00E+00	1.49E-02
Cs-137	<1.76E-02	0.00E+00	1.76E-02
Be-7	<1.14E-01	0.00E+00	1.14E-01
K-40	<3.77E-01	0.00E+00	3.77E-01

Sample ID: 464180 **Sample Dates: 12/4/2017 - 12/11/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.30E-02	0.00E+00	2.30E-02
Cs-134	<1.76E-02	0.00E+00	1.76E-02
Cs-137	<1.50E-02	0.00E+00	1.50E-02
Be-7	<1.25E-01	0.00E+00	1.25E-01
K-40	4.63E-01	2.06E-01	2.50E-01

Sample ID: 464737 **Sample Dates: 12/11/2017 - 12/18/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.85E-02	0.00E+00	1.85E-02
Cs-134	<1.79E-02	0.00E+00	1.79E-02
Cs-137	<2.03E-02	0.00E+00	2.03E-02
Be-7	<1.11E-01	0.00E+00	1.11E-01
K-40	5.59E-01	2.15E-01	2.42E-01

Sample ID: 465003 **Sample Dates: 12/18/2017 - 12/26/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<3.11E-02	0.00E+00	3.11E-02
Cs-134	<1.48E-02	0.00E+00	1.48E-02
Cs-137	<1.45E-02	0.00E+00	1.45E-02
Be-7	<1.16E-01	0.00E+00	1.16E-01
K-40	4.59E-01	1.70E-01	1.68E-01

Sample ID: 465239 **Sample Dates: 12/26/2017 - 1/2/2018**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.57E-02	0.00E+00	2.57E-02
Cs-134	<1.57E-02	0.00E+00	1.57E-02
Cs-137	<1.80E-02	0.00E+00	1.80E-02
Be-7	<1.32E-01	0.00E+00	1.32E-01
K-40	4.53E-01	1.67E-01	1.38E-01

Sample Point 081 [CONTROL - SE @ 9.33 miles]

Sample ID: 431848 **Sample Dates: 12/27/2016 - 1/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.64E-03	0.00E+00	9.64E-03
Cs-134	<7.51E-03	0.00E+00	7.51E-03
Cs-137	<8.28E-03	0.00E+00	8.28E-03
Be-7	<4.16E-02	0.00E+00	4.16E-02
K-40	4.20E-01	1.56E-01	1.54E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 081 [CONTROL - SE @ 9.33 miles]

Sample ID: 432249 **Sample Dates: 1/3/2017 - 1/9/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.38E-02	0.00E+00	1.38E-02
Cs-134	<7.47E-03	0.00E+00	7.47E-03
Cs-137	<8.50E-03	0.00E+00	8.50E-03
Be-7	<6.87E-02	0.00E+00	6.87E-02
K-40	5.05E-01	1.69E-01	1.04E-01

Sample ID: 432943 **Sample Dates: 1/9/2017 - 1/16/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.66E-03	0.00E+00	6.66E-03
Cs-134	<8.42E-03	0.00E+00	8.42E-03
Cs-137	<1.15E-02	0.00E+00	1.15E-02
Be-7	<8.01E-02	0.00E+00	8.01E-02
K-40	<3.04E-01	0.00E+00	3.04E-01

Sample ID: 433339 **Sample Dates: 1/16/2017 - 1/23/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.53E-03	0.00E+00	9.53E-03
Cs-134	<6.35E-03	0.00E+00	6.35E-03
Cs-137	<8.48E-03	0.00E+00	8.48E-03
Be-7	<5.12E-02	0.00E+00	5.12E-02
K-40	3.63E-01	1.35E-01	1.03E-01

Sample ID: 433758 **Sample Dates: 1/23/2017 - 1/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.05E-02	0.00E+00	1.05E-02
Cs-134	<6.38E-03	0.00E+00	6.38E-03
Cs-137	<9.90E-03	0.00E+00	9.90E-03
Be-7	<6.81E-02	0.00E+00	6.81E-02
K-40	3.75E-01	1.65E-01	1.90E-01

Sample ID: 434498 **Sample Dates: 1/30/2017 - 2/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.39E-03	0.00E+00	6.39E-03
Cs-134	<8.58E-03	0.00E+00	8.58E-03
Cs-137	<9.03E-03	0.00E+00	9.03E-03
Be-7	<4.94E-02	0.00E+00	4.94E-02
K-40	4.70E-01	1.49E-01	2.96E-02

Sample ID: 435144 **Sample Dates: 2/6/2017 - 2/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.81E-03	0.00E+00	9.81E-03
Cs-134	<6.42E-03	0.00E+00	6.42E-03
Cs-137	<9.36E-03	0.00E+00	9.36E-03
Be-7	<6.04E-02	0.00E+00	6.04E-02
K-40	5.51E-01	1.80E-01	1.50E-01

Sample ID: 435845 **Sample Dates: 2/13/2017 - 2/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.26E-03	0.00E+00	9.26E-03
Cs-134	<5.30E-03	0.00E+00	5.30E-03
Cs-137	<1.11E-02	0.00E+00	1.11E-02
Be-7	<4.77E-02	0.00E+00	4.77E-02
K-40	1.60E-01	9.62E-02	1.08E-01

Sample ID: 436297 **Sample Dates: 2/20/2017 - 2/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.83E-03	0.00E+00	8.83E-03
Cs-134	<7.80E-03	0.00E+00	7.80E-03
Cs-137	<7.62E-03	0.00E+00	7.62E-03
Be-7	<4.54E-02	0.00E+00	4.54E-02
K-40	<1.94E-01	0.00E+00	1.94E-01

Sample ID: 436753 **Sample Dates: 2/27/2017 - 3/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.84E-03	0.00E+00	6.84E-03
Cs-134	<7.72E-03	0.00E+00	7.72E-03
Cs-137	<1.08E-02	0.00E+00	1.08E-02
Be-7	<4.07E-02	0.00E+00	4.07E-02
K-40	3.09E-01	1.34E-01	1.24E-01

Sample ID: 437624 **Sample Dates: 3/6/2017 - 3/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.58E-03	0.00E+00	8.58E-03
Cs-134	<5.33E-03	0.00E+00	5.33E-03
Cs-137	<9.77E-03	0.00E+00	9.77E-03
Be-7	<4.75E-02	0.00E+00	4.75E-02
K-40	<2.21E-01	0.00E+00	2.21E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 081 [CONTROL - SE @ 9.33 miles]

Sample ID: 438337 **Sample Dates: 3/13/2017 - 3/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.23E-03	0.00E+00	8.23E-03
Cs-134	<6.08E-03	0.00E+00	6.08E-03
Cs-137	<8.25E-03	0.00E+00	8.25E-03
Be-7	<5.76E-02	0.00E+00	5.76E-02
K-40	<2.26E-01	0.00E+00	2.26E-01

Sample ID: 438842 **Sample Dates: 3/20/2017 - 3/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.53E-03	0.00E+00	9.53E-03
Cs-134	<7.51E-03	0.00E+00	7.51E-03
Cs-137	<1.02E-02	0.00E+00	1.02E-02
Be-7	<3.59E-02	0.00E+00	3.59E-02
K-40	<2.37E-01	0.00E+00	2.37E-01

Sample ID: 439224 **Sample Dates: 3/27/2017 - 4/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.49E-03	0.00E+00	9.49E-03
Cs-134	<6.17E-03	0.00E+00	6.17E-03
Cs-137	<1.11E-02	0.00E+00	1.11E-02
Be-7	<5.85E-02	0.00E+00	5.85E-02
K-40	3.05E-01	1.18E-01	2.95E-02

Sample ID: 440046 **Sample Dates: 4/3/2017 - 4/10/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.92E-03	0.00E+00	9.92E-03
Cs-134	<7.24E-03	0.00E+00	7.24E-03
Cs-137	<6.45E-03	0.00E+00	6.45E-03
Be-7	<5.09E-02	0.00E+00	5.09E-02
K-40	<2.07E-01	0.00E+00	2.07E-01

Sample ID: 440634 **Sample Dates: 4/10/2017 - 4/17/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.04E-02	0.00E+00	1.04E-02
Cs-134	<3.96E-03	0.00E+00	3.96E-03
Cs-137	<8.76E-03	0.00E+00	8.76E-03
Be-7	<5.65E-02	0.00E+00	5.65E-02
K-40	5.39E-01	1.73E-01	1.27E-01

Sample ID: 441450 **Sample Dates: 4/17/2017 - 4/24/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.76E-03	0.00E+00	9.76E-03
Cs-134	<6.64E-03	0.00E+00	6.64E-03
Cs-137	<6.29E-03	0.00E+00	6.29E-03
Be-7	<2.81E-02	0.00E+00	2.81E-02
K-40	3.51E-01	1.23E-01	2.72E-02

Sample ID: 441899 **Sample Dates: 4/24/2017 - 5/1/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.83E-03	0.00E+00	9.83E-03
Cs-134	<7.96E-03	0.00E+00	7.96E-03
Cs-137	<4.58E-03	0.00E+00	4.58E-03
Be-7	<4.35E-02	0.00E+00	4.35E-02
K-40	6.11E-01	1.87E-01	1.53E-01

Sample ID: 442360 **Sample Dates: 5/1/2017 - 5/8/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.58E-03	0.00E+00	8.58E-03
Cs-134	<4.44E-03	0.00E+00	4.44E-03
Cs-137	<6.39E-03	0.00E+00	6.39E-03
Be-7	<4.16E-02	0.00E+00	4.16E-02
K-40	4.68E-01	1.44E-01	2.76E-02

Sample ID: 442903 **Sample Dates: 5/8/2017 - 5/15/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.96E-03	0.00E+00	8.96E-03
Cs-134	<6.70E-03	0.00E+00	6.70E-03
Cs-137	<1.06E-02	0.00E+00	1.06E-02
Be-7	<5.41E-02	0.00E+00	5.41E-02
K-40	3.85E-01	1.67E-01	1.94E-01

Sample ID: 443343 **Sample Dates: 5/15/2017 - 5/22/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.06E-02	0.00E+00	1.06E-02
Cs-134	<5.85E-03	0.00E+00	5.85E-03
Cs-137	<7.26E-03	0.00E+00	7.26E-03
Be-7	<5.77E-02	0.00E+00	5.77E-02
K-40	3.18E-01	1.23E-01	3.08E-02

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 081 [CONTROL - SE @ 9.33 miles]

Sample ID: 443895 **Sample Dates: 5/22/2017 - 5/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.60E-03	0.00E+00	8.60E-03
Cs-134	<7.52E-03	0.00E+00	7.52E-03
Cs-137	<8.30E-03	0.00E+00	8.30E-03
Be-7	<5.44E-02	0.00E+00	5.44E-02
K-40	4.43E-01	1.51E-01	1.26E-01

Sample ID: 444302 **Sample Dates: 5/30/2017 - 6/5/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.78E-03	0.00E+00	7.78E-03
Cs-134	<8.03E-03	0.00E+00	8.03E-03
Cs-137	<1.18E-02	0.00E+00	1.18E-02
Be-7	<5.99E-02	0.00E+00	5.99E-02
K-40	2.64E-01	1.23E-01	1.03E-01

Sample ID: 445364 **Sample Dates: 6/5/2017 - 6/12/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.01E-03	0.00E+00	9.01E-03
Cs-134	<8.38E-03	0.00E+00	8.38E-03
Cs-137	<8.96E-03	0.00E+00	8.96E-03
Be-7	<5.09E-02	0.00E+00	5.09E-02
K-40	<2.00E-01	0.00E+00	2.00E-01

Sample ID: 446364 **Sample Dates: 6/12/2017 - 6/19/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.97E-03	0.00E+00	7.97E-03
Cs-134	<5.10E-03	0.00E+00	5.10E-03
Cs-137	<9.80E-03	0.00E+00	9.80E-03
Be-7	<5.08E-02	0.00E+00	5.08E-02
K-40	<2.15E-01	0.00E+00	2.15E-01

Sample ID: 446862 **Sample Dates: 6/19/2017 - 6/26/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.68E-03	0.00E+00	8.68E-03
Cs-134	<9.11E-03	0.00E+00	9.11E-03
Cs-137	<1.00E-02	0.00E+00	1.00E-02
Be-7	<4.70E-02	0.00E+00	4.70E-02
K-40	1.28E-01	8.47E-02	9.70E-02

Sample ID: 447236 **Sample Dates: 6/26/2017 - 7/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.12E-02	0.00E+00	1.12E-02
Cs-134	<8.47E-03	0.00E+00	8.47E-03
Cs-137	<1.05E-02	0.00E+00	1.05E-02
Be-7	<5.67E-02	0.00E+00	5.67E-02
K-40	<2.51E-01	0.00E+00	2.51E-01

Sample ID: 447846 **Sample Dates: 7/3/2017 - 7/10/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.49E-03	0.00E+00	7.49E-03
Cs-134	<6.82E-03	0.00E+00	6.82E-03
Cs-137	<7.22E-03	0.00E+00	7.22E-03
Be-7	<6.18E-02	0.00E+00	6.18E-02
K-40	1.07E-01	8.46E-02	1.13E-01

Sample ID: 448314 **Sample Dates: 7/10/2017 - 7/17/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.29E-03	0.00E+00	7.29E-03
Cs-134	<6.80E-03	0.00E+00	6.80E-03
Cs-137	<8.98E-03	0.00E+00	8.98E-03
Be-7	<4.22E-02	0.00E+00	4.22E-02
K-40	<2.20E-01	0.00E+00	2.20E-01

Sample ID: 448930 **Sample Dates: 7/17/2017 - 7/24/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.72E-03	0.00E+00	7.72E-03
Cs-134	<3.67E-03	0.00E+00	3.67E-03
Cs-137	<8.73E-03	0.00E+00	8.73E-03
Be-7	<1.09E-02	0.00E+00	1.09E-02
K-40	1.42E-01	9.72E-02	1.23E-01

Sample ID: 449259 **Sample Dates: 7/24/2017 - 7/31/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.40E-03	0.00E+00	7.40E-03
Cs-134	<6.40E-03	0.00E+00	6.40E-03
Cs-137	<1.06E-02	0.00E+00	1.06E-02
Be-7	<5.21E-02	0.00E+00	5.21E-02
K-40	2.41E-01	1.14E-01	1.09E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 081 [CONTROL - SE @ 9.33 miles]

Sample ID: 449979 **Sample Dates: 7/31/2017 - 8/7/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.02E-02	0.00E+00	1.02E-02
Cs-134	<6.92E-03	0.00E+00	6.92E-03
Cs-137	<1.11E-02	0.00E+00	1.11E-02
Be-7	<5.95E-02	0.00E+00	5.95E-02
K-40	1.76E-01	1.16E-01	1.54E-01

Sample ID: 450246 **Sample Dates: 8/7/2017 - 8/14/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.04E-03	0.00E+00	9.04E-03
Cs-134	<5.13E-03	0.00E+00	5.13E-03
Cs-137	<1.07E-02	0.00E+00	1.07E-02
Be-7	<7.29E-02	0.00E+00	7.29E-02
K-40	<2.28E-01	0.00E+00	2.28E-01

Sample ID: 450763 **Sample Dates: 8/14/2017 - 8/21/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.70E-03	0.00E+00	7.70E-03
Cs-134	<7.03E-03	0.00E+00	7.03E-03
Cs-137	<8.73E-03	0.00E+00	8.73E-03
Be-7	<6.37E-02	0.00E+00	6.37E-02
K-40	<2.27E-01	0.00E+00	2.27E-01

Sample ID: 451227 **Sample Dates: 8/21/2017 - 8/28/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.74E-03	0.00E+00	6.74E-03
Cs-134	<8.33E-03	0.00E+00	8.33E-03
Cs-137	<9.42E-03	0.00E+00	9.42E-03
Be-7	<5.79E-02	0.00E+00	5.79E-02
K-40	<2.23E-01	0.00E+00	2.23E-01

Sample ID: 451570 **Sample Dates: 8/28/2017 - 9/5/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.05E-03	0.00E+00	8.05E-03
Cs-134	<7.45E-03	0.00E+00	7.45E-03
Cs-137	<9.25E-03	0.00E+00	9.25E-03
Be-7	<4.97E-02	0.00E+00	4.97E-02
K-40	1.47E-01	7.71E-02	2.66E-02

Sample ID: 452404 **Sample Dates: 9/5/2017 - 9/11/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.14E-02	0.00E+00	1.14E-02
Cs-134	<8.73E-03	0.00E+00	8.73E-03
Cs-137	<8.68E-03	0.00E+00	8.68E-03
Be-7	<7.00E-02	0.00E+00	7.00E-02
K-40	<2.38E-01	0.00E+00	2.38E-01

Sample ID: 452823 **Sample Dates: 9/11/2017 - 9/18/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.23E-03	0.00E+00	9.23E-03
Cs-134	<8.55E-03	0.00E+00	8.55E-03
Cs-137	<1.06E-02	0.00E+00	1.06E-02
Be-7	<5.95E-02	0.00E+00	5.95E-02
K-40	<2.24E-01	0.00E+00	2.24E-01

Sample ID: 452978 **Sample Dates: 9/18/2017 - 9/25/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.00E-02	0.00E+00	1.00E-02
Cs-134	<1.05E-02	0.00E+00	1.05E-02
Cs-137	<8.07E-03	0.00E+00	8.07E-03
Be-7	<4.68E-02	0.00E+00	4.68E-02
K-40	1.97E-01	1.22E-01	1.54E-01

Sample ID: 453482 **Sample Dates: 9/25/2017 - 10/2/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.76E-02	0.00E+00	1.76E-02
Cs-134	<2.09E-02	0.00E+00	2.09E-02
Cs-137	<1.38E-02	0.00E+00	1.38E-02
Be-7	<6.29E-02	0.00E+00	6.29E-02
K-40	2.78E-01	1.54E-01	1.89E-01

Sample ID: 454257 **Sample Dates: 10/2/2017 - 10/9/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.39E-02	0.00E+00	1.39E-02
Cs-134	<1.42E-02	0.00E+00	1.42E-02
Cs-137	<1.69E-02	0.00E+00	1.69E-02
Be-7	<8.79E-02	0.00E+00	8.79E-02
K-40	1.62E-01	2.70E-01	2.02E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 081 [CONTROL - SE @ 9.33 miles]

Sample ID: 455114 **Sample Dates: 10/9/2017 - 10/16/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.14E-02	0.00E+00	2.14E-02
Cs-134	<1.84E-02	0.00E+00	1.84E-02
Cs-137	<1.81E-02	0.00E+00	1.81E-02
Be-7	<1.26E-01	0.00E+00	1.26E-01
K-40	<3.80E-01	0.00E+00	3.80E-01

Sample ID: 455450 **Sample Dates: 10/16/2017 - 10/23/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.49E-02	0.00E+00	2.49E-02
Cs-134	<1.25E-02	0.00E+00	1.25E-02
Cs-137	<1.78E-02	0.00E+00	1.78E-02
Be-7	<1.34E-01	0.00E+00	1.34E-01
K-40	5.20E-01	1.93E-01	1.92E-01

Sample ID: 456080 **Sample Dates: 10/23/2017 - 10/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.48E-02	0.00E+00	2.48E-02
Cs-134	<1.45E-02	0.00E+00	1.45E-02
Cs-137	<1.81E-02	0.00E+00	1.81E-02
Be-7	<1.16E-01	0.00E+00	1.16E-01
K-40	3.76E-01	1.69E-01	1.84E-01

Sample ID: 461446 **Sample Dates: 10/30/2017 - 11/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.39E-02	0.00E+00	2.39E-02
Cs-134	<1.69E-02	0.00E+00	1.69E-02
Cs-137	<1.54E-02	0.00E+00	1.54E-02
Be-7	<1.15E-01	0.00E+00	1.15E-01
K-40	5.10E-01	1.86E-01	1.77E-01

Sample ID: 462002 **Sample Dates: 11/6/2017 - 11/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.59E-02	0.00E+00	2.59E-02
Cs-134	<1.64E-02	0.00E+00	1.64E-02
Cs-137	<2.01E-02	0.00E+00	2.01E-02
Be-7	<1.30E-01	0.00E+00	1.30E-01
K-40	5.66E-01	1.78E-01	3.57E-02

Sample ID: 462641 **Sample Dates: 11/13/2017 - 11/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.18E-02	0.00E+00	2.18E-02
Cs-134	<2.14E-02	0.00E+00	2.14E-02
Cs-137	<1.73E-02	0.00E+00	1.73E-02
Be-7	<1.24E-01	0.00E+00	1.24E-01
K-40	4.28E-01	1.94E-01	2.35E-01

Sample ID: 463130 **Sample Dates: 11/20/2017 - 11/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.96E-02	0.00E+00	1.96E-02
Cs-134	<1.36E-02	0.00E+00	1.36E-02
Cs-137	<1.75E-02	0.00E+00	1.75E-02
Be-7	<1.09E-01	0.00E+00	1.09E-01
K-40	4.93E-01	2.16E-01	2.66E-01

Sample ID: 463540 **Sample Dates: 11/27/2017 - 12/4/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.51E-02	0.00E+00	2.51E-02
Cs-134	<1.50E-02	0.00E+00	1.50E-02
Cs-137	<1.77E-02	0.00E+00	1.77E-02
Be-7	<1.21E-01	0.00E+00	1.21E-01
K-40	<3.98E-01	0.00E+00	3.98E-01

Sample ID: 464181 **Sample Dates: 12/4/2017 - 12/11/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.97E-02	0.00E+00	1.97E-02
Cs-134	<1.69E-02	0.00E+00	1.69E-02
Cs-137	<1.31E-02	0.00E+00	1.31E-02
Be-7	<1.16E-01	0.00E+00	1.16E-01
K-40	5.07E-01	2.00E-01	2.17E-01

Sample ID: 464738 **Sample Dates: 12/11/2017 - 12/18/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.20E-02	0.00E+00	2.20E-02
Cs-134	<1.85E-02	0.00E+00	1.85E-02
Cs-137	<1.81E-02	0.00E+00	1.81E-02
Be-7	<9.30E-02	0.00E+00	9.30E-02
K-40	5.12E-01	1.98E-01	2.12E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 081 [CONTROL - SE @ 9.33 miles]

Sample ID: 465004 Sample Dates: 12/18/2017 - 12/26/2017

Nuclide	Activity	2 Sigma Error	MDA
I-131	<3.21E-02	0.00E+00	3.21E-02
Cs-134	<1.81E-02	0.00E+00	1.81E-02
Cs-137	<1.30E-02	0.00E+00	1.30E-02
Be-7	<1.16E-01	0.00E+00	1.16E-01
K-40	4.34E-01	1.74E-01	1.90E-01

Sample ID: 465240 Sample Dates: 12/26/2017 - 1/2/2018

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.40E-02	0.00E+00	2.40E-02
Cs-134	<2.12E-02	0.00E+00	2.12E-02
Cs-137	<1.40E-02	0.00E+00	1.40E-02
Be-7	<1.50E-01	0.00E+00	1.50E-01
K-40	4.01E-01	2.14E-01	2.92E-01

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID: 431849 Sample Dates: 12/27/2016 - 1/3/2017

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.19E-02	0.00E+00	1.19E-02
Cs-134	<1.43E-03	0.00E+00	1.43E-03
Cs-137	<8.59E-03	0.00E+00	8.59E-03
Be-7	<6.42E-02	0.00E+00	6.42E-02
K-40	2.98E-01	1.32E-01	1.30E-01

Sample ID: 432250 Sample Dates: 1/3/2017 - 1/9/2017

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.79E-03	0.00E+00	9.79E-03
Cs-134	<6.26E-03	0.00E+00	6.26E-03
Cs-137	<1.08E-02	0.00E+00	1.08E-02
Be-7	<3.42E-02	0.00E+00	3.42E-02
K-40	4.60E-01	1.57E-01	3.37E-02

Sample ID: 432944 Sample Dates: 1/9/2017 - 1/16/2017

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.53E-03	0.00E+00	7.53E-03
Cs-134	<5.36E-03	0.00E+00	5.36E-03
Cs-137	<1.68E-03	0.00E+00	1.68E-03
Be-7	<2.93E-02	0.00E+00	2.93E-02
K-40	3.57E-01	1.45E-01	1.46E-01

Sample ID: 433340 Sample Dates: 1/16/2017 - 1/23/2017

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.18E-03	0.00E+00	9.18E-03
Cs-134	<7.43E-03	0.00E+00	7.43E-03
Cs-137	<1.07E-02	0.00E+00	1.07E-02
Be-7	<4.78E-02	0.00E+00	4.78E-02
K-40	4.83E-01	1.60E-01	1.25E-01

Sample ID: 433759 Sample Dates: 1/23/2017 - 1/30/2017

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.06E-02	0.00E+00	1.06E-02
Cs-134	<6.98E-03	0.00E+00	6.98E-03
Cs-137	<7.39E-03	0.00E+00	7.39E-03
Be-7	<7.24E-02	0.00E+00	7.24E-02
K-40	3.48E-01	1.39E-01	1.34E-01

Sample ID: 434499 Sample Dates: 1/30/2017 - 2/6/2017

Nuclide	Activity	2 Sigma Error	MDA
I-131	<4.53E-03	0.00E+00	4.53E-03
Cs-134	<3.75E-03	0.00E+00	3.75E-03
Cs-137	<4.32E-03	0.00E+00	4.32E-03
Be-7	<2.58E-02	0.00E+00	2.58E-02
K-40	4.80E-01	9.06E-02	6.38E-02

Sample ID: 435145 Sample Dates: 2/6/2017 - 2/13/2017

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.97E-03	0.00E+00	9.97E-03
Cs-134	<6.55E-03	0.00E+00	6.55E-03
Cs-137	<8.15E-03	0.00E+00	8.15E-03
Be-7	<6.65E-02	0.00E+00	6.65E-02
K-40	4.82E-01	1.48E-01	2.84E-02

Sample ID: 435846 Sample Dates: 2/13/2017 - 2/20/2017

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.09E-02	0.00E+00	1.09E-02
Cs-134	<8.09E-03	0.00E+00	8.09E-03
Cs-137	<8.78E-03	0.00E+00	8.78E-03
Be-7	<6.85E-02	0.00E+00	6.85E-02
K-40	1.66E-01	1.03E-01	1.19E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID: 436298 **Sample Dates: 2/20/2017 - 2/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.34E-03	0.00E+00	7.34E-03
Cs-134	<6.72E-03	0.00E+00	6.72E-03
Cs-137	<1.03E-02	0.00E+00	1.03E-02
Be-7	<5.41E-02	0.00E+00	5.41E-02
K-40	<2.23E-01	0.00E+00	2.23E-01

Sample ID: 436754 **Sample Dates: 2/27/2017 - 3/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.31E-03	0.00E+00	8.31E-03
Cs-134	<6.73E-03	0.00E+00	6.73E-03
Cs-137	<1.06E-02	0.00E+00	1.06E-02
Be-7	<5.78E-02	0.00E+00	5.78E-02
K-40	<1.62E-01	0.00E+00	1.62E-01

Sample ID: 437625 **Sample Dates: 3/6/2017 - 3/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.84E-03	0.00E+00	8.84E-03
Cs-134	<8.57E-03	0.00E+00	8.57E-03
Cs-137	<1.17E-02	0.00E+00	1.17E-02
Be-7	<4.03E-02	0.00E+00	4.03E-02
K-40	1.25E-01	1.12E-01	1.67E-01

Sample ID: 438338 **Sample Dates: 3/13/2017 - 3/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.07E-03	0.00E+00	9.07E-03
Cs-134	<8.80E-03	0.00E+00	8.80E-03
Cs-137	<1.15E-02	0.00E+00	1.15E-02
Be-7	<4.84E-02	0.00E+00	4.84E-02
K-40	<1.74E-01	0.00E+00	1.74E-01

Sample ID: 438843 **Sample Dates: 3/20/2017 - 3/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.17E-02	0.00E+00	1.17E-02
Cs-134	<8.32E-03	0.00E+00	8.32E-03
Cs-137	<7.82E-03	0.00E+00	7.82E-03
Be-7	<5.56E-02	0.00E+00	5.56E-02
K-40	2.96E-01	1.17E-01	2.97E-02

Sample ID: 439225 **Sample Dates: 3/27/2017 - 4/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.96E-03	0.00E+00	7.96E-03
Cs-134	<5.82E-03	0.00E+00	5.82E-03
Cs-137	<1.05E-02	0.00E+00	1.05E-02
Be-7	<6.26E-02	0.00E+00	6.26E-02
K-40	<2.37E-01	0.00E+00	2.37E-01

Sample ID: 440047 **Sample Dates: 4/3/2017 - 4/10/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.99E-03	0.00E+00	7.99E-03
Cs-134	<5.76E-03	0.00E+00	5.76E-03
Cs-137	<1.08E-02	0.00E+00	1.08E-02
Be-7	<5.07E-02	0.00E+00	5.07E-02
K-40	<2.40E-01	0.00E+00	2.40E-01

Sample ID: 440635 **Sample Dates: 4/10/2017 - 4/17/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.62E-03	0.00E+00	8.62E-03
Cs-134	<9.07E-03	0.00E+00	9.07E-03
Cs-137	<8.16E-03	0.00E+00	8.16E-03
Be-7	<6.34E-02	0.00E+00	6.34E-02
K-40	3.24E-01	1.39E-01	1.45E-01

Sample ID: 441451 **Sample Dates: 4/17/2017 - 4/24/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.40E-03	0.00E+00	7.40E-03
Cs-134	<5.91E-03	0.00E+00	5.91E-03
Cs-137	<6.59E-03	0.00E+00	6.59E-03
Be-7	<4.72E-02	0.00E+00	4.72E-02
K-40	4.27E-01	1.47E-01	1.14E-01

Sample ID: 441900 **Sample Dates: 4/24/2017 - 5/1/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.77E-03	0.00E+00	8.77E-03
Cs-134	<4.74E-03	0.00E+00	4.74E-03
Cs-137	<8.96E-03	0.00E+00	8.96E-03
Be-7	<4.89E-02	0.00E+00	4.89E-02
K-40	3.67E-01	1.46E-01	1.43E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID: 442361 **Sample Dates: 5/1/2017 - 5/8/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.78E-03	0.00E+00	7.78E-03
Cs-134	<7.21E-03	0.00E+00	7.21E-03
Cs-137	<9.56E-03	0.00E+00	9.56E-03
Be-7	<5.77E-02	0.00E+00	5.77E-02
K-40	4.85E-01	1.71E-01	1.62E-01

Sample ID: 442904 **Sample Dates: 5/8/2017 - 5/15/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.93E-03	0.00E+00	7.93E-03
Cs-134	<6.30E-03	0.00E+00	6.30E-03
Cs-137	<9.47E-03	0.00E+00	9.47E-03
Be-7	<6.19E-02	0.00E+00	6.19E-02
K-40	3.69E-01	1.27E-01	2.78E-02

Sample ID: 443344 **Sample Dates: 5/15/2017 - 5/22/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.99E-03	0.00E+00	8.99E-03
Cs-134	<8.99E-03	0.00E+00	8.99E-03
Cs-137	<7.12E-03	0.00E+00	7.12E-03
Be-7	<5.48E-02	0.00E+00	5.48E-02
K-40	4.43E-01	1.52E-01	1.23E-01

Sample ID: 443896 **Sample Dates: 5/22/2017 - 5/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.73E-03	0.00E+00	9.73E-03
Cs-134	<8.02E-03	0.00E+00	8.02E-03
Cs-137	<6.94E-03	0.00E+00	6.94E-03
Be-7	<3.75E-02	0.00E+00	3.75E-02
K-40	3.00E-01	1.08E-01	2.46E-02

Sample ID: 444303 **Sample Dates: 5/30/2017 - 6/5/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.30E-03	0.00E+00	8.30E-03
Cs-134	<9.26E-03	0.00E+00	9.26E-03
Cs-137	<1.30E-02	0.00E+00	1.30E-02
Be-7	<4.81E-02	0.00E+00	4.81E-02
K-40	2.19E-01	1.14E-01	1.08E-01

Sample ID: 445365 **Sample Dates: 6/5/2017 - 6/12/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.08E-03	0.00E+00	7.08E-03
Cs-134	<8.16E-03	0.00E+00	8.16E-03
Cs-137	<1.20E-02	0.00E+00	1.20E-02
Be-7	<6.52E-02	0.00E+00	6.52E-02
K-40	1.38E-01	8.84E-02	9.62E-02

Sample ID: 446365 **Sample Dates: 6/12/2017 - 6/19/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.19E-03	0.00E+00	9.19E-03
Cs-134	<9.09E-03	0.00E+00	9.09E-03
Cs-137	<9.98E-03	0.00E+00	9.98E-03
Be-7	<4.23E-02	0.00E+00	4.23E-02
K-40	<2.37E-01	0.00E+00	2.37E-01

Sample ID: 446863 **Sample Dates: 6/19/2017 - 6/26/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.95E-03	0.00E+00	9.95E-03
Cs-134	<7.13E-03	0.00E+00	7.13E-03
Cs-137	<1.26E-02	0.00E+00	1.26E-02
Be-7	<6.47E-02	0.00E+00	6.47E-02
K-40	<2.31E-01	0.00E+00	2.31E-01

Sample ID: 447237 **Sample Dates: 6/26/2017 - 7/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.35E-03	0.00E+00	7.35E-03
Cs-134	<6.26E-03	0.00E+00	6.26E-03
Cs-137	<8.36E-03	0.00E+00	8.36E-03
Be-7	<5.50E-02	0.00E+00	5.50E-02
K-40	<1.77E-01	0.00E+00	1.77E-01

Sample ID: 447847 **Sample Dates: 7/3/2017 - 7/10/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.43E-03	0.00E+00	9.43E-03
Cs-134	<8.16E-03	0.00E+00	8.16E-03
Cs-137	<1.01E-02	0.00E+00	1.01E-02
Be-7	<6.17E-02	0.00E+00	6.17E-02
K-40	2.26E-01	1.08E-01	9.26E-02

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID: 448315 **Sample Dates: 7/10/2017 - 7/17/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.00E-02	0.00E+00	1.00E-02
Cs-134	<1.01E-02	0.00E+00	1.01E-02
Cs-137	<8.02E-03	0.00E+00	8.02E-03
Be-7	<3.21E-02	0.00E+00	3.21E-02
K-40	1.43E-01	9.06E-02	9.68E-02

Sample ID: 448931 **Sample Dates: 7/17/2017 - 7/24/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.96E-03	0.00E+00	9.96E-03
Cs-134	<6.52E-03	0.00E+00	6.52E-03
Cs-137	<1.17E-02	0.00E+00	1.17E-02
Be-7	<5.22E-02	0.00E+00	5.22E-02
K-40	1.93E-01	1.15E-01	1.37E-01

Sample ID: 449260 **Sample Dates: 7/24/2017 - 7/31/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.08E-03	0.00E+00	7.08E-03
Cs-134	<7.52E-03	0.00E+00	7.52E-03
Cs-137	<1.10E-02	0.00E+00	1.10E-02
Be-7	<7.18E-02	0.00E+00	7.18E-02
K-40	<2.25E-01	0.00E+00	2.25E-01

Sample ID: 449980 **Sample Dates: 7/31/2017 - 8/7/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.87E-03	0.00E+00	9.87E-03
Cs-134	<6.43E-03	0.00E+00	6.43E-03
Cs-137	<1.06E-02	0.00E+00	1.06E-02
Be-7	<5.63E-02	0.00E+00	5.63E-02
K-40	1.90E-01	9.39E-02	3.03E-02

Sample ID: 450247 **Sample Dates: 8/7/2017 - 8/14/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.47E-03	0.00E+00	8.47E-03
Cs-134	<7.91E-03	0.00E+00	7.91E-03
Cs-137	<9.81E-03	0.00E+00	9.81E-03
Be-7	<5.45E-02	0.00E+00	5.45E-02
K-40	<1.90E-01	0.00E+00	1.90E-01

Sample ID: 450764 **Sample Dates: 8/14/2017 - 8/21/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.04E-02	0.00E+00	1.04E-02
Cs-134	<5.85E-03	0.00E+00	5.85E-03
Cs-137	<1.07E-02	0.00E+00	1.07E-02
Be-7	<5.22E-02	0.00E+00	5.22E-02
K-40	1.64E-01	9.93E-02	1.08E-01

Sample ID: 451228 **Sample Dates: 8/21/2017 - 8/28/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.55E-03	0.00E+00	8.55E-03
Cs-134	<6.42E-03	0.00E+00	6.42E-03
Cs-137	<8.58E-03	0.00E+00	8.58E-03
Be-7	<4.73E-02	0.00E+00	4.73E-02
K-40	<2.30E-01	0.00E+00	2.30E-01

Sample ID: 451571 **Sample Dates: 8/28/2017 - 9/5/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.36E-03	0.00E+00	7.36E-03
Cs-134	<6.69E-03	0.00E+00	6.69E-03
Cs-137	<9.85E-03	0.00E+00	9.85E-03
Be-7	<4.83E-02	0.00E+00	4.83E-02
K-40	1.92E-01	9.65E-02	1.00E-01

Sample ID: 452405 **Sample Dates: 9/5/2017 - 9/11/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.90E-03	0.00E+00	8.90E-03
Cs-134	<5.35E-03	0.00E+00	5.35E-03
Cs-137	<1.14E-02	0.00E+00	1.14E-02
Be-7	<6.51E-02	0.00E+00	6.51E-02
K-40	<2.72E-01	0.00E+00	2.72E-01

Sample ID: 452824 **Sample Dates: 9/11/2017 - 9/18/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.20E-03	0.00E+00	9.20E-03
Cs-134	<6.96E-03	0.00E+00	6.96E-03
Cs-137	<9.31E-03	0.00E+00	9.31E-03
Be-7	<5.11E-02	0.00E+00	5.11E-02
K-40	<2.09E-01	0.00E+00	2.09E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID: 452979 **Sample Dates: 9/18/2017 - 9/25/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.49E-03	0.00E+00	8.49E-03
Cs-134	<9.42E-03	0.00E+00	9.42E-03
Cs-137	<7.21E-03	0.00E+00	7.21E-03
Be-7	<6.16E-02	0.00E+00	6.16E-02
K-40	<2.32E-01	0.00E+00	2.32E-01

Sample ID: 453483 **Sample Dates: 9/25/2017 - 10/2/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.53E-02	0.00E+00	1.53E-02
Cs-134	<1.89E-02	0.00E+00	1.89E-02
Cs-137	<1.52E-02	0.00E+00	1.52E-02
Be-7	<1.03E-01	0.00E+00	1.03E-01
K-40	3.51E-01	1.71E-01	2.10E-01

Sample ID: 454258 **Sample Dates: 10/2/2017 - 10/9/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.73E-02	0.00E+00	1.73E-02
Cs-134	<1.60E-02	0.00E+00	1.60E-02
Cs-137	<1.44E-02	0.00E+00	1.44E-02
Be-7	<1.01E-01	0.00E+00	1.01E-01
K-40	2.17E-01	1.46E-01	2.03E-01

Sample ID: 455115 **Sample Dates: 10/9/2017 - 10/16/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.91E-02	0.00E+00	1.91E-02
Cs-134	<1.69E-02	0.00E+00	1.69E-02
Cs-137	<1.68E-02	0.00E+00	1.68E-02
Be-7	<1.06E-01	0.00E+00	1.06E-01
K-40	1.70E-01	1.38E-01	2.02E-01

Sample ID: 455451 **Sample Dates: 10/16/2017 - 10/23/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.41E-02	0.00E+00	2.41E-02
Cs-134	<1.52E-02	0.00E+00	1.52E-02
Cs-137	<1.79E-02	0.00E+00	1.79E-02
Be-7	<1.13E-01	0.00E+00	1.13E-01
K-40	5.13E-01	1.79E-01	1.39E-01

Sample ID: 456081 **Sample Dates: 10/23/2017 - 10/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.97E-02	0.00E+00	1.97E-02
Cs-134	<1.27E-02	0.00E+00	1.27E-02
Cs-137	<1.71E-02	0.00E+00	1.71E-02
Be-7	<1.42E-01	0.00E+00	1.42E-01
K-40	5.70E-01	1.78E-01	3.51E-02

Sample ID: 461447 **Sample Dates: 10/30/2017 - 11/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.11E-02	0.00E+00	2.11E-02
Cs-134	<1.55E-02	0.00E+00	1.55E-02
Cs-137	<1.78E-02	0.00E+00	1.78E-02
Be-7	<1.29E-01	0.00E+00	1.29E-01
K-40	4.63E-01	2.06E-01	2.56E-01

Sample ID: 462003 **Sample Dates: 11/6/2017 - 11/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.26E-02	0.00E+00	2.26E-02
Cs-134	<1.85E-02	0.00E+00	1.85E-02
Cs-137	<1.64E-02	0.00E+00	1.64E-02
Be-7	<1.25E-01	0.00E+00	1.25E-01
K-40	4.49E-01	1.83E-01	1.89E-01

Sample ID: 462642 **Sample Dates: 11/13/2017 - 11/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.06E-02	0.00E+00	2.06E-02
Cs-134	<1.34E-02	0.00E+00	1.34E-02
Cs-137	<1.86E-02	0.00E+00	1.86E-02
Be-7	<1.18E-01	0.00E+00	1.18E-01
K-40	3.95E-01	1.45E-01	3.45E-02

Sample ID: 463131 **Sample Dates: 11/20/2017 - 11/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.08E-02	0.00E+00	2.08E-02
Cs-134	<1.61E-02	0.00E+00	1.61E-02
Cs-137	<1.60E-02	0.00E+00	1.60E-02
Be-7	<1.28E-01	0.00E+00	1.28E-01
K-40	4.27E-01	2.08E-01	2.68E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID: 463541 **Sample Dates: 11/27/2017 - 12/4/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.38E-02	0.00E+00	2.38E-02
Cs-134	<1.85E-02	0.00E+00	1.85E-02
Cs-137	<1.52E-02	0.00E+00	1.52E-02
Be-7	<1.21E-01	0.00E+00	1.21E-01
K-40	3.98E-01	1.67E-01	1.69E-01

Sample ID: 464182 **Sample Dates: 12/4/2017 - 12/11/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.16E-02	0.00E+00	2.16E-02
Cs-134	<1.37E-02	0.00E+00	1.37E-02
Cs-137	<1.81E-02	0.00E+00	1.81E-02
Be-7	2.34E-02	6.91E-02	1.22E-01
K-40	8.52E-01	2.32E-01	1.55E-01

Sample ID: 464739 **Sample Dates: 12/11/2017 - 12/18/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.06E-02	0.00E+00	2.06E-02
Cs-134	<1.85E-02	0.00E+00	1.85E-02
Cs-137	<2.06E-02	0.00E+00	2.06E-02
Be-7	<1.23E-01	0.00E+00	1.23E-01
K-40	4.45E-01	1.99E-01	2.42E-01

Sample ID: 465005 **Sample Dates: 12/18/2017 - 12/26/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<3.47E-02	0.00E+00	3.47E-02
Cs-134	<1.76E-02	0.00E+00	1.76E-02
Cs-137	<1.49E-02	0.00E+00	1.49E-02
Be-7	<9.71E-02	0.00E+00	9.71E-02
K-40	4.82E-01	1.76E-01	1.75E-01

Sample ID: 465241 **Sample Dates: 12/26/2017 - 1/2/2018**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.19E-02	0.00E+00	2.19E-02
Cs-134	<1.64E-02	0.00E+00	1.64E-02
Cs-137	<1.71E-02	0.00E+00	1.71E-02
Be-7	<1.24E-01	0.00E+00	1.24E-01
K-40	3.63E-01	1.78E-01	2.19E-01

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

Sample ID: 431850 **Sample Dates: 12/27/2016 - 1/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.58E-03	0.00E+00	8.58E-03
Cs-134	<4.57E-03	0.00E+00	4.57E-03
Cs-137	<6.59E-03	0.00E+00	6.59E-03
Be-7	<5.60E-02	0.00E+00	5.60E-02
K-40	5.47E-01	1.57E-01	2.80E-02

Sample ID: 432251 **Sample Dates: 1/3/2017 - 1/9/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.16E-02	0.00E+00	1.16E-02
Cs-134	<5.90E-03	0.00E+00	5.90E-03
Cs-137	<1.04E-02	0.00E+00	1.04E-02
Be-7	<8.02E-02	0.00E+00	8.02E-02
K-40	4.12E-01	1.53E-01	3.61E-02

Sample ID: 432945 **Sample Dates: 1/9/2017 - 1/16/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.05E-02	0.00E+00	1.05E-02
Cs-134	<6.54E-03	0.00E+00	6.54E-03
Cs-137	<7.28E-03	0.00E+00	7.28E-03
Be-7	<4.06E-02	0.00E+00	4.06E-02
K-40	3.19E-01	1.24E-01	3.09E-02

Sample ID: 433341 **Sample Dates: 1/16/2017 - 1/23/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.42E-03	0.00E+00	7.42E-03
Cs-134	<7.60E-03	0.00E+00	7.60E-03
Cs-137	<1.01E-02	0.00E+00	1.01E-02
Be-7	<6.48E-02	0.00E+00	6.48E-02
K-40	5.04E-01	1.78E-01	1.69E-01

Sample ID: 433760 **Sample Dates: 1/23/2017 - 1/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.00E-02	0.00E+00	1.00E-02
Cs-134	<9.43E-03	0.00E+00	9.43E-03
Cs-137	<9.47E-03	0.00E+00	9.47E-03
Be-7	<5.27E-02	0.00E+00	5.27E-02
K-40	5.67E-01	1.67E-01	3.07E-02

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

Sample ID: 434500 **Sample Dates: 1/30/2017 - 2/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.04E-02	0.00E+00	1.04E-02
Cs-134	<4.58E-03	0.00E+00	4.58E-03
Cs-137	<8.64E-03	0.00E+00	8.64E-03
Be-7	<5.60E-02	0.00E+00	5.60E-02
K-40	3.59E-01	1.27E-01	2.86E-02

Sample ID: 435146 **Sample Dates: 2/6/2017 - 2/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.84E-03	0.00E+00	8.84E-03
Cs-134	<5.86E-03	0.00E+00	5.86E-03
Cs-137	<1.83E-03	0.00E+00	1.83E-03
Be-7	<5.24E-02	0.00E+00	5.24E-02
K-40	3.31E-01	1.26E-01	3.09E-02

Sample ID: 435847 **Sample Dates: 2/13/2017 - 2/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.23E-03	0.00E+00	9.23E-03
Cs-134	<6.82E-03	0.00E+00	6.82E-03
Cs-137	<7.56E-03	0.00E+00	7.56E-03
Be-7	<6.41E-02	0.00E+00	6.41E-02
K-40	1.19E-01	8.47E-02	1.02E-01

Sample ID: 436299 **Sample Dates: 2/20/2017 - 2/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.98E-03	0.00E+00	8.98E-03
Cs-134	<6.80E-03	0.00E+00	6.80E-03
Cs-137	<1.26E-02	0.00E+00	1.26E-02
Be-7	<5.45E-02	0.00E+00	5.45E-02
K-40	1.41E-01	7.93E-02	2.94E-02

Sample ID: 436755 **Sample Dates: 2/27/2017 - 3/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.99E-03	0.00E+00	6.99E-03
Cs-134	<7.36E-03	0.00E+00	7.36E-03
Cs-137	<9.14E-03	0.00E+00	9.14E-03
Be-7	<5.90E-02	0.00E+00	5.90E-02
K-40	1.67E-01	1.05E-01	1.21E-01

Sample ID: 437626 **Sample Dates: 3/6/2017 - 3/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.02E-02	0.00E+00	1.02E-02
Cs-134	<1.02E-02	0.00E+00	1.02E-02
Cs-137	<7.56E-03	0.00E+00	7.56E-03
Be-7	<6.08E-02	0.00E+00	6.08E-02
K-40	<2.84E-01	0.00E+00	2.84E-01

Sample ID: 438339 **Sample Dates: 3/13/2017 - 3/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.73E-03	0.00E+00	9.73E-03
Cs-134	<8.06E-03	0.00E+00	8.06E-03
Cs-137	<7.86E-03	0.00E+00	7.86E-03
Be-7	<6.57E-02	0.00E+00	6.57E-02
K-40	1.89E-01	1.22E-01	1.63E-01

Sample ID: 438844 **Sample Dates: 3/20/2017 - 3/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.04E-03	0.00E+00	9.04E-03
Cs-134	<7.40E-03	0.00E+00	7.40E-03
Cs-137	<8.04E-03	0.00E+00	8.04E-03
Be-7	<5.21E-02	0.00E+00	5.21E-02
K-40	1.69E-01	9.52E-02	9.93E-02

Sample ID: 439226 **Sample Dates: 3/27/2017 - 4/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.02E-02	0.00E+00	1.02E-02
Cs-134	<6.96E-03	0.00E+00	6.96E-03
Cs-137	<1.11E-02	0.00E+00	1.11E-02
Be-7	<5.65E-02	0.00E+00	5.65E-02
K-40	<2.31E-01	0.00E+00	2.31E-01

Sample ID: 440048 **Sample Dates: 4/3/2017 - 4/10/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.12E-03	0.00E+00	8.12E-03
Cs-134	<3.62E-03	0.00E+00	3.62E-03
Cs-137	<1.02E-02	0.00E+00	1.02E-02
Be-7	<5.19E-02	0.00E+00	5.19E-02
K-40	<2.12E-01	0.00E+00	2.12E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

Sample ID: 440636 **Sample Dates: 4/10/2017 - 4/17/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.48E-03	0.00E+00	9.48E-03
Cs-134	<8.20E-03	0.00E+00	8.20E-03
Cs-137	<8.89E-03	0.00E+00	8.89E-03
Be-7	<6.18E-02	0.00E+00	6.18E-02
K-40	2.86E-01	1.17E-01	3.10E-02

Sample ID: 441452 **Sample Dates: 4/17/2017 - 4/24/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.01E-02	0.00E+00	1.01E-02
Cs-134	<6.19E-03	0.00E+00	6.19E-03
Cs-137	<9.29E-03	0.00E+00	9.29E-03
Be-7	<6.91E-02	0.00E+00	6.91E-02
K-40	3.65E-01	1.32E-01	9.50E-02

Sample ID: 441901 **Sample Dates: 4/24/2017 - 5/1/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.22E-03	0.00E+00	8.22E-03
Cs-134	<5.07E-03	0.00E+00	5.07E-03
Cs-137	<1.08E-02	0.00E+00	1.08E-02
Be-7	<5.72E-02	0.00E+00	5.72E-02
K-40	3.12E-01	1.43E-01	1.52E-01

Sample ID: 442362 **Sample Dates: 5/1/2017 - 5/8/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.59E-03	0.00E+00	9.59E-03
Cs-134	<7.75E-03	0.00E+00	7.75E-03
Cs-137	<7.96E-03	0.00E+00	7.96E-03
Be-7	<5.55E-02	0.00E+00	5.55E-02
K-40	2.16E-01	1.36E-01	1.85E-01

Sample ID: 442905 **Sample Dates: 5/8/2017 - 5/15/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.02E-02	0.00E+00	1.02E-02
Cs-134	<7.05E-03	0.00E+00	7.05E-03
Cs-137	<5.77E-03	0.00E+00	5.77E-03
Be-7	<4.84E-02	0.00E+00	4.84E-02
K-40	3.18E-01	1.36E-01	1.40E-01

Sample ID: 443345 **Sample Dates: 5/15/2017 - 5/22/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.54E-03	0.00E+00	5.54E-03
Cs-134	<7.62E-03	0.00E+00	7.62E-03
Cs-137	<5.54E-03	0.00E+00	5.54E-03
Be-7	<5.11E-02	0.00E+00	5.11E-02
K-40	4.62E-01	1.68E-01	1.70E-01

Sample ID: 443897 **Sample Dates: 5/22/2017 - 5/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.96E-03	0.00E+00	7.96E-03
Cs-134	<6.12E-03	0.00E+00	6.12E-03
Cs-137	<7.59E-03	0.00E+00	7.59E-03
Be-7	<3.82E-02	0.00E+00	3.82E-02
K-40	<2.84E-01	0.00E+00	2.84E-01

Sample ID: 444304 **Sample Dates: 5/30/2017 - 6/5/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.63E-03	0.00E+00	8.63E-03
Cs-134	<9.42E-03	0.00E+00	9.42E-03
Cs-137	<1.44E-02	0.00E+00	1.44E-02
Be-7	<7.09E-02	0.00E+00	7.09E-02
K-40	<3.40E-01	0.00E+00	3.40E-01

Sample ID: 445366 **Sample Dates: 6/5/2017 - 6/12/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.94E-03	0.00E+00	7.94E-03
Cs-134	<7.67E-03	0.00E+00	7.67E-03
Cs-137	<1.05E-02	0.00E+00	1.05E-02
Be-7	<5.48E-02	0.00E+00	5.48E-02
K-40	<1.94E-01	0.00E+00	1.94E-01

Sample ID: 446366 **Sample Dates: 6/12/2017 - 6/19/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.56E-03	0.00E+00	8.56E-03
Cs-134	<6.45E-03	0.00E+00	6.45E-03
Cs-137	<7.35E-03	0.00E+00	7.35E-03
Be-7	<4.27E-02	0.00E+00	4.27E-02
K-40	2.54E-01	1.20E-01	1.23E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

Sample ID: 446864 **Sample Dates: 6/19/2017 - 6/26/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.86E-03	0.00E+00	8.86E-03
Cs-134	<7.66E-03	0.00E+00	7.66E-03
Cs-137	<7.26E-03	0.00E+00	7.26E-03
Be-7	<4.04E-02	0.00E+00	4.04E-02
K-40	<2.68E-01	0.00E+00	2.68E-01

Sample ID: 447238 **Sample Dates: 6/26/2017 - 7/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.76E-03	0.00E+00	5.76E-03
Cs-134	<4.54E-03	0.00E+00	4.54E-03
Cs-137	<6.53E-03	0.00E+00	6.53E-03
Be-7	<5.22E-02	0.00E+00	5.22E-02
K-40	1.74E-01	1.07E-01	1.32E-01

Sample ID: 447848 **Sample Dates: 7/3/2017 - 7/10/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.13E-03	0.00E+00	8.13E-03
Cs-134	<8.18E-03	0.00E+00	8.18E-03
Cs-137	<1.02E-02	0.00E+00	1.02E-02
Be-7	<6.28E-02	0.00E+00	6.28E-02
K-40	1.09E-01	9.99E-02	1.49E-01

Sample ID: 448316 **Sample Dates: 7/10/2017 - 7/17/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<9.92E-03	0.00E+00	9.92E-03
Cs-134	<1.28E-03	0.00E+00	1.28E-03
Cs-137	<9.78E-03	0.00E+00	9.78E-03
Be-7	<5.78E-02	0.00E+00	5.78E-02
K-40	1.76E-01	1.05E-01	1.26E-01

Sample ID: 448932 **Sample Dates: 7/17/2017 - 7/24/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<5.40E-03	0.00E+00	5.40E-03
Cs-134	<6.65E-03	0.00E+00	6.65E-03
Cs-137	<1.14E-02	0.00E+00	1.14E-02
Be-7	<2.98E-02	0.00E+00	2.98E-02
K-40	<2.33E-01	0.00E+00	2.33E-01

Sample ID: 449261 **Sample Dates: 7/24/2017 - 7/31/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.02E-02	0.00E+00	1.02E-02
Cs-134	<5.37E-03	0.00E+00	5.37E-03
Cs-137	<8.13E-03	0.00E+00	8.13E-03
Be-7	<6.38E-02	0.00E+00	6.38E-02
K-40	1.72E-01	9.57E-02	9.69E-02

Sample ID: 449981 **Sample Dates: 7/31/2017 - 8/7/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.94E-03	0.00E+00	6.94E-03
Cs-134	<6.57E-03	0.00E+00	6.57E-03
Cs-137	<8.17E-03	0.00E+00	8.17E-03
Be-7	<3.72E-02	0.00E+00	3.72E-02
K-40	<2.18E-01	0.00E+00	2.18E-01

Sample ID: 450248 **Sample Dates: 8/7/2017 - 8/14/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.09E-02	0.00E+00	1.09E-02
Cs-134	<6.93E-03	0.00E+00	6.93E-03
Cs-137	<1.09E-02	0.00E+00	1.09E-02
Be-7	<4.60E-02	0.00E+00	4.60E-02
K-40	2.23E-01	1.13E-01	1.13E-01

Sample ID: 450765 **Sample Dates: 8/14/2017 - 8/21/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<6.98E-03	0.00E+00	6.98E-03
Cs-134	<8.07E-03	0.00E+00	8.07E-03
Cs-137	<6.81E-03	0.00E+00	6.81E-03
Be-7	<7.07E-02	0.00E+00	7.07E-02
K-40	6.24E-02	7.57E-02	1.20E-01

Sample ID: 451229 **Sample Dates: 8/21/2017 - 8/28/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.06E-02	0.00E+00	1.06E-02
Cs-134	<8.03E-03	0.00E+00	8.03E-03
Cs-137	<8.71E-03	0.00E+00	8.71E-03
Be-7	<6.42E-02	0.00E+00	6.42E-02
K-40	1.46E-01	8.78E-02	8.28E-02

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

Sample ID: 451572 **Sample Dates: 8/28/2017 - 9/5/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.22E-03	0.00E+00	8.22E-03
Cs-134	<8.37E-03	0.00E+00	8.37E-03
Cs-137	<9.93E-03	0.00E+00	9.93E-03
Be-7	<6.46E-02	0.00E+00	6.46E-02
K-40	<1.96E-01	0.00E+00	1.96E-01

Sample ID: 452406 **Sample Dates: 9/5/2017 - 9/11/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.06E-02	0.00E+00	1.06E-02
Cs-134	<5.97E-03	0.00E+00	5.97E-03
Cs-137	<9.72E-03	0.00E+00	9.72E-03
Be-7	<6.72E-02	0.00E+00	6.72E-02
K-40	1.16E-01	1.07E-01	1.57E-01

Sample ID: 452825 **Sample Dates: 9/11/2017 - 9/18/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<7.18E-03	0.00E+00	7.18E-03
Cs-134	<6.28E-03	0.00E+00	6.28E-03
Cs-137	<1.13E-02	0.00E+00	1.13E-02
Be-7	<6.95E-02	0.00E+00	6.95E-02
K-40	<2.46E-01	0.00E+00	2.46E-01

Sample ID: 452980 **Sample Dates: 9/18/2017 - 9/25/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.11E-03	0.00E+00	8.11E-03
Cs-134	<7.86E-03	0.00E+00	7.86E-03
Cs-137	<8.62E-03	0.00E+00	8.62E-03
Be-7	<3.68E-02	0.00E+00	3.68E-02
K-40	2.32E-01	1.13E-01	1.13E-01

Sample ID: 453484 **Sample Dates: 9/25/2017 - 10/2/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.81E-02	0.00E+00	1.81E-02
Cs-134	<9.05E-03	0.00E+00	9.05E-03
Cs-137	<1.69E-02	0.00E+00	1.69E-02
Be-7	<9.87E-02	0.00E+00	9.87E-02
K-40	<3.76E-01	0.00E+00	3.76E-01

Sample ID: 454259 **Sample Dates: 10/2/2017 - 10/9/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.72E-02	0.00E+00	1.72E-02
Cs-134	<1.18E-02	0.00E+00	1.18E-02
Cs-137	<1.65E-02	0.00E+00	1.65E-02
Be-7	<1.01E-01	0.00E+00	1.01E-01
K-40	3.55E-01	1.56E-01	1.57E-01

Sample ID: 455116 **Sample Dates: 10/9/2017 - 10/16/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.59E-02	0.00E+00	1.59E-02
Cs-134	<1.71E-02	0.00E+00	1.71E-02
Cs-137	<1.60E-02	0.00E+00	1.60E-02
Be-7	<1.08E-01	0.00E+00	1.08E-01
K-40	2.44E-01	1.28E-01	1.28E-01

Sample ID: 455452 **Sample Dates: 10/16/2017 - 10/23/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.15E-02	0.00E+00	2.15E-02
Cs-134	<1.89E-02	0.00E+00	1.89E-02
Cs-137	<1.76E-02	0.00E+00	1.76E-02
Be-7	<1.08E-01	0.00E+00	1.07E-01
K-40	3.67E-01	2.17E-01	3.08E-01

Sample ID: 456082 **Sample Dates: 10/23/2017 - 10/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.24E-02	0.00E+00	2.24E-02
Cs-134	<1.69E-02	0.00E+00	1.69E-02
Cs-137	<1.71E-02	0.00E+00	1.71E-02
Be-7	<1.26E-01	0.00E+00	1.26E-01
K-40	5.28E-01	1.98E-01	1.99E-01

Sample ID: 461448 **Sample Dates: 10/30/2017 - 11/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.35E-02	0.00E+00	2.35E-02
Cs-134	<1.75E-02	0.00E+00	1.75E-02
Cs-137	<1.82E-02	0.00E+00	1.82E-02
Be-7	<1.18E-01	0.00E+00	1.18E-01
K-40	4.35E-01	1.75E-01	1.79E-01

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3
Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

Sample ID: 462004 Sample Dates: 11/6/2017 - 11/13/2017

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.56E-02	0.00E+00	2.56E-02
Cs-134	<1.56E-02	0.00E+00	1.56E-02
Cs-137	<2.06E-02	0.00E+00	2.06E-02
Be-7	<1.12E-01	0.00E+00	1.12E-01
K-40	4.58E-01	1.71E-01	1.35E-01

Sample ID: 462643 Sample Dates: 11/13/2017 - 11/20/2017

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.28E-02	0.00E+00	2.28E-02
Cs-134	<1.72E-02	0.00E+00	1.72E-02
Cs-137	<1.68E-02	0.00E+00	1.68E-02
Be-7	<1.34E-01	0.00E+00	1.34E-01
K-40	6.02E-01	2.19E-01	2.36E-01

Sample ID: 463132 Sample Dates: 11/20/2017 - 11/27/2017

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.29E-02	0.00E+00	2.29E-02
Cs-134	<1.53E-02	0.00E+00	1.53E-02
Cs-137	<1.98E-02	0.00E+00	1.98E-02
Be-7	<1.13E-01	0.00E+00	1.13E-01
K-40	4.39E-01	1.82E-01	1.93E-01

Sample ID: 463542 Sample Dates: 11/27/2017 - 12/4/2017

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.15E-02	0.00E+00	2.15E-02
Cs-134	<1.65E-02	0.00E+00	1.65E-02
Cs-137	<1.94E-02	0.00E+00	1.94E-02
Be-7	<1.14E-01	0.00E+00	1.14E-01
K-40	3.98E-01	1.67E-01	1.69E-01

Sample ID: 464183 Sample Dates: 12/4/2017 - 12/11/2017

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.30E-02	0.00E+00	2.30E-02
Cs-134	<1.76E-02	0.00E+00	1.76E-02
Cs-137	<1.76E-02	0.00E+00	1.76E-02
Be-7	<1.03E-01	0.00E+00	1.03E-01
K-40	3.57E-01	1.48E-01	1.20E-01

Sample ID: 464740 Sample Dates: 12/11/2017 - 12/18/2017

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.25E-02	0.00E+00	2.25E-02
Cs-134	<1.73E-02	0.00E+00	1.73E-02
Cs-137	<1.91E-02	0.00E+00	1.91E-02
Be-7	<1.37E-01	0.00E+00	1.37E-01
K-40	2.82E-01	1.88E-01	2.70E-01

Sample ID: 465006 Sample Dates: 12/18/2017 - 12/26/2017

Nuclide	Activity	2 Sigma Error	MDA
I-131	<3.71E-02	0.00E+00	3.71E-02
Cs-134	<1.60E-02	0.00E+00	1.60E-02
Cs-137	<1.45E-02	0.00E+00	1.45E-02
Be-7	<1.13E-01	0.00E+00	1.13E-01
K-40	5.08E-01	1.57E-01	3.06E-02

Sample ID: 465242 Sample Dates: 12/26/2017 - 1/2/2018

Nuclide	Activity	2 Sigma Error	MDA
I-131	<2.28E-02	0.00E+00	2.28E-02
Cs-134	<1.50E-02	0.00E+00	1.50E-02
Cs-137	<1.81E-02	0.00E+00	1.81E-02
Be-7	<1.05E-01	0.00E+00	1.05E-01
K-40	4.48E-01	1.72E-01	1.59E-01

Media Type: DRINKING WATER Concentration (Activity): pCi/l
Sample Point 060 [INDICATOR - NE @ 3.23 miles]

Sample ID: 431608 Sample Dates: 12/5/2016 - 1/3/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	<5.08E-01	0.00E+00	1.21E+00
Mn-54	<1.71E+00	0.00E+00	1.71E+00
Co-58	<2.14E+00	0.00E+00	2.14E+00
Fe-59	<3.95E+00	0.00E+00	3.95E+00
Co-60	<1.57E+00	0.00E+00	1.57E+00
Zn-65	<4.61E+00	0.00E+00	4.61E+00
Zr-95	<4.03E+00	0.00E+00	4.03E+00
Nb-95	<2.32E+00	0.00E+00	2.32E+00
I-131	<9.67E+00	0.00E+00	9.67E+00
Cs-134	<2.17E+00	0.00E+00	2.17E+00

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

Sample Point 060 [INDICATOR - NE @ 3.23 miles]

Sample ID: 431608 Sample Dates: 12/5/2016 - 1/3/2017

Nuclide	Activity	2 Sigma Error	MDA
Cs-137	<2.16E+00	0.00E+00	2.16E+00
BaLa-140	<5.90E+00	0.00E+00	5.90E+00
Be-7	<2.16E+01	0.00E+00	2.16E+01
K-40	<3.26E+01	0.00E+00	3.26E+01

Sample ID: 433494 Sample Dates: 1/3/2017 - 1/30/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	<2.11E-01	0.00E+00	1.19E+00
Mn-54	<2.98E+00	0.00E+00	2.98E+00
Co-58	<2.95E+00	0.00E+00	2.95E+00
Fe-59	<7.59E+00	0.00E+00	7.59E+00
Co-60	<3.08E+00	0.00E+00	3.08E+00
Zn-65	<2.78E+00	0.00E+00	2.78E+00
Zr-95	<5.85E+00	0.00E+00	5.85E+00
Nb-95	<4.46E+00	0.00E+00	4.46E+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	<3.07E+00	0.00E+00	3.07E+00
BaLa-140	<6.69E+00	0.00E+00	6.69E+00
Be-7	<3.19E+01	0.00E+00	3.19E+01
K-40	6.88E+01	3.31E+01	4.27E+01

Sample ID: 434745 Sample Dates: 12/5/2016 - 2/27/2017

Nuclide	Activity	2 Sigma Error	MDA
H3DW	<-2.4E+01	0.00E+00	1.90E+02

Sample ID: 436099 Sample Dates: 1/30/2017 - 2/27/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	<2.17E-01	0.00E+00	1.20E+00
Mn-54	<3.54E+00	0.00E+00	3.54E+00
Co-58	<3.73E+00	0.00E+00	3.73E+00
Fe-59	<7.12E+00	0.00E+00	7.12E+00
Co-60	<2.78E+00	0.00E+00	2.78E+00
Zn-65	<8.76E+00	0.00E+00	8.76E+00
Zr-95	<6.20E+00	0.00E+00	6.20E+00
Nb-95	<4.86E+00	0.00E+00	4.86E+00
I-131	<1.19E+01	0.00E+00	1.19E+01
Cs-134	<3.49E+00	0.00E+00	3.49E+00
Cs-137	<4.48E+00	0.00E+00	4.48E+00
BaLa-140	<2.25E+00	0.00E+00	2.25E+00
Be-7	<3.62E+01	0.00E+00	3.62E+01
K-40	<7.29E+01	0.00E+00	7.29E+01

Sample ID: 438667 Sample Dates: 2/27/2017 - 3/27/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	<4.92E-01	0.00E+00	1.43E+00
Mn-54	<3.07E+00	0.00E+00	3.07E+00
Co-58	<2.96E+00	0.00E+00	2.96E+00
Fe-59	<6.43E+00	0.00E+00	6.43E+00
Co-60	<3.25E+00	0.00E+00	3.25E+00
Zn-65	<5.32E+00	0.00E+00	5.32E+00
Zr-95	<6.06E+00	0.00E+00	6.06E+00
Nb-95	<4.07E+00	0.00E+00	4.07E+00
I-131	<1.14E+01	0.00E+00	1.14E+01
Cs-134	<3.89E+00	0.00E+00	3.89E+00
Cs-137	<3.32E+00	0.00E+00	3.32E+00
BaLa-140	<4.24E+00	0.00E+00	4.24E+00
Be-7	<2.54E+01	0.00E+00	2.54E+01
K-40	6.24E+01	3.00E+01	3.70E+01

Sample ID: 440798 Sample Dates: 3/27/2017 - 4/24/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	6.94E-01	6.75E-01	1.12E+00
Mn-54	<2.57E+00	0.00E+00	2.57E+00
Co-58	<2.79E+00	0.00E+00	2.79E+00
Fe-59	<6.49E+00	0.00E+00	6.49E+00
Co-60	<2.85E+00	0.00E+00	2.85E+00
Zn-65	<5.74E+00	0.00E+00	5.74E+00
Zr-95	<5.97E+00	0.00E+00	5.97E+00
Nb-95	<3.66E+00	0.00E+00	3.66E+00
I-131	<9.60E+00	0.00E+00	9.59E+00
Cs-134	<2.72E+00	0.00E+00	2.72E+00
Cs-137	<2.74E+00	0.00E+00	2.74E+00

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

Sample Point 060 [INDICATOR - NE @ 3.23 miles]

Sample ID: 440798 **Sample Dates: 3/27/2017 - 4/24/2017**

Nuclide	Activity	2 Sigma Error	MDA
BaLa-140	<5.71E+00	0.00E+00	5.71E+00
Be-7	<2.25E+01	0.00E+00	2.25E+01
K-40	8.95E+01	3.55E+01	4.72E+01

Sample ID: 442367 **Sample Dates: 2/27/2017 - 5/22/2017**

Nuclide	Activity	2 Sigma Error	MDA
H3DW	<-9.6E+01	0.00E+00	1.98E+02

Sample ID: 443066 **Sample Dates: 4/24/2017 - 5/22/2017**

Nuclide	Activity	2 Sigma Error	MDA
Beta	<1.84E-01	0.00E+00	1.39E+00
Mn-54	<3.01E+00	0.00E+00	3.01E+00
Co-58	<3.91E+00	0.00E+00	3.91E+00
Fe-59	<7.19E+00	0.00E+00	7.19E+00
Co-60	<4.02E+00	0.00E+00	4.02E+00
Zn-65	<7.75E+00	0.00E+00	7.75E+00
Zr-95	<6.71E+00	0.00E+00	6.71E+00
Nb-95	<5.07E+00	0.00E+00	5.07E+00
I-131	<1.16E+01	0.00E+00	1.16E+01
Cs-134	<3.49E+00	0.00E+00	3.49E+00
Cs-137	<3.29E+00	0.00E+00	3.29E+00
BaLa-140	<1.01E+01	0.00E+00	1.01E+01
Be-7	<3.08E+01	0.00E+00	3.08E+01
K-40	<6.09E+01	0.00E+00	6.09E+01

Sample ID: 445671 **Sample Dates: 5/22/2017 - 6/19/2017**

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.46E+00	8.43E-01	1.35E+00
Mn-54	<3.49E+00	0.00E+00	3.49E+00
Co-58	<2.89E+00	0.00E+00	2.89E+00
Fe-59	<6.90E+00	0.00E+00	6.90E+00
Co-60	<2.63E+00	0.00E+00	2.63E+00
Zn-65	<7.32E+00	0.00E+00	7.32E+00
Zr-95	<6.70E+00	0.00E+00	6.70E+00
Nb-95	<4.13E+00	0.00E+00	4.13E+00
I-131	<1.07E+01	0.00E+00	1.07E+01
Cs-134	<2.88E+00	0.00E+00	2.88E+00
Cs-137	<2.64E+00	0.00E+00	2.64E+00
BaLa-140	<1.12E+01	0.00E+00	1.12E+01
Be-7	<3.02E+01	0.00E+00	3.02E+01
K-40	<4.99E+01	0.00E+00	4.99E+01

Sample ID: 447964 **Sample Dates: 6/19/2017 - 7/17/2017**

Nuclide	Activity	2 Sigma Error	MDA
Beta	<5.51E-01	0.00E+00	1.48E+00
Mn-54	<3.22E+00	0.00E+00	3.22E+00
Co-58	<2.69E+00	0.00E+00	2.69E+00
Fe-59	<6.17E+00	0.00E+00	6.17E+00
Co-60	<3.00E+00	0.00E+00	3.00E+00
Zn-65	<4.30E+00	0.00E+00	4.30E+00
Zr-95	<4.27E+00	0.00E+00	4.27E+00
Nb-95	<3.12E+00	0.00E+00	3.12E+00
I-131	<1.10E+01	0.00E+00	1.10E+01
Cs-134	<3.31E+00	0.00E+00	3.31E+00
Cs-137	<2.42E+00	0.00E+00	2.42E+00
BaLa-140	<7.67E+00	0.00E+00	7.67E+00
Be-7	7.00E+00	2.00E+01	3.44E+01
K-40	4.26E+01	2.53E+01	3.52E+01

Sample ID: 450054 **Sample Dates: 5/22/2017 - 8/14/2017**

Nuclide	Activity	2 Sigma Error	MDA
H3DW	<-5.9E+01	0.00E+00	2.05E+02

Sample ID: 450093 **Sample Dates: 7/17/2017 - 8/14/2017**

Nuclide	Activity	2 Sigma Error	MDA
Beta	8.72E-01	8.53E-01	1.42E+00
Mn-54	<2.51E+00	0.00E+00	2.51E+00
Co-58	<3.31E+00	0.00E+00	3.31E+00
Fe-59	<7.11E+00	0.00E+00	7.11E+00
Co-60	<3.37E+00	0.00E+00	3.37E+00
Zn-65	<6.61E+00	0.00E+00	6.61E+00
Zr-95	<5.58E+00	0.00E+00	5.58E+00
Nb-95	<4.63E+00	0.00E+00	4.63E+00
I-131	<1.18E+01	0.00E+00	1.18E+01
Cs-134	<4.21E+00	0.00E+00	4.21E+00

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 060 [INDICATOR - NE @ 3.23 miles]

Sample ID: 450093 **Sample Dates: 7/17/2017 - 8/14/2017**

Nuclide	Activity	2 Sigma Error	MDA
Cs-137	<3.68E+00	0.00E+00	3.68E+00
BaLa-140	<1.01E+01	0.00E+00	1.01E+01
Be-7	<3.05E+01	0.00E+00	3.05E+01
K-40	4.79E+01	3.40E+01	4.96E+01

Sample ID: 451826 **Sample Dates: 8/14/2017 - 9/11/2017**

Nuclide	Activity	2 Sigma Error	MDA
Beta	<3.06E-01	0.00E+00	1.20E+00
Mn-54	<2.73E+00	0.00E+00	2.73E+00
Co-58	<2.61E+00	0.00E+00	2.61E+00
Fe-59	<6.25E+00	0.00E+00	6.25E+00
Co-60	<2.96E+00	0.00E+00	2.96E+00
Zn-65	<5.07E+00	0.00E+00	5.07E+00
Zr-95	<4.90E+00	0.00E+00	4.90E+00
Nb-95	<4.90E+00	0.00E+00	4.90E+00
I-131	<1.10E+01	0.00E+00	1.10E+01
Cs-134	<2.75E+00	0.00E+00	2.75E+00
Cs-137	<2.40E+00	0.00E+00	2.40E+00
BaLa-140	<8.85E+00	0.00E+00	8.85E+00
Be-7	<2.54E+01	0.00E+00	2.54E+01
K-40	1.84E+01	2.38E+01	3.90E+01

Sample ID: 454590 **Sample Dates: 9/11/2017 - 10/9/2017**

Nuclide	Activity	2 Sigma Error	MDA
Beta	<3.67E-01	0.00E+00	1.36E+00
Mn-54	<2.44E+00	0.00E+00	2.44E+00
Co-58	<2.63E+00	0.00E+00	2.63E+00
Fe-59	<6.33E+00	0.00E+00	6.33E+00
Co-60	<2.75E+00	0.00E+00	2.75E+00
Zn-65	<5.80E+00	0.00E+00	5.80E+00
Zr-95	<5.50E+00	0.00E+00	5.50E+00
Nb-95	<3.71E+00	0.00E+00	3.71E+00
I-131	<1.19E+01	0.00E+00	1.19E+01
Cs-134	<2.49E+00	0.00E+00	2.49E+00
Cs-137	<2.59E+00	0.00E+00	2.59E+00
BaLa-140	<8.23E+00	0.00E+00	8.23E+00
Be-7	<2.51E+01	0.00E+00	2.51E+01
K-40	4.84E+01	2.79E+01	3.88E+01

Sample ID: 461751 **Sample Dates: 10/9/2017 - 11/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
Beta	<5.74E-01	0.00E+00	1.48E+00
Mn-54	<4.45E+00	0.00E+00	4.45E+00
Co-58	<5.31E+00	0.00E+00	5.31E+00
Fe-59	<9.14E+00	0.00E+00	9.14E+00
Co-60	<4.30E+00	0.00E+00	4.30E+00
Zn-65	<6.51E+00	0.00E+00	6.51E+00
Zr-95	<8.41E+00	0.00E+00	8.41E+00
Nb-95	<5.10E+00	0.00E+00	5.10E+00
I-131	<1.19E+01	0.00E+00	1.19E+01
Cs-134	<5.30E+00	0.00E+00	5.30E+00
Cs-137	<3.76E+00	0.00E+00	3.76E+00
BaLa-140	<9.76E+00	0.00E+00	9.76E+00
Be-7	<2.69E+01	0.00E+00	2.69E+01
K-40	<7.29E+01	0.00E+00	7.29E+01

Sample ID: 462375 **Sample Dates: 8/14/2017 - 12/4/2017**

Nuclide	Activity	2 Sigma Error	MDA
H3DW	<-7.0E+00	0.00E+00	1.90E+02

Sample ID: 463807 **Sample Dates: 11/6/2017 - 12/4/2017**

Nuclide	Activity	2 Sigma Error	MDA
Beta	<4.90E-01	0.00E+00	1.40E+00
Mn-54	<3.16E+00	0.00E+00	3.16E+00
Co-58	<3.65E+00	0.00E+00	3.65E+00
Fe-59	<6.06E+00	0.00E+00	6.06E+00
Co-60	<3.70E+00	0.00E+00	3.70E+00
Zn-65	<6.46E+00	0.00E+00	6.46E+00
Zr-95	<7.52E+00	0.00E+00	7.52E+00
Nb-95	<4.65E+00	0.00E+00	4.65E+00
I-131	<1.14E+01	0.00E+00	1.14E+01
Cs-134	<3.51E+00	0.00E+00	3.51E+00
Cs-137	<4.05E+00	0.00E+00	4.05E+00

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

Sample Point 060 [INDICATOR - NE @ 3.23 miles]

Sample ID: 463807 Sample Dates: 11/6/2017 - 12/4/2017

Nuclide	Activity	2 Sigma Error	MDA
BaLa-140	<7.80E+00	0.00E+00	7.80E+00
Be-7	<2.82E+01	0.00E+00	2.82E+01
K-40	<6.61E+01	0.00E+00	6.61E+01

Sample ID: 465394 Sample Dates: 12/4/2017 - 1/2/2018

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.06E+00	8.18E-01	1.34E+00
Mn-54	<3.11E+00	0.00E+00	3.11E+00
Co-58	<2.99E+00	0.00E+00	2.99E+00
Fe-59	<6.86E+00	0.00E+00	6.86E+00
Co-60	<2.47E+00	0.00E+00	2.47E+00
Zn-65	<6.57E+00	0.00E+00	6.57E+00
Zr-95	<5.11E+00	0.00E+00	5.11E+00
Nb-95	<4.32E+00	0.00E+00	4.32E+00
I-131	<1.16E+01	0.00E+00	1.16E+01
Cs-134	<3.06E+00	0.00E+00	3.06E+00
Cs-137	<2.76E+00	0.00E+00	2.76E+00
BaLa-140	<7.73E+00	0.00E+00	7.73E+00
Be-7	<3.30E+01	0.00E+00	3.30E+01
K-40	<5.02E+01	0.00E+00	5.02E+01
H3DW	<9.61E+01	0.00E+00	1.67E+02

Sample Point 064 [CONTROL - SSW @ 6.67 miles]

Sample ID: 431609 Sample Dates: 12/5/2016 - 1/3/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	8.57E-01	7.38E-01	1.22E+00
Mn-54	<1.97E+00	0.00E+00	1.97E+00
Co-58	<2.16E+00	0.00E+00	2.16E+00
Fe-59	<5.29E+00	0.00E+00	5.29E+00
Co-60	<1.89E+00	0.00E+00	1.89E+00
Zn-65	<3.99E+00	0.00E+00	3.99E+00
Zr-95	<4.40E+00	0.00E+00	4.40E+00
Nb-95	<2.26E+00	0.00E+00	2.26E+00
I-131	<1.20E+01	0.00E+00	1.20E+01
Cs-134	<2.01E+00	0.00E+00	2.01E+00
Cs-137	<2.24E+00	0.00E+00	2.24E+00
BaLa-140	<6.13E+00	0.00E+00	6.13E+00
Be-7	<2.16E+01	0.00E+00	2.16E+01
K-40	1.82E+01	2.09E+01	3.40E+01

Sample ID: 433495 Sample Dates: 1/3/2017 - 1/30/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	7.98E-01	7.21E-01	1.19E+00
Mn-54	<2.97E+00	0.00E+00	2.97E+00
Co-58	<2.92E+00	0.00E+00	2.92E+00
Fe-59	<5.87E+00	0.00E+00	5.87E+00
Co-60	<3.68E+00	0.00E+00	3.68E+00
Zn-65	<5.49E+00	0.00E+00	5.49E+00
Zr-95	<6.24E+00	0.00E+00	6.24E+00
Nb-95	<4.07E+00	0.00E+00	4.07E+00
I-131	<1.12E+01	0.00E+00	1.12E+01
Cs-134	<3.30E+00	0.00E+00	3.30E+00
Cs-137	<2.55E+00	0.00E+00	2.55E+00
BaLa-140	<6.95E+00	0.00E+00	6.95E+00
Be-7	<2.69E+01	0.00E+00	2.69E+01
K-40	<5.02E+01	0.00E+00	5.02E+01

Sample ID: 434746 Sample Dates: 12/5/2016 - 2/27/2017

Nuclide	Activity	2 Sigma Error	MDA
H3DW	<-4.0E+01	0.00E+00	1.92E+02

Sample ID: 436100 Sample Dates: 1/30/2017 - 2/27/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	<1.66E-01	0.00E+00	1.22E+00
Mn-54	<2.22E+00	0.00E+00	2.22E+00
Co-58	<2.47E+00	0.00E+00	2.47E+00
Fe-59	<6.55E+00	0.00E+00	6.55E+00
Co-60	<2.82E+00	0.00E+00	2.82E+00
Zn-65	<5.88E+00	0.00E+00	5.88E+00
Zr-95	<4.89E+00	0.00E+00	4.89E+00
Nb-95	<3.11E+00	0.00E+00	3.11E+00
I-131	<1.07E+01	0.00E+00	1.07E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 064 [CONTROL - SSW @ 6.67 miles]

Sample ID: 436100 Sample Dates: 1/30/2017 - 2/27/2017

Nuclide	Activity	2 Sigma Error	MDA
Cs-134	<3.17E+00	0.00E+00	3.17E+00
Cs-137	<2.77E+00	0.00E+00	2.77E+00
BaLa-140	<7.12E+00	0.00E+00	7.12E+00
Be-7	2.42E+01	2.22E+01	3.53E+01
K-40	<4.43E+01	0.00E+00	4.43E+01

Sample ID: 438668 Sample Dates: 2/27/2017 - 3/27/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.86E+00	9.09E-01	1.44E+00
Mn-54	<3.85E+00	0.00E+00	3.85E+00
Co-58	<4.14E+00	0.00E+00	4.14E+00
Fe-59	<7.14E+00	0.00E+00	7.14E+00
Co-60	<2.95E+00	0.00E+00	2.95E+00
Zn-65	<4.69E+00	0.00E+00	4.69E+00
Zr-95	<7.61E+00	0.00E+00	7.61E+00
Nb-95	<3.48E+00	0.00E+00	3.48E+00
I-131	<1.18E+01	0.00E+00	1.18E+01
Cs-134	<4.12E+00	0.00E+00	4.12E+00
Cs-137	<3.99E+00	0.00E+00	3.99E+00
BaLa-140	<5.70E+00	0.00E+00	5.70E+00
Be-7	<2.80E+01	0.00E+00	2.80E+01
K-40	2.98E+01	2.80E+01	4.24E+01

Sample ID: 440799 Sample Dates: 3/27/2017 - 4/24/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.13E+00	7.03E-01	1.13E+00
Mn-54	<2.22E+00	0.00E+00	2.22E+00
Co-58	<4.00E+00	0.00E+00	4.00E+00
Fe-59	<6.57E+00	0.00E+00	6.57E+00
Co-60	<4.14E+00	0.00E+00	4.14E+00
Zn-65	<7.17E+00	0.00E+00	7.17E+00
Zr-95	<5.74E+00	0.00E+00	5.74E+00
Nb-95	<5.03E+00	0.00E+00	5.03E+00
I-131	<1.20E+01	0.00E+00	1.20E+01
Cs-134	<4.46E+00	0.00E+00	4.46E+00
Cs-137	<4.02E+00	0.00E+00	4.02E+00
BaLa-140	<5.67E+00	0.00E+00	5.67E+00
Be-7	5.50E+00	1.84E+01	3.31E+01
K-40	2.77E+01	3.09E+01	4.93E+01

Sample ID: 442368 Sample Dates: 2/27/2017 - 5/22/2017

Nuclide	Activity	2 Sigma Error	MDA
H3DW	<-6.9E+01	0.00E+00	2.00E+02

Sample ID: 443067 Sample Dates: 4/24/2017 - 5/22/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.40E+00	8.68E-01	1.40E+00
Mn-54	<3.48E+00	0.00E+00	3.48E+00
Co-58	<3.39E+00	0.00E+00	3.39E+00
Fe-59	<8.11E+00	0.00E+00	8.11E+00
Co-60	<4.09E+00	0.00E+00	4.09E+00
Zn-65	<6.69E+00	0.00E+00	6.69E+00
Zr-95	<5.70E+00	0.00E+00	5.70E+00
Nb-95	<4.85E+00	0.00E+00	4.85E+00
I-131	<1.14E+01	0.00E+00	1.14E+01
Cs-134	<4.78E+00	0.00E+00	4.78E+00
Cs-137	<3.74E+00	0.00E+00	3.74E+00
BaLa-140	<9.57E+00	0.00E+00	9.57E+00
Be-7	<2.93E+01	0.00E+00	2.93E+01
K-40	<6.01E+01	0.00E+00	6.01E+01

Sample ID: 445672 Sample Dates: 5/22/2017 - 6/19/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.01E+00	8.28E-01	1.37E+00
Mn-54	<2.67E+00	0.00E+00	2.67E+00
Co-58	<2.79E+00	0.00E+00	2.79E+00
Fe-59	<6.68E+00	0.00E+00	6.68E+00
Co-60	<3.36E+00	0.00E+00	3.36E+00
Zn-65	<5.27E+00	0.00E+00	5.27E+00
Zr-95	<3.26E+00	0.00E+00	3.26E+00
Nb-95	<4.49E+00	0.00E+00	4.49E+00
I-131	<1.17E+01	0.00E+00	1.17E+01
Cs-134	<2.78E+00	0.00E+00	2.78E+00

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

Sample Point 064 [CONTROL - SSW @ 6.67 miles]

Sample ID: 445672 **Sample Dates: 5/22/2017 - 6/19/2017**

Nuclide	Activity	2 Sigma Error	MDA
Cs-137	<2.86E+00	0.00E+00	2.86E+00
BaLa-140	<8.15E+00	0.00E+00	8.15E+00
Be-7	<3.05E+01	0.00E+00	3.05E+01
K-40	3.54E+01	2.26E+01	2.77E+01

Sample ID: 447965 **Sample Dates: 6/19/2017 - 7/17/2017**

Nuclide	Activity	2 Sigma Error	MDA
Beta	<-2.8E-02	0.00E+00	1.48E+00
Mn-54	<2.28E+00	0.00E+00	2.28E+00
Co-58	<2.58E+00	0.00E+00	2.58E+00
Fe-59	<5.82E+00	0.00E+00	5.82E+00
Co-60	<1.79E+00	0.00E+00	1.79E+00
Zn-65	<4.14E+00	0.00E+00	4.14E+00
Zr-95	<3.07E+00	0.00E+00	3.07E+00
Nb-95	<2.45E+00	0.00E+00	2.45E+00
I-131	<8.25E+00	0.00E+00	8.25E+00
Cs-134	<2.38E+00	0.00E+00	2.38E+00
Cs-137	<1.57E+00	0.00E+00	1.57E+00
BaLa-140	<4.77E+00	0.00E+00	4.77E+00
Be-7	<2.17E+01	0.00E+00	2.17E+01
K-40	2.79E+01	2.16E+01	3.31E+01

Sample ID: 450055 **Sample Dates: 5/22/2017 - 8/14/2017**

Nuclide	Activity	2 Sigma Error	MDA
H3DW	<-7.7E+01	0.00E+00	2.02E+02

Sample ID: 450094 **Sample Dates: 7/17/2017 - 8/14/2017**

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.50E+00	8.91E-01	1.43E+00
Mn-54	<3.51E+00	0.00E+00	3.51E+00
Co-58	<4.73E+00	0.00E+00	4.73E+00
Fe-59	<1.19E+01	0.00E+00	1.19E+01
Co-60	<4.70E+00	0.00E+00	4.70E+00
Zn-65	<9.91E+00	0.00E+00	9.91E+00
Zr-95	<6.35E+00	0.00E+00	6.35E+00
Nb-95	<6.96E+00	0.00E+00	6.96E+00
I-131	<1.18E+01	0.00E+00	1.18E+01
Cs-134	<4.18E+00	0.00E+00	4.18E+00
Cs-137	<4.11E+00	0.00E+00	4.11E+00
BaLa-140	<9.40E+00	0.00E+00	9.40E+00
Be-7	<4.22E+01	0.00E+00	4.22E+01
K-40	4.28E+01	3.37E+01	4.71E+01

Sample ID: 451827 **Sample Dates: 8/14/2017 - 9/11/2017**

Nuclide	Activity	2 Sigma Error	MDA
Beta	<4.23E-01	0.00E+00	1.22E+00
Mn-54	<2.89E+00	0.00E+00	2.89E+00
Co-58	<3.13E+00	0.00E+00	3.13E+00
Fe-59	<7.68E+00	0.00E+00	7.68E+00
Co-60	<3.41E+00	0.00E+00	3.41E+00
Zn-65	<5.82E+00	0.00E+00	5.82E+00
Zr-95	<5.70E+00	0.00E+00	5.70E+00
Nb-95	<3.42E+00	0.00E+00	3.42E+00
I-131	<1.16E+01	0.00E+00	1.16E+01
Cs-134	<3.28E+00	0.00E+00	3.28E+00
Cs-137	<3.21E+00	0.00E+00	3.21E+00
BaLa-140	<6.15E+00	0.00E+00	6.15E+00
Be-7	<2.85E+01	0.00E+00	2.85E+01
K-40	8.82E+01	3.48E+01	4.28E+01

Sample ID: 454591 **Sample Dates: 9/11/2017 - 10/9/2017**

Nuclide	Activity	2 Sigma Error	MDA
Beta	<4.77E-01	0.00E+00	1.38E+00
Mn-54	<2.69E+00	0.00E+00	2.69E+00
Co-58	<2.67E+00	0.00E+00	2.67E+00
Fe-59	<5.79E+00	0.00E+00	5.79E+00
Co-60	<2.29E+00	0.00E+00	2.29E+00
Zn-65	<5.87E+00	0.00E+00	5.87E+00
Zr-95	<4.28E+00	0.00E+00	4.28E+00
Nb-95	<4.00E+00	0.00E+00	4.00E+00
I-131	<1.19E+01	0.00E+00	1.19E+01
Cs-134	<3.37E+00	0.00E+00	3.37E+00
Cs-137	<3.02E+00	0.00E+00	3.02E+00

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 064 [CONTROL - SSW @ 6.67 miles]

Sample ID: 454591 Sample Dates: 9/11/2017 - 10/9/2017

Nuclide	Activity	2 Sigma Error	MDA
BaLa-140	<8.06E+00	0.00E+00	8.06E+00
Be-7	<2.47E+01	0.00E+00	2.47E+01
K-40	<4.53E+01	0.00E+00	4.53E+01

Sample ID: 461752 Sample Dates: 10/9/2017 - 11/6/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	<7.09E-01	0.00E+00	1.48E+00
Mn-54	<3.35E+00	0.00E+00	3.35E+00
Co-58	<3.39E+00	0.00E+00	3.39E+00
Fe-59	<5.55E+00	0.00E+00	5.55E+00
Co-60	<2.01E+00	0.00E+00	2.01E+00
Zn-65	<6.24E+00	0.00E+00	6.24E+00
Zr-95	<6.61E+00	0.00E+00	6.61E+00
Nb-95	<4.01E+00	0.00E+00	4.01E+00
I-131	<1.17E+01	0.00E+00	1.17E+01
Cs-134	<2.91E+00	0.00E+00	2.91E+00
Cs-137	<3.44E+00	0.00E+00	3.44E+00
BaLa-140	<6.26E+00	0.00E+00	6.26E+00
Be-7	<2.05E+01	0.00E+00	2.05E+01
K-40	9.01E+01	3.42E+01	4.01E+01

Sample ID: 462376 Sample Dates: 8/14/2017 - 12/4/2017

Nuclide	Activity	2 Sigma Error	MDA
H3DW	<-1.6E+01	0.00E+00	1.92E+02

Sample ID: 463808 Sample Dates: 11/6/2017 - 12/4/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	9.53E-01	8.48E-01	1.40E+00
Mn-54	<2.79E+00	0.00E+00	2.79E+00
Co-58	<3.30E+00	0.00E+00	3.30E+00
Fe-59	<6.88E+00	0.00E+00	6.88E+00
Co-60	<3.18E+00	0.00E+00	3.18E+00
Zn-65	<8.85E+00	0.00E+00	8.85E+00
Zr-95	<7.59E+00	0.00E+00	7.59E+00
Nb-95	<4.97E+00	0.00E+00	4.97E+00
I-131	<1.19E+01	0.00E+00	1.19E+01
Cs-134	<3.65E+00	0.00E+00	3.65E+00
Cs-137	<3.47E+00	0.00E+00	3.47E+00
BaLa-140	<1.05E+01	0.00E+00	1.05E+01
Be-7	<3.79E+01	0.00E+00	3.79E+01
K-40	5.44E+01	3.31E+01	4.40E+01

Sample ID: 465395 Sample Dates: 12/4/2017 - 1/2/2018

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.18E+00	8.32E-01	1.35E+00
Mn-54	<1.67E+00	0.00E+00	1.67E+00
Co-58	<2.27E+00	0.00E+00	2.27E+00
Fe-59	<4.09E+00	0.00E+00	4.09E+00
Co-60	<1.62E+00	0.00E+00	1.62E+00
Zn-65	<3.03E+00	0.00E+00	3.03E+00
Zr-95	<2.93E+00	0.00E+00	2.93E+00
Nb-95	<2.17E+00	0.00E+00	2.17E+00
I-131	<9.77E+00	0.00E+00	9.77E+00
Cs-134	<2.17E+00	0.00E+00	2.17E+00
Cs-137	<1.81E+00	0.00E+00	1.81E+00
BaLa-140	<5.22E+00	0.00E+00	5.22E+00
Be-7	<1.88E+01	0.00E+00	1.88E+01
K-40	3.49E+01	1.91E+01	2.81E+01
H3DW	<3.28E+01	0.00E+00	1.67E+02

Sample Point 066 [INDICATOR - SSE @ 18.9 miles]

Sample ID: 431610 Sample Dates: 12/5/2016 - 1/3/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	9.18E-01	7.53E-01	1.24E+00
Mn-54	<1.91E+00	0.00E+00	1.91E+00
Co-58	<2.14E+00	0.00E+00	2.14E+00
Fe-59	<4.30E+00	0.00E+00	4.30E+00
Co-60	<1.73E+00	0.00E+00	1.73E+00
Zn-65	<4.17E+00	0.00E+00	4.17E+00
Zr-95	<3.46E+00	0.00E+00	3.46E+00
Nb-95	<2.73E+00	0.00E+00	2.73E+00
I-131	<1.17E+01	0.00E+00	1.17E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 066 [INDICATOR - SSE @ 18.9 miles]

Sample ID: 431610 Sample Dates: 12/5/2016 - 1/3/2017

Nuclide	Activity	2 Sigma Error	MDA
Cs-134	<2.16E+00	0.00E+00	2.16E+00
Cs-137	<2.04E+00	0.00E+00	2.04E+00
BaLa-140	<5.58E+00	0.00E+00	5.58E+00
Be-7	<1.84E+01	0.00E+00	1.84E+01
K-40	5.87E+01	2.03E+01	2.51E+01

Sample ID: 433496 Sample Dates: 1/3/2017 - 1/30/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.35E+00	7.57E-01	1.21E+00
Mn-54	<2.74E+00	0.00E+00	2.74E+00
Co-58	<3.03E+00	0.00E+00	3.03E+00
Fe-59	<6.88E+00	0.00E+00	6.88E+00
Co-60	<4.15E+00	0.00E+00	4.15E+00
Zn-65	<7.90E+00	0.00E+00	7.90E+00
Zr-95	<6.49E+00	0.00E+00	6.49E+00
Nb-95	<5.10E+00	0.00E+00	5.10E+00
I-131	<1.20E+01	0.00E+00	1.20E+01
Cs-134	<3.43E+00	0.00E+00	3.43E+00
Cs-137	<2.88E+00	0.00E+00	2.88E+00
BaLa-140	<1.01E+01	0.00E+00	1.01E+01
Be-7	<2.56E+01	0.00E+00	2.56E+01
K-40	<6.08E+01	0.00E+00	6.08E+01

Sample ID: 434747 Sample Dates: 12/5/2016 - 2/27/2017

Nuclide	Activity	2 Sigma Error	MDA
H3DW	4.01E+02	1.22E+02	1.90E+02

Sample ID: 436101 Sample Dates: 1/30/2017 - 2/27/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.17E+00	7.59E-01	1.23E+00
Mn-54	<3.33E+00	0.00E+00	3.33E+00
Co-58	<4.13E+00	0.00E+00	4.13E+00
Fe-59	<8.44E+00	0.00E+00	8.44E+00
Co-60	<2.76E+00	0.00E+00	2.76E+00
Zn-65	<6.65E+00	0.00E+00	6.65E+00
Zr-95	<7.08E+00	0.00E+00	7.08E+00
Nb-95	<4.94E+00	0.00E+00	4.94E+00
I-131	<1.19E+01	0.00E+00	1.19E+01
Cs-134	<3.36E+00	0.00E+00	3.36E+00
Cs-137	<3.48E+00	0.00E+00	3.48E+00
BaLa-140	<7.73E+00	0.00E+00	7.73E+00
Be-7	<2.99E+01	0.00E+00	2.99E+01
K-40	6.01E+01	3.65E+01	5.04E+01

Sample ID: 438669 Sample Dates: 2/27/2017 - 3/27/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	7.12E-01	8.76E-01	1.47E+00
Mn-54	<2.75E+00	0.00E+00	2.75E+00
Co-58	<3.44E+00	0.00E+00	3.44E+00
Fe-59	<7.77E+00	0.00E+00	7.77E+00
Co-60	<3.43E+00	0.00E+00	3.43E+00
Zn-65	<5.18E+00	0.00E+00	5.18E+00
Zr-95	<3.57E+00	0.00E+00	3.57E+00
Nb-95	<2.63E+00	0.00E+00	2.63E+00
I-131	<1.18E+01	0.00E+00	1.18E+01
Cs-134	<4.85E+00	0.00E+00	4.85E+00
Cs-137	<3.14E+00	0.00E+00	3.14E+00
BaLa-140	<8.85E+00	0.00E+00	8.85E+00
Be-7	<3.82E+01	0.00E+00	3.82E+01
K-40	5.21E+01	3.29E+01	4.47E+01

Sample ID: 440800 Sample Dates: 3/27/2017 - 4/24/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.54E+00	7.36E-01	1.16E+00
Mn-54	<2.66E+00	0.00E+00	2.66E+00
Co-58	<3.28E+00	0.00E+00	3.28E+00
Fe-59	<6.45E+00	0.00E+00	6.45E+00
Co-60	<3.80E+00	0.00E+00	3.80E+00
Zn-65	<5.71E+00	0.00E+00	5.71E+00
Zr-95	<4.59E+00	0.00E+00	4.59E+00
Nb-95	<3.69E+00	0.00E+00	3.69E+00
I-131	<1.13E+01	0.00E+00	1.13E+01
Cs-134	<2.83E+00	0.00E+00	2.83E+00

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

Sample Point 066 [INDICATOR - SSE @ 18.9 miles]

Sample ID: 440800 Sample Dates: 3/27/2017 - 4/24/2017

Nuclide	Activity	2 Sigma Error	MDA
Cs-137	<2.77E+00	0.00E+00	2.77E+00
BaLa-140	<8.63E+00	0.00E+00	8.63E+00
Be-7	<2.51E+01	0.00E+00	2.51E+01
K-40	4.37E+01	2.20E+01	2.44E+01

Sample ID: 442369 Sample Dates: 2/27/2017 - 5/22/2017

Nuclide	Activity	2 Sigma Error	MDA
H3DW	2.89E+02	1.24E+02	1.98E+02

Sample ID: 443068 Sample Dates: 4/24/2017 - 5/22/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.17E+00	8.71E-01	1.43E+00
Mn-54	<2.63E+00	0.00E+00	2.63E+00
Co-58	<2.93E+00	0.00E+00	2.93E+00
Fe-59	<6.13E+00	0.00E+00	6.13E+00
Co-60	<2.97E+00	0.00E+00	2.97E+00
Zn-65	<5.46E+00	0.00E+00	5.46E+00
Zr-95	<4.37E+00	0.00E+00	4.37E+00
Nb-95	<3.21E+00	0.00E+00	3.21E+00
I-131	<1.01E+01	0.00E+00	1.01E+01
Cs-134	<2.83E+00	0.00E+00	2.83E+00
Cs-137	<2.40E+00	0.00E+00	2.40E+00
BaLa-140	<6.30E+00	0.00E+00	6.30E+00
Be-7	<2.49E+01	0.00E+00	2.49E+01
K-40	4.74E+01	2.31E+01	2.79E+01

Sample ID: 445673 Sample Dates: 5/22/2017 - 6/19/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.39E+00	8.59E-01	1.39E+00
Mn-54	<3.51E+00	0.00E+00	3.51E+00
Co-58	<4.48E+00	0.00E+00	4.48E+00
Fe-59	<9.34E+00	0.00E+00	9.34E+00
Co-60	<4.31E+00	0.00E+00	4.31E+00
Zn-65	<7.93E+00	0.00E+00	7.93E+00
Zr-95	<6.94E+00	0.00E+00	6.94E+00
Nb-95	<4.04E+00	0.00E+00	4.04E+00
I-131	<1.19E+01	0.00E+00	1.19E+01
Cs-134	<4.94E+00	0.00E+00	4.94E+00
Cs-137	<4.70E+00	0.00E+00	4.70E+00
BaLa-140	<1.10E+01	0.00E+00	1.10E+01
Be-7	<3.81E+01	0.00E+00	3.81E+01
K-40	<6.19E+01	0.00E+00	6.19E+01

Sample ID: 447966 Sample Dates: 6/19/2017 - 7/17/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	9.24E-01	9.10E-01	1.51E+00
Mn-54	<2.08E+00	0.00E+00	2.08E+00
Co-58	<2.99E+00	0.00E+00	2.99E+00
Fe-59	<6.40E+00	0.00E+00	6.40E+00
Co-60	<4.51E+00	0.00E+00	4.51E+00
Zn-65	<6.64E+00	0.00E+00	6.64E+00
Zr-95	<8.31E+00	0.00E+00	8.31E+00
Nb-95	<5.27E+00	0.00E+00	5.27E+00
I-131	<1.19E+01	0.00E+00	1.19E+01
Cs-134	<4.14E+00	0.00E+00	4.14E+00
Cs-137	<4.08E+00	0.00E+00	4.08E+00
BaLa-140	<1.10E+01	0.00E+00	1.10E+01
Be-7	<3.93E+01	0.00E+00	3.93E+01
K-40	3.07E+01	2.44E+01	3.28E+01

Sample ID: 450056 Sample Dates: 5/22/2017 - 8/14/2017

Nuclide	Activity	2 Sigma Error	MDA
H3DW	4.62E+02	1.32E+02	2.03E+02

Sample ID: 450095 Sample Dates: 7/17/2017 - 8/14/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.90E+00	9.19E-01	1.45E+00
Mn-54	<2.52E+00	0.00E+00	2.52E+00
Co-58	<2.65E+00	0.00E+00	2.65E+00
Fe-59	<5.31E+00	0.00E+00	5.31E+00
Co-60	<1.65E+00	0.00E+00	1.65E+00
Zn-65	<6.20E+00	0.00E+00	6.20E+00
Zr-95	<5.33E+00	0.00E+00	5.33E+00
Nb-95	<2.98E+00	0.00E+00	2.98E+00
I-131	<1.04E+01	0.00E+00	1.04E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 066 [INDICATOR - SSE @ 18.9 miles]

Sample ID: 450095 Sample Dates: 7/17/2017 - 8/14/2017

Nuclide	Activity	2 Sigma Error	MDA
Cs-134	<2.86E+00	0.00E+00	2.86E+00
Cs-137	<2.99E+00	0.00E+00	2.99E+00
BaLa-140	<4.64E+00	0.00E+00	4.64E+00
Be-7	<2.15E+01	0.00E+00	2.15E+01
K-40	2.87E+01	2.41E+01	3.72E+01

Sample ID: 451828 Sample Dates: 8/14/2017 - 9/11/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	9.48E-01	7.53E-01	1.24E+00
Mn-54	<3.08E+00	0.00E+00	3.08E+00
Co-58	<4.27E+00	0.00E+00	4.27E+00
Fe-59	<5.88E+00	0.00E+00	5.88E+00
Co-60	<3.22E+00	0.00E+00	3.22E+00
Zn-65	<5.45E+00	0.00E+00	5.45E+00
Zr-95	<5.80E+00	0.00E+00	5.80E+00
Nb-95	<3.87E+00	0.00E+00	3.87E+00
I-131	<1.15E+01	0.00E+00	1.15E+01
Cs-134	<3.08E+00	0.00E+00	3.08E+00
Cs-137	<2.69E+00	0.00E+00	2.69E+00
BaLa-140	<8.32E+00	0.00E+00	8.32E+00
Be-7	<3.26E+01	0.00E+00	3.26E+01
K-40	<5.60E+01	0.00E+00	5.60E+01

Sample ID: 454592 Sample Dates: 9/11/2017 - 10/9/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	9.18E-01	8.49E-01	1.40E+00
Mn-54	<2.07E+00	0.00E+00	2.07E+00
Co-58	<2.15E+00	0.00E+00	2.15E+00
Fe-59	<4.85E+00	0.00E+00	4.85E+00
Co-60	<2.15E+00	0.00E+00	2.15E+00
Zn-65	<5.59E+00	0.00E+00	5.59E+00
Zr-95	<4.60E+00	0.00E+00	4.60E+00
Nb-95	<2.14E+00	0.00E+00	2.14E+00
I-131	<1.08E+01	0.00E+00	1.08E+01
Cs-134	<2.23E+00	0.00E+00	2.23E+00
Cs-137	<2.54E+00	0.00E+00	2.54E+00
BaLa-140	<6.16E+00	0.00E+00	6.16E+00
Be-7	<1.94E+01	0.00E+00	1.94E+01
K-40	5.17E+01	2.47E+01	3.38E+01

Sample ID: 461753 Sample Dates: 10/9/2017 - 11/6/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.38E+00	9.16E-01	1.50E+00
Mn-54	<2.22E+00	0.00E+00	2.22E+00
Co-58	<3.75E+00	0.00E+00	3.75E+00
Fe-59	<6.83E+00	0.00E+00	6.83E+00
Co-60	<3.86E+00	0.00E+00	3.86E+00
Zn-65	<6.36E+00	0.00E+00	6.36E+00
Zr-95	<7.85E+00	0.00E+00	7.85E+00
Nb-95	<4.98E+00	0.00E+00	4.98E+00
I-131	<1.14E+01	0.00E+00	1.14E+01
Cs-134	<4.21E+00	0.00E+00	4.21E+00
Cs-137	<4.20E+00	0.00E+00	4.20E+00
BaLa-140	<9.62E+00	0.00E+00	9.62E+00
Be-7	<3.65E+01	0.00E+00	3.65E+01
K-40	<6.60E+01	0.00E+00	6.60E+01

Sample ID: 462377 Sample Dates: 8/14/2017 - 12/4/2017

Nuclide	Activity	2 Sigma Error	MDA
H3DW	3.78E+02	1.22E+02	1.90E+02

Sample ID: 463809 Sample Dates: 11/6/2017 - 12/4/2017

Nuclide	Activity	2 Sigma Error	MDA
Beta	1.29E+00	8.73E-01	1.42E+00
Mn-54	<3.49E+00	0.00E+00	3.49E+00
Co-58	<3.27E+00	0.00E+00	3.27E+00
Fe-59	<7.81E+00	0.00E+00	7.81E+00
Co-60	<3.17E+00	0.00E+00	3.17E+00
Zn-65	<4.94E+00	0.00E+00	4.94E+00
Zr-95	<5.27E+00	0.00E+00	5.27E+00
Nb-95	<4.18E+00	0.00E+00	4.18E+00
I-131	<1.07E+01	0.00E+00	1.07E+01
Cs-134	<3.26E+00	0.00E+00	3.26E+00

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

Sample Point 066 [INDICATOR - SSE @ 18.9 miles]

Sample ID:	463809	Sample Dates: 11/6/2017 - 12/4/2017	Nuclide	Activity	2 Sigma Error	MDA
			Cs-137	<3.16E+00	0.00E+00	3.16E+00
			BaLa-140	<6.35E+00	0.00E+00	6.35E+00
			Be-7	<2.83E+01	0.00E+00	2.83E+01
			K-40	9.93E+01	3.43E+01	3.66E+01

Sample ID:	465396	Sample Dates: 12/4/2017 - 1/2/2018	Nuclide	Activity	2 Sigma Error	MDA
			Beta	1.89E+00	8.74E-01	1.37E+00
			Mn-54	<1.93E+00	0.00E+00	1.93E+00
			Co-58	<2.19E+00	0.00E+00	2.19E+00
			Fe-59	<3.84E+00	0.00E+00	3.84E+00
			Co-60	<1.70E+00	0.00E+00	1.70E+00
			Zn-65	<3.98E+00	0.00E+00	3.98E+00
			Zr-95	<4.33E+00	0.00E+00	4.33E+00
			Nb-95	<3.17E+00	0.00E+00	3.17E+00
			I-131	<1.17E+01	0.00E+00	1.17E+01
			Cs-134	<2.24E+00	0.00E+00	2.24E+00
			Cs-137	<2.04E+00	0.00E+00	2.04E+00
			BaLa-140	<5.27E+00	0.00E+00	5.27E+00
			Be-7	<1.65E+01	0.00E+00	1.65E+01
			K-40	5.37E+01	2.23E+01	3.06E+01
			H3DW	5.63E+02	1.17E+02	1.68E+02

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

Sample Point 060 [CONTROL FISH / INDICATOR - NE @ 3.23 miles]

Sample ID:	439871	Sample Dates: 4/5/2017 - 4/5/2017	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<1.71E+01	0.00E+00	1.71E+01
				Co-58	<1.34E+01	0.00E+00	1.34E+01
				Fe-59	<2.15E+01	0.00E+00	2.15E+01
				Co-60	<1.64E+01	0.00E+00	1.64E+01
				Zn-65	<4.37E+01	0.00E+00	4.37E+01
				Nb-95	<2.00E+01	0.00E+00	2.00E+01
				I-131	<2.16E+01	0.00E+00	2.16E+01
				Cs-134	<2.15E+01	0.00E+00	2.15E+01
				Cs-137	<2.27E+01	0.00E+00	2.27E+01
				Be-7	<1.13E+02	0.00E+00	1.13E+02
				K-40	3.21E+03	5.80E+02	3.82E+02
				Ag-110M	<1.67E+01	0.00E+00	1.67E+01
				Sb-122	<8.31E+01	0.00E+00	8.31E+01
				Sb-125	<3.62E+01	0.00E+00	3.62E+01

Sample ID:	439872	Sample Dates: 4/5/2017 - 4/5/2017	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<1.88E+01	0.00E+00	1.88E+01
				Co-58	<1.47E+01	0.00E+00	1.47E+01
				Fe-59	<4.18E+01	0.00E+00	4.18E+01
				Co-60	<2.07E+01	0.00E+00	2.07E+01
				Zn-65	<4.43E+01	0.00E+00	4.43E+01
				Nb-95	<1.28E+01	0.00E+00	1.28E+01
				I-131	<2.46E+01	0.00E+00	2.46E+01
				Cs-134	<1.78E+01	0.00E+00	1.78E+01
				Cs-137	<2.57E+01	0.00E+00	2.57E+01
				Be-7	<8.11E+01	0.00E+00	8.11E+01
				K-40	3.18E+03	5.76E+02	3.02E+02
				Ag-110M	<1.24E+01	0.00E+00	1.24E+01
				Sb-122	<7.29E+01	0.00E+00	7.29E+01
				Sb-125	<3.72E+01	0.00E+00	3.72E+01

Sample ID:	454950	Sample Dates: 10/17/2017 - 10/20/2017	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.96E+01	0.00E+00	3.96E+01
				Co-58	<6.27E+01	0.00E+00	6.27E+01
				Fe-59	<2.38E+01	0.00E+00	2.38E+01
				Co-60	<6.42E+01	0.00E+00	6.42E+01
				Zn-65	<1.01E+02	0.00E+00	1.01E+02
				Nb-95	<4.95E+01	0.00E+00	4.95E+01
				I-131	<4.48E+01	0.00E+00	4.48E+01
				Cs-134	<4.93E+01	0.00E+00	4.93E+01
				Cs-137	<4.97E+01	0.00E+00	4.97E+01
				Be-7	<3.12E+02	0.00E+00	3.12E+02

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

Sample Point 060 [CONTROL FISH / INDICATOR - NE @ 3.23 miles]

Sample ID:	454950	Sample Dates: 10/17/2017 - 10/20/2017	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
				K-40	3.43E+03	9.05E+02	1.45E+02
				Ag-110M	<5.03E+01	0.00E+00	5.03E+01
				Sb-122	<2.38E+02	0.00E+00	2.38E+02
				Sb-125	<1.09E+02	0.00E+00	1.09E+02
Sample ID:	454951	Sample Dates: 10/19/2017 - 10/20/2017	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.82E+01	0.00E+00	2.82E+01
				Co-58	<3.12E+01	0.00E+00	3.12E+01
				Fe-59	<7.83E+01	0.00E+00	7.83E+01
				Co-60	<2.53E+01	0.00E+00	2.53E+01
				Zn-65	<7.20E+01	0.00E+00	7.20E+01
				Nb-95	<3.55E+01	0.00E+00	3.55E+01
				I-131	<3.12E+01	0.00E+00	3.12E+01
				Cs-134	<3.93E+01	0.00E+00	3.93E+01
				Cs-137	<3.58E+01	0.00E+00	3.58E+01
				Be-7	<1.98E+02	0.00E+00	1.98E+02
				K-40	2.56E+03	6.91E+02	5.62E+02
				Ag-110M	<1.49E+01	0.00E+00	1.49E+01
				Sb-122	<1.11E+02	0.00E+00	1.11E+02
				Sb-125	<7.39E+01	0.00E+00	7.39E+01

Sample Point 063 [INDICATOR - ESE @ 0.8 miles]

Sample ID:	439873	Sample Dates: 4/6/2017 - 4/6/2017	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.46E+01	0.00E+00	3.46E+01
				Co-58	<3.23E+01	0.00E+00	3.23E+01
				Fe-59	<6.77E+01	0.00E+00	6.77E+01
				Co-60	<2.84E+01	0.00E+00	2.84E+01
				Zn-65	<6.27E+01	0.00E+00	6.27E+01
				Nb-95	<3.52E+01	0.00E+00	3.52E+01
				I-131	<3.39E+01	0.00E+00	3.39E+01
				Cs-134	<4.16E+01	0.00E+00	4.16E+01
				Cs-137	<4.02E+01	0.00E+00	4.02E+01
				Be-7	<2.85E+02	0.00E+00	2.85E+02
				K-40	3.68E+03	8.35E+02	4.14E+02
				Ag-110M	<2.11E+01	0.00E+00	2.11E+01
				Sb-122	<1.22E+02	0.00E+00	1.22E+02
				Sb-125	<5.64E+01	0.00E+00	5.64E+01
Sample ID:	439874	Sample Dates: 4/6/2017 - 4/6/2017	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.88E+01	0.00E+00	2.88E+01
				Co-58	<4.75E+01	0.00E+00	4.75E+01
				Fe-59	<5.90E+01	0.00E+00	5.90E+01
				Co-60	<5.10E+01	0.00E+00	5.10E+01
				Zn-65	<7.35E+01	0.00E+00	7.35E+01
				Nb-95	<3.56E+01	0.00E+00	3.56E+01
				I-131	<4.30E+01	0.00E+00	4.30E+01
				Cs-134	<4.98E+01	0.00E+00	4.98E+01
				Cs-137	<5.17E+01	0.00E+00	5.17E+01
				Be-7	<3.24E+02	0.00E+00	3.24E+02
				K-40	4.65E+03	9.38E+02	1.06E+02
				Ag-110M	<3.66E+01	0.00E+00	3.66E+01
				Sb-122	<1.49E+02	0.00E+00	1.49E+02
				Sb-125	<7.90E+01	0.00E+00	7.90E+01
Sample ID:	454952	Sample Dates: 10/18/2017 - 10/18/2017	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<5.91E+01	0.00E+00	5.91E+01
				Co-58	<4.85E+01	0.00E+00	4.85E+01
				Fe-59	<8.81E+01	0.00E+00	8.81E+01
				Co-60	<4.21E+01	0.00E+00	4.21E+01
				Zn-65	<9.33E+01	0.00E+00	9.33E+01
				Nb-95	<5.75E+01	0.00E+00	5.75E+01
				I-131	<9.09E+01	0.00E+00	9.09E+01
				Cs-134	<5.76E+01	0.00E+00	5.76E+01
				Cs-137	<7.35E+01	0.00E+00	7.35E+01
				Be-7	<4.47E+02	0.00E+00	4.47E+02
				K-40	3.69E+03	1.03E+03	7.22E+02
				Ag-110M	<3.65E+01	0.00E+00	3.65E+01

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

Sample Point 063 [INDICATOR - ESE @ 0.8 miles]

Sample ID:	454952	Sample Dates: 10/18/2017 - 10/18/2017	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
				Sb-122	<1.95E+02	0.00E+00	1.95E+02
				Sb-125	<1.35E+02	0.00E+00	1.35E+02
Sample ID:	454953	Sample Dates: 10/18/2017 - 10/18/2017	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<5.78E+01	0.00E+00	5.78E+01
				Co-58	<6.79E+01	0.00E+00	6.79E+01
				Fe-59	<7.84E+01	0.00E+00	7.84E+01
				Co-60	<5.98E+01	0.00E+00	5.98E+01
				Zn-65	<8.30E+01	0.00E+00	8.30E+01
				Nb-95	<4.30E+01	0.00E+00	4.30E+01
				I-131	<8.23E+01	0.00E+00	8.23E+01
				Cs-134	<3.62E+01	0.00E+00	3.62E+01
				Cs-137	<5.53E+01	0.00E+00	5.53E+01
				Be-7	<4.34E+02	0.00E+00	4.34E+02
				K-40	3.23E+03	9.51E+02	1.75E+02
				Ag-110M	<5.71E+01	0.00E+00	5.71E+01
				Sb-122	<2.87E+02	0.00E+00	2.87E+02
				Sb-125	<1.05E+02	0.00E+00	1.05E+02

Sample Point 067 [INDICATOR - SSE @ 4.34 miles]

Sample ID:	439875	Sample Dates: 4/5/2017 - 4/5/2017	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<1.55E+01	0.00E+00	1.55E+01
				Co-58	<1.59E+01	0.00E+00	1.59E+01
				Fe-59	<2.27E+01	0.00E+00	2.27E+01
				Co-60	<5.02E+00	0.00E+00	5.02E+00
				Zn-65	<4.62E+01	0.00E+00	4.62E+01
				Nb-95	<1.24E+01	0.00E+00	1.24E+01
				I-131	<2.82E+01	0.00E+00	2.82E+01
				Cs-134	<2.51E+01	0.00E+00	2.51E+01
				Cs-137	<2.16E+01	0.00E+00	2.16E+01
				Be-7	<1.41E+02	0.00E+00	1.41E+02
				K-40	4.03E+03	6.44E+02	2.26E+02
				Ag-110M	<1.57E+01	0.00E+00	1.57E+01
				Sb-122	<7.05E+01	0.00E+00	7.05E+01
				Sb-125	<3.59E+01	0.00E+00	3.59E+01
Sample ID:	439876	Sample Dates: 4/5/2017 - 4/5/2017	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<1.52E+01	0.00E+00	1.52E+01
				Co-58	<1.33E+01	0.00E+00	1.33E+01
				Fe-59	<3.66E+01	0.00E+00	3.66E+01
				Co-60	<4.22E+00	0.00E+00	4.22E+00
				Zn-65	<3.60E+01	0.00E+00	3.60E+01
				Nb-95	<1.34E+01	0.00E+00	1.34E+01
				I-131	<1.61E+01	0.00E+00	1.61E+01
				Cs-134	<1.70E+01	0.00E+00	1.70E+01
				Cs-137	1.73E+01	1.43E+01	2.16E+01
				Be-7	<1.33E+02	0.00E+00	1.33E+02
				K-40	3.54E+03	5.62E+02	1.88E+02
				Ag-110M	<1.01E+01	0.00E+00	1.01E+01
				Sb-122	<8.56E+01	0.00E+00	8.56E+01
				Sb-125	<3.87E+01	0.00E+00	3.87E+01
Sample ID:	454954	Sample Dates: 10/18/2017 - 10/18/2017	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.85E+01	0.00E+00	2.85E+01
				Co-58	<4.73E+01	0.00E+00	4.73E+01
				Fe-59	<5.46E+01	0.00E+00	5.46E+01
				Co-60	<4.82E+01	0.00E+00	4.82E+01
				Zn-65	<8.46E+01	0.00E+00	8.46E+01
				Nb-95	<4.17E+01	0.00E+00	4.17E+01
				I-131	<4.64E+01	0.00E+00	4.64E+01
				Cs-134	<3.18E+01	0.00E+00	3.18E+01
				Cs-137	<4.90E+01	0.00E+00	4.90E+01
				Be-7	<2.64E+02	0.00E+00	2.64E+02
				K-40	3.46E+03	8.38E+02	1.22E+02
				Ag-110M	<3.73E+01	0.00E+00	3.73E+01
				Sb-122	<2.14E+02	0.00E+00	2.14E+02
				Sb-125	<9.14E+01	0.00E+00	9.14E+01

Media Type: FISH Concentration (Activity): pCi/kg wet
Sample Point 067 [INDICATOR - SSE @ 4.34 miles]

Sample ID: 454955 **Sample Dates:** 10/19/2017 - 10/19/2017 BOTMFEEDER

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.89E+01	0.00E+00	2.89E+01
Co-58	<2.51E+01	0.00E+00	2.51E+01
Fe-59	<5.87E+01	0.00E+00	5.87E+01
Co-60	<2.20E+01	0.00E+00	2.20E+01
Zn-65	<4.87E+01	0.00E+00	4.87E+01
Nb-95	<3.63E+01	0.00E+00	3.63E+01
I-131	<3.04E+01	0.00E+00	3.04E+01
Cs-134	<2.75E+01	0.00E+00	2.75E+01
Cs-137	<3.28E+01	0.00E+00	3.28E+01
Be-7	<1.88E+02	0.00E+00	1.88E+02
K-40	2.58E+03	5.98E+02	8.14E+01
Ag-110M	<2.49E+01	0.00E+00	2.49E+01
Sb-122	<1.23E+02	0.00E+00	1.23E+02
Sb-125	<4.38E+01	0.00E+00	4.38E+01

Media Type: MILK Concentration (Activity): pCi/l
Sample Point 071 [CONTROL - SSE @ 10.2 miles]

Sample ID: 432946 **Sample Dates:** 1/9/2017 - 1/9/2017

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.16E-01	0.00E+00	6.16E-01
I-131	<7.44E+00	0.00E+00	7.44E+00
Cs-134	<3.86E+00	0.00E+00	3.86E+00
Cs-137	<5.57E+00	0.00E+00	5.57E+00
BaLa-140	<7.55E+00	0.00E+00	7.55E+00
Be-7	<5.62E+01	0.00E+00	5.62E+01
K-40	1.40E+03	2.23E+02	6.99E+01

Sample ID: 433761 **Sample Dates:** 1/23/2017 - 1/23/2017

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.88E-01	0.00E+00	5.88E-01
I-131	<6.42E+00	0.00E+00	6.42E+00
Cs-134	<7.88E+00	0.00E+00	7.88E+00
Cs-137	<9.33E+00	0.00E+00	9.33E+00
BaLa-140	<2.19E+00	0.00E+00	2.19E+00
Be-7	<4.65E+01	0.00E+00	4.65E+01
K-40	1.54E+03	2.40E+02	1.05E+02

Sample ID: 435151 **Sample Dates:** 2/6/2017 - 2/6/2017

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.27E-01	0.00E+00	5.27E-01
I-131	<7.13E+00	0.00E+00	7.13E+00
Cs-134	<8.25E+00	0.00E+00	8.25E+00
Cs-137	<9.74E+00	0.00E+00	9.74E+00
BaLa-140	<2.44E+00	0.00E+00	2.44E+00
Be-7	<5.19E+01	0.00E+00	5.19E+01
K-40	1.41E+03	2.32E+02	8.39E+01

Sample ID: 436300 **Sample Dates:** 2/20/2017 - 2/20/2017

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.82E-01	0.00E+00	5.82E-01
I-131	<7.67E+00	0.00E+00	7.67E+00
Cs-134	<7.40E+00	0.00E+00	7.40E+00
Cs-137	<7.73E+00	0.00E+00	7.73E+00
BaLa-140	<7.55E+00	0.00E+00	7.55E+00
Be-7	<5.40E+01	0.00E+00	5.40E+01
K-40	1.41E+03	2.24E+02	7.84E+01

Sample ID: 437631 **Sample Dates:** 3/6/2017 - 3/6/2017

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.46E-01	0.00E+00	6.46E-01
I-131	<8.06E+00	0.00E+00	8.06E+00
Cs-134	<6.82E+00	0.00E+00	6.82E+00
Cs-137	<9.10E+00	0.00E+00	9.10E+00
BaLa-140	<9.42E+00	0.00E+00	9.42E+00
Be-7	<5.58E+01	0.00E+00	5.58E+01
K-40	1.68E+03	2.53E+02	1.86E+01

Sample ID: 438845 **Sample Dates:** 3/20/2017 - 3/20/2017

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.30E-01	0.00E+00	6.30E-01
I-131	<8.10E+00	0.00E+00	8.10E+00
Cs-134	<9.47E+00	0.00E+00	9.47E+00
Cs-137	<7.08E+00	0.00E+00	7.08E+00

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 071 [CONTROL - SSE @ 10.2 miles]

Sample ID: 438845 **Sample Dates: 3/20/2017 - 3/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
BaLa-140	<6.73E+00	0.00E+00	6.73E+00
Be-7	<5.90E+01	0.00E+00	5.90E+01
K-40	1.57E+03	2.50E+02	1.20E+02

Sample ID: 440053 **Sample Dates: 4/3/2017 - 4/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.89E-01	0.00E+00	5.89E-01
I-131	<9.71E+00	0.00E+00	9.71E+00
Cs-134	<9.01E+00	0.00E+00	9.01E+00
Cs-137	<9.44E+00	0.00E+00	9.44E+00
BaLa-140	<9.73E+00	0.00E+00	9.73E+00
Be-7	<5.36E+01	0.00E+00	5.36E+01
K-40	1.58E+03	2.47E+02	7.96E+01

Sample ID: 441453 **Sample Dates: 4/17/2017 - 4/17/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.47E-01	0.00E+00	5.47E-01
I-131	<5.22E+00	0.00E+00	5.22E+00
Cs-134	<8.72E+00	0.00E+00	8.72E+00
Cs-137	<7.34E+00	0.00E+00	7.34E+00
BaLa-140	<2.19E+00	0.00E+00	2.19E+00
Be-7	<4.06E+01	0.00E+00	4.06E+01
K-40	1.47E+03	2.33E+02	1.06E+02

Sample ID: 442370 **Sample Dates: 5/1/2017 - 5/1/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.26E-01	0.00E+00	5.26E-01
I-131	<5.09E+00	0.00E+00	5.09E+00
Cs-134	<9.24E+00	0.00E+00	9.24E+00
Cs-137	<8.17E+00	0.00E+00	8.17E+00
BaLa-140	<9.27E+00	0.00E+00	9.27E+00
Be-7	<4.90E+01	0.00E+00	4.90E+01
K-40	1.43E+03	2.32E+02	8.49E+01

Sample ID: 443346 **Sample Dates: 5/15/2017 - 5/15/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.26E-01	0.00E+00	6.26E-01
I-131	<7.32E+00	0.00E+00	7.32E+00
Cs-134	<7.68E+00	0.00E+00	7.68E+00
Cs-137	<6.22E+00	0.00E+00	6.22E+00
BaLa-140	<1.13E+01	0.00E+00	1.13E+01
Be-7	<5.82E+01	0.00E+00	5.82E+01
K-40	1.54E+03	2.45E+02	8.52E+01

Sample ID: 444305 **Sample Dates: 5/30/2017 - 5/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.07E-01	0.00E+00	6.07E-01
I-131	<7.97E+00	0.00E+00	7.97E+00
Cs-134	<9.01E+00	0.00E+00	9.01E+00
Cs-137	<8.36E+00	0.00E+00	8.36E+00
BaLa-140	<6.66E+00	0.00E+00	6.66E+00
Be-7	<6.13E+01	0.00E+00	6.13E+01
K-40	1.34E+03	2.23E+02	7.47E+01

Sample ID: 446367 **Sample Dates: 6/12/2017 - 6/12/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.16E-01	0.00E+00	6.16E-01
I-131	<7.12E+00	0.00E+00	7.12E+00
Cs-134	<1.02E+01	0.00E+00	1.02E+01
Cs-137	<1.04E+01	0.00E+00	1.04E+01
BaLa-140	<2.43E+00	0.00E+00	2.43E+00
Be-7	<4.87E+01	0.00E+00	4.87E+01
K-40	1.44E+03	2.32E+02	1.92E+01

Sample ID: 447239 **Sample Dates: 6/26/2017 - 6/26/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.09E-01	0.00E+00	6.09E-01
I-131	<7.17E+00	0.00E+00	7.17E+00
Cs-134	<7.40E+00	0.00E+00	7.40E+00
Cs-137	<8.08E+00	0.00E+00	8.08E+00
BaLa-140	<6.24E+00	0.00E+00	6.24E+00
Be-7	<5.68E+01	0.00E+00	5.68E+01
K-40	1.42E+03	2.26E+02	9.12E+01

Sample ID: 448317 **Sample Dates: 7/10/2017 - 7/10/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.67E-01	0.00E+00	5.67E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 071 [CONTROL - SSE @ 10.2 miles]

Sample ID: 448317 **Sample Dates: 7/10/2017 - 7/10/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<8.35E+00	0.00E+00	8.35E+00
Cs-134	<5.63E+00	0.00E+00	5.63E+00
Cs-137	<7.71E+00	0.00E+00	7.71E+00
BaLa-140	<7.53E+00	0.00E+00	7.53E+00
Be-7	<4.06E+01	0.00E+00	4.06E+01
K-40	1.47E+03	2.33E+02	1.10E+02

Sample ID: 449262 **Sample Dates: 7/24/2017 - 7/24/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.93E-01	0.00E+00	5.93E-01
I-131	<7.25E+00	0.00E+00	7.25E+00
Cs-134	<9.46E+00	0.00E+00	9.46E+00
Cs-137	<6.58E+00	0.00E+00	6.58E+00
BaLa-140	<6.42E+00	0.00E+00	6.42E+00
Be-7	<5.31E+01	0.00E+00	5.31E+01
K-40	1.51E+03	2.48E+02	1.38E+02

Sample ID: 450253 **Sample Dates: 8/7/2017 - 8/7/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.42E-01	0.00E+00	6.42E-01
I-131	<7.18E+00	0.00E+00	7.18E+00
Cs-134	<9.82E+00	0.00E+00	9.82E+00
Cs-137	<9.39E+00	0.00E+00	9.39E+00
BaLa-140	<2.45E+00	0.00E+00	2.45E+00
Be-7	<4.53E+01	0.00E+00	4.53E+01
K-40	1.42E+03	2.30E+02	1.92E+01

Sample ID: 451230 **Sample Dates: 8/21/2017 - 8/21/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.33E-01	0.00E+00	5.33E-01
I-131	<6.95E+00	0.00E+00	6.95E+00
Cs-134	<6.30E+00	0.00E+00	6.30E+00
Cs-137	<7.73E+00	0.00E+00	7.73E+00
BaLa-140	<8.74E+00	0.00E+00	8.74E+00
Be-7	<5.16E+01	0.00E+00	5.16E+01
K-40	1.48E+03	2.31E+02	7.73E+01

Sample ID: 452411 **Sample Dates: 9/5/2017 - 9/5/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.39E-01	0.00E+00	6.39E-01
I-131	<5.80E+00	0.00E+00	5.80E+00
Cs-134	<9.75E+00	0.00E+00	9.75E+00
Cs-137	<8.21E+00	0.00E+00	8.21E+00
BaLa-140	<8.38E+00	0.00E+00	8.38E+00
Be-7	<4.15E+01	0.00E+00	4.15E+01
K-40	1.33E+03	2.24E+02	8.01E+01

Sample ID: 453485 **Sample Dates: 9/18/2017 - 9/18/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<4.99E-01	0.00E+00	4.99E-01
I-131	<6.96E+00	0.00E+00	6.96E+00
Cs-134	<6.88E+00	0.00E+00	6.88E+00
Cs-137	<5.57E+00	0.00E+00	5.57E+00
BaLa-140	<7.55E+00	0.00E+00	7.55E+00
Be-7	<4.65E+01	0.00E+00	4.65E+01
K-40	1.44E+03	2.27E+02	8.11E+01

Sample ID: 455121 **Sample Dates: 10/2/2017 - 10/2/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.36E-01	0.00E+00	5.36E-01
I-131	<8.04E+00	0.00E+00	8.04E+00
Cs-134	<5.65E+00	0.00E+00	5.65E+00
Cs-137	<6.08E+00	0.00E+00	6.08E+00
BaLa-140	<6.28E+00	0.00E+00	6.28E+00
Be-7	<6.11E+01	0.00E+00	6.11E+01
K-40	1.47E+03	2.27E+02	1.73E+01

Sample ID: 456083 **Sample Dates: 10/16/2017 - 10/16/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.58E-01	0.00E+00	5.58E-01
I-131	<7.44E+00	0.00E+00	7.44E+00
Cs-134	<7.74E+00	0.00E+00	7.74E+00
Cs-137	<8.10E+00	0.00E+00	8.10E+00
BaLa-140	<2.36E+00	0.00E+00	2.36E+00
Be-7	<4.92E+01	0.00E+00	4.92E+01
K-40	1.33E+03	2.20E+02	9.47E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 071 [CONTROL - SSE @ 10.2 miles]

Sample ID: 462005 **Sample Dates: 10/30/2017 - 10/30/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.36E-01	0.00E+00	6.36E-01
I-131	<6.40E+00	0.00E+00	6.40E+00
Cs-134	<5.91E+00	0.00E+00	5.91E+00
Cs-137	<6.85E+00	0.00E+00	6.85E+00
BaLa-140	<7.77E+00	0.00E+00	7.77E+00
Be-7	<5.41E+01	0.00E+00	5.41E+01
K-40	1.39E+03	2.25E+02	9.33E+01

Sample ID: 463133 **Sample Dates: 11/13/2017 - 11/13/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<5.21E-01	0.00E+00	5.21E-01
I-131	<6.24E+00	0.00E+00	6.24E+00
Cs-134	<1.07E+01	0.00E+00	1.07E+01
Cs-137	<6.03E+00	0.00E+00	6.03E+00
BaLa-140	<6.36E+00	0.00E+00	6.36E+00
Be-7	<4.38E+01	0.00E+00	4.38E+01
K-40	1.48E+03	2.45E+02	1.38E+02

Sample ID: 464184 **Sample Dates: 11/27/2017 - 11/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.06E-01	0.00E+00	6.06E-01
I-131	<8.79E+00	0.00E+00	8.79E+00
Cs-134	<6.88E+00	0.00E+00	6.88E+00
Cs-137	<6.96E+00	0.00E+00	6.96E+00
BaLa-140	<6.30E+00	0.00E+00	6.30E+00
Be-7	<6.87E+01	0.00E+00	6.87E+01
K-40	1.43E+03	2.29E+02	9.84E+01

Sample ID: 465007 **Sample Dates: 12/11/2017 - 12/11/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.02E-01	0.00E+00	6.02E-01
I-131	<8.28E+00	0.00E+00	8.28E+00
Cs-134	<1.03E+01	0.00E+00	1.03E+01
Cs-137	<8.36E+00	0.00E+00	8.36E+00
BaLa-140	<8.10E+00	0.00E+00	8.10E+00
Be-7	<5.31E+01	0.00E+00	5.31E+01
K-40	1.60E+03	2.55E+02	1.31E+02

Sample ID: 465664 **Sample Dates: 12/26/2017 - 12/26/2017**

Nuclide	Activity	2 Sigma Error	MDA
LLI-131	<6.49E-01	0.00E+00	6.49E-01
I-131	<6.32E+00	0.00E+00	6.32E+00
Cs-134	<7.88E+00	0.00E+00	7.88E+00
Cs-137	<6.08E+00	0.00E+00	6.08E+00
BaLa-140	<2.30E+00	0.00E+00	2.30E+00
Be-7	<5.22E+01	0.00E+00	5.22E+01
K-40	1.49E+03	2.40E+02	1.38E+02

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

Sample Point 067 [INDICATOR - SSE @ 4.34 miles]

Sample ID: 437633 **Sample Dates: 3/20/2017 - 3/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.40E+01	0.00E+00	3.40E+01
Co-58	<2.37E+01	0.00E+00	2.37E+01
Fe-59	<4.78E+01	0.00E+00	4.78E+01
Co-60	<2.83E+01	0.00E+00	2.83E+01
Zn-65	<4.50E+01	0.00E+00	4.50E+01
Zr-95	<4.99E+01	0.00E+00	4.99E+01
Nb-95	<2.92E+01	0.00E+00	2.92E+01
I-131	<3.53E+01	0.00E+00	3.53E+01
Cs-134	<3.91E+01	0.00E+00	3.91E+01
Cs-137	3.86E+01	3.88E+01	2.55E+01
Be-7	<2.43E+02	0.00E+00	2.43E+02
K-40	1.13E+04	1.20E+03	3.11E+02
Co-57	<2.12E+01	0.00E+00	2.12E+01
Mo-99	<1.02E+03	0.00E+00	1.02E+03
Ag-110M	<2.11E+01	0.00E+00	2.11E+01
Sb-122	<1.89E+02	0.00E+00	1.89E+02
Sb-125	<5.61E+01	0.00E+00	5.61E+01

Sample ID: 452412 **Sample Dates: 9/18/2017 - 9/18/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.96E+01	0.00E+00	3.96E+01

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

Sample Point 067 [INDICATOR - SSE @ 4.34 miles]

Sample ID: 452412 **Sample Dates: 9/18/2017 - 9/18/2017**

Nuclide	Activity	2 Sigma Error	MDA
Co-58	<2.30E+01	0.00E+00	2.30E+01
Fe-59	<5.75E+01	0.00E+00	5.75E+01
Co-60	<2.56E+01	0.00E+00	2.56E+01
Zn-65	<7.07E+01	0.00E+00	7.07E+01
Zr-95	<5.07E+01	0.00E+00	5.07E+01
Nb-95	<3.30E+01	0.00E+00	3.30E+01
I-131	<3.27E+01	0.00E+00	3.27E+01
Cs-134	<5.01E+01	0.00E+00	5.01E+01
Cs-137	7.61E+01	3.58E+01	5.32E+01
Be-7	1.55E+02	2.22E+02	3.67E+02
K-40	2.10E+04	2.01E+03	4.31E+02
Co-57	<2.62E+01	0.00E+00	2.62E+01
Mo-99	<4.79E+02	0.00E+00	4.79E+02
Ag-110M	<3.05E+01	0.00E+00	3.05E+01
Sb-122	<7.20E+01	0.00E+00	7.20E+01
Sb-125	<6.97E+01	0.00E+00	6.97E+01

Sample Point 068 [CONTROL - W @ 1.82 miles]

Sample ID: 437634 **Sample Dates: 3/20/2017 - 3/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.26E+01	0.00E+00	1.26E+01
Co-58	<1.62E+01	0.00E+00	1.62E+01
Fe-59	<3.81E+01	0.00E+00	3.81E+01
Co-60	<1.31E+01	0.00E+00	1.31E+01
Zn-65	<3.48E+01	0.00E+00	3.48E+01
Zr-95	<2.90E+01	0.00E+00	2.90E+01
Nb-95	<2.07E+01	0.00E+00	2.07E+01
I-131	<1.78E+01	0.00E+00	1.78E+01
Cs-134	<2.02E+01	0.00E+00	2.02E+01
Cs-137	<1.66E+01	0.00E+00	1.66E+01
Be-7	1.82E+02	1.20E+02	1.83E+02
K-40	5.50E+03	6.62E+02	2.96E+01
Co-57	<1.26E+01	0.00E+00	1.26E+01
Mo-99	<5.82E+02	0.00E+00	5.82E+02
Ag-110M	<1.67E+01	0.00E+00	1.67E+01
Sb-122	<1.02E+02	0.00E+00	1.02E+02
Sb-125	<3.60E+01	0.00E+00	3.60E+01

Sample ID: 452413 **Sample Dates: 9/18/2017 - 9/18/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.98E+01	0.00E+00	1.98E+01
Co-58	<1.38E+01	0.00E+00	1.38E+01
Fe-59	<3.02E+01	0.00E+00	3.02E+01
Co-60	<1.99E+01	0.00E+00	1.99E+01
Zn-65	<3.79E+01	0.00E+00	3.79E+01
Zr-95	<3.06E+01	0.00E+00	3.06E+01
Nb-95	<1.78E+01	0.00E+00	1.78E+01
I-131	<1.69E+01	0.00E+00	1.69E+01
Cs-134	<2.12E+01	0.00E+00	2.12E+01
Cs-137	<2.31E+01	0.00E+00	2.31E+01
Be-7	<1.87E+02	0.00E+00	1.87E+02
K-40	5.96E+03	7.28E+02	2.00E+02
Co-57	<1.51E+01	0.00E+00	1.51E+01
Mo-99	<2.74E+02	0.00E+00	2.74E+02
Ag-110M	<1.74E+01	0.00E+00	1.74E+01
Sb-122	<4.62E+01	0.00E+00	4.62E+01
Sb-125	<3.60E+01	0.00E+00	3.60E+01

Sample Point 091 [INDICATOR - S @ 2.09 miles]

Sample ID: 437635 **Sample Dates: 3/20/2017 - 3/20/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.16E+01	0.00E+00	3.16E+01
Co-58	<3.38E+01	0.00E+00	3.38E+01
Fe-59	<7.41E+01	0.00E+00	7.41E+01
Co-60	<3.60E+01	0.00E+00	3.60E+01
Zn-65	<6.72E+01	0.00E+00	6.72E+01
Zr-95	<5.89E+01	0.00E+00	5.89E+01
Nb-95	<3.70E+01	0.00E+00	3.70E+01
I-131	<4.33E+01	0.00E+00	4.33E+01

Media Type: SEDIMENT_SHORE Concentration (Activity): pCi/kg
Sample Point 091 [INDICATOR - S @ 2.09 miles]

Sample ID: 437635 Sample Dates: 3/20/2017 - 3/20/2017

Nuclide	Activity	2 Sigma Error	MDA
Cs-134	<5.14E+01	0.00E+00	5.14E+01
Cs-137	1.22E+02	3.75E+01	4.94E+01
Be-7	1.62E+01	1.60E+02	2.79E+02
K-40	2.48E+04	2.35E+03	5.31E+02
Co-57	<2.53E+01	0.00E+00	2.53E+01
Mo-99	<1.31E+03	0.00E+00	1.31E+03
Ag-110M	<3.03E+01	0.00E+00	3.03E+01
Sb-122	<1.78E+02	0.00E+00	1.78E+02
Sb-125	<6.95E+01	0.00E+00	6.95E+01

Sample ID: 452414 Sample Dates: 9/18/2017 - 9/18/2017

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<5.01E+01	0.00E+00	5.01E+01
Co-58	<3.65E+01	0.00E+00	3.65E+01
Fe-59	<7.74E+01	0.00E+00	7.74E+01
Co-60	<3.57E+01	0.00E+00	3.57E+01
Zn-65	<1.04E+02	0.00E+00	1.04E+02
Zr-95	<9.39E+01	0.00E+00	9.39E+01
Nb-95	<4.33E+01	0.00E+00	4.33E+01
I-131	<4.42E+01	0.00E+00	4.42E+01
Cs-134	<6.93E+01	0.00E+00	6.93E+01
Cs-137	<4.70E+01	0.00E+00	4.70E+01
Be-7	<2.43E+02	0.00E+00	2.43E+02
K-40	2.47E+04	2.42E+03	4.42E+02
Co-57	<3.59E+01	0.00E+00	3.59E+01
Mo-99	<6.84E+02	0.00E+00	6.84E+02
Ag-110M	<4.10E+01	0.00E+00	4.10E+01
Sb-122	<1.84E+02	0.00E+00	1.84E+02
Sb-125	<9.16E+01	0.00E+00	9.16E+01

Media Type: SURFACE WATER Concentration (Activity): pCi/l
Sample Point 062 [CONTROL - ENE @ 0.85 miles]

Sample ID: 432256 Sample Dates: 12/5/2016 - 1/3/2017

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.04E+00	0.00E+00	2.04E+00
Co-58	<2.19E+00	0.00E+00	2.19E+00
Fe-59	<4.32E+00	0.00E+00	4.32E+00
Co-60	<1.78E+00	0.00E+00	1.78E+00
Zn-65	<4.46E+00	0.00E+00	4.46E+00
Zr-95	<3.71E+00	0.00E+00	3.71E+00
Nb-95	<2.58E+00	0.00E+00	2.58E+00
I-131	<1.16E+01	0.00E+00	1.16E+01
Cs-134	<2.05E+00	0.00E+00	2.05E+00
Cs-137	<2.00E+00	0.00E+00	2.00E+00
BaLa-140	<5.99E+00	0.00E+00	5.99E+00
Be-7	<2.34E+01	0.00E+00	2.34E+01
K-40	2.99E+01	2.08E+01	3.12E+01

Sample ID: 434501 Sample Dates: 1/3/2017 - 1/30/2017

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<4.03E+00	0.00E+00	4.03E+00
Co-58	<2.88E+00	0.00E+00	2.88E+00
Fe-59	<8.34E+00	0.00E+00	8.34E+00
Co-60	<3.01E+00	0.00E+00	3.01E+00
Zn-65	<9.46E+00	0.00E+00	9.46E+00
Zr-95	<7.91E+00	0.00E+00	7.91E+00
Nb-95	<5.22E+00	0.00E+00	5.22E+00
I-131	<1.14E+01	0.00E+00	1.14E+01
Cs-134	<3.52E+00	0.00E+00	3.52E+00
Cs-137	<4.41E+00	0.00E+00	4.41E+00
BaLa-140	<1.06E+01	0.00E+00	1.06E+01
Be-7	<3.28E+01	0.00E+00	3.28E+01
K-40	<7.04E+01	0.00E+00	7.04E+01

Sample ID: 434748 Sample Dates: 12/5/2016 - 2/27/2017

Nuclide	Activity	2 Sigma Error	MDA
H3SW	<-1.6E+01	0.00E+00	1.90E+02

Sample ID: 436756 Sample Dates: 1/30/2017 - 2/27/2017

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.52E+00	0.00E+00	3.52E+00
Co-58	<2.83E+00	0.00E+00	2.83E+00

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

Sample Point 062 [CONTROL - ENE @ 0.85 miles]

Sample ID: 436756 **Sample Dates: 1/30/2017 - 2/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
Fe-59	<7.49E+00	0.00E+00	7.49E+00
Co-60	<2.73E+00	0.00E+00	2.73E+00
Zn-65	<5.03E+00	0.00E+00	5.03E+00
Zr-95	<6.07E+00	0.00E+00	6.07E+00
Nb-95	<4.26E+00	0.00E+00	4.26E+00
I-131	<1.14E+01	0.00E+00	1.14E+01
Cs-134	<2.66E+00	0.00E+00	2.66E+00
Cs-137	<3.41E+00	0.00E+00	3.41E+00
BaLa-140	<9.96E+00	0.00E+00	9.96E+00
Be-7	<2.49E+01	0.00E+00	2.49E+01
K-40	<5.05E+01	0.00E+00	5.05E+01

Sample ID: 439227 **Sample Dates: 2/27/2017 - 3/27/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.29E+00	0.00E+00	3.29E+00
Co-58	<4.18E+00	0.00E+00	4.18E+00
Fe-59	<8.67E+00	0.00E+00	8.67E+00
Co-60	<2.46E+00	0.00E+00	2.46E+00
Zn-65	<9.25E+00	0.00E+00	9.25E+00
Zr-95	<6.48E+00	0.00E+00	6.48E+00
Nb-95	<3.77E+00	0.00E+00	3.77E+00
I-131	<1.08E+01	0.00E+00	1.08E+01
Cs-134	<4.63E+00	0.00E+00	4.63E+00
Cs-137	<4.05E+00	0.00E+00	4.05E+00
BaLa-140	<1.12E+01	0.00E+00	1.12E+01
Be-7	<4.19E+01	0.00E+00	4.19E+01
K-40	<5.99E+01	0.00E+00	5.99E+01

Sample ID: 441902 **Sample Dates: 3/27/2017 - 4/24/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.24E+00	0.00E+00	3.24E+00
Co-58	<2.67E+00	0.00E+00	2.67E+00
Fe-59	<6.07E+00	0.00E+00	6.07E+00
Co-60	<2.91E+00	0.00E+00	2.91E+00
Zn-65	<5.94E+00	0.00E+00	5.94E+00
Zr-95	<5.35E+00	0.00E+00	5.35E+00
Nb-95	<3.51E+00	0.00E+00	3.51E+00
I-131	<1.14E+01	0.00E+00	1.14E+01
Cs-134	<3.22E+00	0.00E+00	3.22E+00
Cs-137	<3.50E+00	0.00E+00	3.50E+00
BaLa-140	<9.38E+00	0.00E+00	9.38E+00
Be-7	<2.70E+01	0.00E+00	2.70E+01
K-40	7.31E+01	3.23E+01	3.99E+01

Sample ID: 442371 **Sample Dates: 2/27/2017 - 5/22/2017**

Nuclide	Activity	2 Sigma Error	MDA
H3SW	<-1.7E+01	0.00E+00	1.98E+02

Sample ID: 443898 **Sample Dates: 4/24/2017 - 5/22/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.80E+00	0.00E+00	2.80E+00
Co-58	<2.69E+00	0.00E+00	2.69E+00
Fe-59	<7.75E+00	0.00E+00	7.75E+00
Co-60	<3.05E+00	0.00E+00	3.05E+00
Zn-65	<5.97E+00	0.00E+00	5.97E+00
Zr-95	<6.58E+00	0.00E+00	6.58E+00
Nb-95	<3.51E+00	0.00E+00	3.51E+00
I-131	<1.09E+01	0.00E+00	1.09E+01
Cs-134	<3.11E+00	0.00E+00	3.11E+00
Cs-137	<3.32E+00	0.00E+00	3.32E+00
BaLa-140	<7.28E+00	0.00E+00	7.28E+00
Be-7	<2.44E+01	0.00E+00	2.44E+01
K-40	6.62E+01	3.43E+01	4.54E+01

Sample ID: 446865 **Sample Dates: 5/22/2017 - 6/19/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.09E+00	0.00E+00	3.09E+00
Co-58	<3.44E+00	0.00E+00	3.44E+00
Fe-59	<5.73E+00	0.00E+00	5.73E+00
Co-60	<3.11E+00	0.00E+00	3.11E+00
Zn-65	<6.10E+00	0.00E+00	6.10E+00
Zr-95	<4.87E+00	0.00E+00	4.87E+00
Nb-95	<3.73E+00	0.00E+00	3.73E+00

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

Sample Point 062 [CONTROL - ENE @ 0.85 miles]

Sample ID: 446865 **Sample Dates: 5/22/2017 - 6/19/2017**

Nuclide	Activity	2 Sigma Error	MDA
I-131	<1.05E+01	0.00E+00	1.05E+01
Cs-134	<3.88E+00	0.00E+00	3.88E+00
Cs-137	<2.88E+00	0.00E+00	2.88E+00
BaLa-140	<7.44E+00	0.00E+00	7.44E+00
Be-7	<3.29E+01	0.00E+00	3.29E+01
K-40	2.77E+01	3.03E+01	4.86E+01

Sample ID: 448933 **Sample Dates: 6/19/2017 - 7/17/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.01E+00	0.00E+00	3.01E+00
Co-58	<3.73E+00	0.00E+00	3.73E+00
Fe-59	<7.20E+00	0.00E+00	7.20E+00
Co-60	<3.35E+00	0.00E+00	3.35E+00
Zn-65	<5.87E+00	0.00E+00	5.87E+00
Zr-95	<6.93E+00	0.00E+00	6.93E+00
Nb-95	<3.64E+00	0.00E+00	3.64E+00
I-131	<1.16E+01	0.00E+00	1.16E+01
Cs-134	<3.73E+00	0.00E+00	3.73E+00
Cs-137	<3.83E+00	0.00E+00	3.83E+00
BaLa-140	<8.82E+00	0.00E+00	8.82E+00
Be-7	<2.81E+01	0.00E+00	2.81E+01
K-40	2.26E+01	2.46E+01	3.92E+01

Sample ID: 450057 **Sample Dates: 5/22/2017 - 8/14/2017**

Nuclide	Activity	2 Sigma Error	MDA
H3SW	<1.20E+01	0.00E+00	2.03E+02

Sample ID: 450766 **Sample Dates: 7/17/2017 - 8/14/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.68E+00	0.00E+00	2.68E+00
Co-58	<2.32E+00	0.00E+00	2.32E+00
Fe-59	<6.07E+00	0.00E+00	6.07E+00
Co-60	<2.81E+00	0.00E+00	2.81E+00
Zn-65	<5.16E+00	0.00E+00	5.16E+00
Zr-95	<4.86E+00	0.00E+00	4.86E+00
Nb-95	<4.06E+00	0.00E+00	4.06E+00
I-131	<1.01E+01	0.00E+00	1.01E+01
Cs-134	<2.60E+00	0.00E+00	2.60E+00
Cs-137	<2.49E+00	0.00E+00	2.49E+00
BaLa-140	<7.03E+00	0.00E+00	7.03E+00
Be-7	<2.13E+01	0.00E+00	2.13E+01
K-40	6.42E+01	2.78E+01	3.60E+01

Sample ID: 452826 **Sample Dates: 8/14/2017 - 9/11/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.05E+00	0.00E+00	3.05E+00
Co-58	<3.40E+00	0.00E+00	3.40E+00
Fe-59	<8.38E+00	0.00E+00	8.38E+00
Co-60	<3.27E+00	0.00E+00	3.27E+00
Zn-65	<4.81E+00	0.00E+00	4.81E+00
Zr-95	<6.82E+00	0.00E+00	6.82E+00
Nb-95	<4.20E+00	0.00E+00	4.20E+00
I-131	<1.14E+01	0.00E+00	1.14E+01
Cs-134	<3.39E+00	0.00E+00	3.39E+00
Cs-137	<3.77E+00	0.00E+00	3.77E+00
BaLa-140	<8.60E+00	0.00E+00	8.60E+00
Be-7	<2.62E+01	0.00E+00	2.62E+01
K-40	4.96E+01	3.20E+01	4.56E+01

Sample ID: 455453 **Sample Dates: 9/11/2017 - 10/9/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.03E+00	0.00E+00	3.03E+00
Co-58	<2.91E+00	0.00E+00	2.91E+00
Fe-59	<6.04E+00	0.00E+00	6.04E+00
Co-60	<2.74E+00	0.00E+00	2.74E+00
Zn-65	<6.40E+00	0.00E+00	6.40E+00
Zr-95	<5.16E+00	0.00E+00	5.16E+00
Nb-95	<2.61E+00	0.00E+00	2.61E+00
I-131	<1.15E+01	0.00E+00	1.15E+01
Cs-134	<3.04E+00	0.00E+00	3.04E+00
Cs-137	<2.86E+00	0.00E+00	2.86E+00
BaLa-140	<5.50E+00	0.00E+00	5.50E+00
Be-7	<2.50E+01	0.00E+00	2.50E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 062 [CONTROL - ENE @ 0.85 miles]

Sample ID: 455453 **Sample Dates: 9/11/2017 - 10/9/2017**

Nuclide	Activity	2 Sigma Error	MDA
K-40	<4.59E+01	0.00E+00	4.59E+01

Sample ID: 462648 **Sample Dates: 10/9/2017 - 11/6/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.71E+00	0.00E+00	2.71E+00
Co-58	<3.01E+00	0.00E+00	3.01E+00
Fe-59	<7.72E+00	0.00E+00	7.72E+00
Co-60	<3.64E+00	0.00E+00	3.64E+00
Zn-65	<7.67E+00	0.00E+00	7.67E+00
Zr-95	<6.46E+00	0.00E+00	6.46E+00
Nb-95	<5.02E+00	0.00E+00	5.02E+00
I-131	<1.14E+01	0.00E+00	1.14E+01
Cs-134	<3.82E+00	0.00E+00	3.82E+00
Cs-137	<3.90E+00	0.00E+00	3.90E+00
BaLa-140	<1.08E+01	0.00E+00	1.08E+01
Be-7	<3.52E+01	0.00E+00	3.52E+01
K-40	<7.16E+01	0.00E+00	7.16E+01

Sample ID: 462378 **Sample Dates: 8/14/2017 - 12/4/2017**

Nuclide	Activity	2 Sigma Error	MDA
H3SW	<-5.6E+01	0.00E+00	1.90E+02

Sample ID: 464745 **Sample Dates: 11/6/2017 - 12/4/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.19E+00	0.00E+00	3.19E+00
Co-58	<3.00E+00	0.00E+00	3.00E+00
Fe-59	<6.09E+00	0.00E+00	6.09E+00
Co-60	<4.08E+00	0.00E+00	4.08E+00
Zn-65	<7.10E+00	0.00E+00	7.10E+00
Zr-95	<7.34E+00	0.00E+00	7.34E+00
Nb-95	<3.79E+00	0.00E+00	3.79E+00
I-131	<1.10E+01	0.00E+00	1.10E+01
Cs-134	<3.85E+00	0.00E+00	3.85E+00
Cs-137	<3.73E+00	0.00E+00	3.73E+00
BaLa-140	<1.07E+01	0.00E+00	1.07E+01
Be-7	<3.35E+01	0.00E+00	3.35E+01
K-40	1.09E+01	2.67E+01	4.72E+01

Sample ID: 466023 **Sample Dates: 12/4/2017 - 1/2/2018**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.77E+00	0.00E+00	1.77E+00
Co-58	<1.93E+00	0.00E+00	1.93E+00
Fe-59	<4.05E+00	0.00E+00	4.05E+00
Co-60	<1.70E+00	0.00E+00	1.70E+00
Zn-65	<3.73E+00	0.00E+00	3.73E+00
Zr-95	<4.07E+00	0.00E+00	4.07E+00
Nb-95	<2.66E+00	0.00E+00	2.66E+00
I-131	<1.03E+01	0.00E+00	1.03E+01
Cs-134	<2.16E+00	0.00E+00	2.16E+00
Cs-137	<1.95E+00	0.00E+00	1.95E+00
BaLa-140	<4.67E+00	0.00E+00	4.67E+00
Be-7	<1.73E+01	0.00E+00	1.73E+01
K-40	4.95E+01	1.65E+01	1.76E+01
H3SW	<6.56E+01	0.00E+00	1.67E+02

Sample Point 063.1 [INDICATOR - E @ 0.79 miles]

Sample ID: 432257 **Sample Dates: 12/5/2016 - 1/3/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.83E+00	0.00E+00	2.83E+00
Co-58	<2.27E+00	0.00E+00	2.27E+00
Fe-59	<4.78E+00	0.00E+00	4.78E+00
Co-60	<1.81E+00	0.00E+00	1.81E+00
Zn-65	<5.46E+00	0.00E+00	5.46E+00
Zr-95	<5.33E+00	0.00E+00	5.33E+00
Nb-95	<3.35E+00	0.00E+00	3.35E+00
I-131	<1.16E+01	0.00E+00	1.16E+01
Cs-134	<3.18E+00	0.00E+00	3.18E+00
Cs-137	<2.71E+00	0.00E+00	2.71E+00
BaLa-140	<6.44E+00	0.00E+00	6.44E+00
Be-7	<2.69E+01	0.00E+00	2.69E+01
K-40	6.83E+01	3.03E+01	4.01E+01

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

Sample Point 063.1 [INDICATOR - E @ 0.79 miles]

Sample ID: 434502 Sample Dates: 1/3/2017 - 1/30/2017

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.66E+00	0.00E+00	3.66E+00
Co-58	<4.43E+00	0.00E+00	4.43E+00
Fe-59	<7.96E+00	0.00E+00	7.96E+00
Co-60	<3.92E+00	0.00E+00	3.92E+00
Zn-65	<8.45E+00	0.00E+00	8.45E+00
Zr-95	<7.20E+00	0.00E+00	7.20E+00
Nb-95	<3.54E+00	0.00E+00	3.54E+00
I-131	<1.09E+01	0.00E+00	1.09E+01
Cs-134	<3.56E+00	0.00E+00	3.56E+00
Cs-137	<3.82E+00	0.00E+00	3.82E+00
BaLa-140	<9.21E+00	0.00E+00	9.21E+00
Be-7	<3.66E+01	0.00E+00	3.66E+01
K-40	<6.06E+01	0.00E+00	6.06E+01

Sample ID: 434749 Sample Dates: 12/5/2016 - 2/27/2017

Nuclide	Activity	2 Sigma Error	MDA
H3SW	2.58E+03	1.69E+02	1.90E+02

Sample ID: 436757 Sample Dates: 1/30/2017 - 2/27/2017

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.77E+00	0.00E+00	3.77E+00
Co-58	<4.37E+00	0.00E+00	4.37E+00
Fe-59	<6.51E+00	0.00E+00	6.51E+00
Co-60	<3.66E+00	0.00E+00	3.66E+00
Zn-65	<7.04E+00	0.00E+00	7.04E+00
Zr-95	<6.69E+00	0.00E+00	6.69E+00
Nb-95	<3.98E+00	0.00E+00	3.98E+00
I-131	<1.12E+01	0.00E+00	1.12E+01
Cs-134	<3.98E+00	0.00E+00	3.98E+00
Cs-137	<3.19E+00	0.00E+00	3.19E+00
BaLa-140	<6.55E+00	0.00E+00	6.55E+00
Be-7	<2.57E+01	0.00E+00	2.57E+01
K-40	2.81E+01	3.10E+01	4.98E+01

Sample ID: 439228 Sample Dates: 2/27/2017 - 3/27/2017

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.76E+00	0.00E+00	2.76E+00
Co-58	<3.40E+00	0.00E+00	3.40E+00
Fe-59	<4.17E+00	0.00E+00	4.17E+00
Co-60	<2.27E+00	0.00E+00	2.27E+00
Zn-65	<6.14E+00	0.00E+00	6.14E+00
Zr-95	<5.91E+00	0.00E+00	5.91E+00
Nb-95	<3.89E+00	0.00E+00	3.89E+00
I-131	<1.15E+01	0.00E+00	1.15E+01
Cs-134	<2.91E+00	0.00E+00	2.91E+00
Cs-137	<2.73E+00	0.00E+00	2.73E+00
BaLa-140	<7.12E+00	0.00E+00	7.12E+00
Be-7	<2.80E+01	0.00E+00	2.80E+01
K-40	3.62E+01	2.20E+01	2.94E+01

Sample ID: 441903 Sample Dates: 3/27/2017 - 4/24/2017

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<4.34E+00	0.00E+00	4.34E+00
Co-58	<4.21E+00	0.00E+00	4.21E+00
Fe-59	<7.61E+00	0.00E+00	7.61E+00
Co-60	<2.98E+00	0.00E+00	2.98E+00
Zn-65	<1.07E+01	0.00E+00	1.07E+01
Zr-95	<1.11E+01	0.00E+00	1.11E+01
Nb-95	<6.35E+00	0.00E+00	6.35E+00
I-131	<1.17E+01	0.00E+00	1.17E+01
Cs-134	<3.74E+00	0.00E+00	3.74E+00
Cs-137	<4.36E+00	0.00E+00	4.36E+00
BaLa-140	<9.55E+00	0.00E+00	9.55E+00
Be-7	<3.52E+01	0.00E+00	3.52E+01
K-40	3.72E+01	2.48E+01	2.76E+01

Sample ID: 442372 Sample Dates: 2/27/2017 - 5/22/2017

Nuclide	Activity	2 Sigma Error	MDA
H3SW	3.24E+03	1.96E+02	1.97E+02

Sample ID: 443899 Sample Dates: 4/24/2017 - 5/22/2017

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.03E+00	0.00E+00	3.03E+00
Co-58	<3.49E+00	0.00E+00	3.49E+00
Fe-59	<7.58E+00	0.00E+00	7.58E+00

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

Sample Point 063.1 [INDICATOR - E @ 0.79 miles]

Sample ID: 443899 **Sample Dates: 4/24/2017 - 5/22/2017**

Nuclide	Activity	2 Sigma Error	MDA
Co-60	<2.88E+00	0.00E+00	2.88E+00
Zn-65	<5.90E+00	0.00E+00	5.90E+00
Zr-95	<5.75E+00	0.00E+00	5.75E+00
Nb-95	<4.19E+00	0.00E+00	4.19E+00
I-131	<1.15E+01	0.00E+00	1.15E+01
Cs-134	<3.16E+00	0.00E+00	3.16E+00
Cs-137	<2.76E+00	0.00E+00	2.76E+00
BaLa-140	<8.65E+00	0.00E+00	8.65E+00
Be-7	<2.84E+01	0.00E+00	2.84E+01
K-40	7.08E+01	3.62E+01	5.18E+01

Sample ID: 446866 **Sample Dates: 6/19/2017 - 6/19/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.22E+00	0.00E+00	3.22E+00
Co-58	<3.47E+00	0.00E+00	3.47E+00
Fe-59	<6.50E+00	0.00E+00	6.50E+00
Co-60	<3.65E+00	0.00E+00	3.65E+00
Zn-65	<8.49E+00	0.00E+00	8.49E+00
Zr-95	<4.63E+00	0.00E+00	4.63E+00
Nb-95	<3.61E+00	0.00E+00	3.61E+00
I-131	<4.95E+00	0.00E+00	4.95E+00
Cs-134	<3.64E+00	0.00E+00	3.64E+00
Cs-137	<3.68E+00	0.00E+00	3.68E+00
BaLa-140	<5.37E+00	0.00E+00	5.37E+00
Be-7	<1.98E+01	0.00E+00	1.98E+01
K-40	3.69E+01	3.08E+01	4.39E+01

Sample ID: 448934 **Sample Dates: 6/19/2017 - 7/17/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.44E+00	0.00E+00	3.44E+00
Co-58	<3.67E+00	0.00E+00	3.67E+00
Fe-59	<9.44E+00	0.00E+00	9.44E+00
Co-60	<4.42E+00	0.00E+00	4.42E+00
Zn-65	<7.42E+00	0.00E+00	7.42E+00
Zr-95	<8.38E+00	0.00E+00	8.38E+00
Nb-95	<4.90E+00	0.00E+00	4.90E+00
I-131	<1.20E+01	0.00E+00	1.20E+01
Cs-134	<4.60E+00	0.00E+00	4.60E+00
Cs-137	<3.57E+00	0.00E+00	3.57E+00
BaLa-140	<1.11E+01	0.00E+00	1.11E+01
Be-7	<3.32E+01	0.00E+00	3.32E+01
K-40	8.27E+01	3.76E+01	4.51E+01

Sample ID: 450058 **Sample Dates: 6/19/2017 - 8/14/2017**

Nuclide	Activity	2 Sigma Error	MDA
H3SW	3.41E+03	2.02E+02	2.05E+02

Sample ID: 450767 **Sample Dates: 7/17/2017 - 8/14/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.43E+00	0.00E+00	2.43E+00
Co-58	<2.70E+00	0.00E+00	2.70E+00
Fe-59	<5.29E+00	0.00E+00	5.29E+00
Co-60	<2.87E+00	0.00E+00	2.87E+00
Zn-65	<7.07E+00	0.00E+00	7.07E+00
Zr-95	<5.26E+00	0.00E+00	5.26E+00
Nb-95	<3.85E+00	0.00E+00	3.85E+00
I-131	<1.20E+01	0.00E+00	1.20E+01
Cs-134	<2.83E+00	0.00E+00	2.83E+00
Cs-137	<2.23E+00	0.00E+00	2.23E+00
BaLa-140	<6.12E+00	0.00E+00	6.12E+00
Be-7	<3.11E+01	0.00E+00	3.11E+01
K-40	1.26E+01	2.11E+01	3.60E+01

Sample ID: 452827 **Sample Dates: 8/14/2017 - 9/11/2017**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.20E+00	0.00E+00	2.20E+00
Co-58	<1.56E+00	0.00E+00	1.56E+00
Fe-59	<6.78E+00	0.00E+00	6.78E+00
Co-60	<2.34E+00	0.00E+00	2.34E+00
Zn-65	<5.61E+00	0.00E+00	5.61E+00
Zr-95	<4.34E+00	0.00E+00	4.34E+00
Nb-95	<3.58E+00	0.00E+00	3.58E+00
I-131	<1.03E+01	0.00E+00	1.03E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 063.1 [INDICATOR - E @ 0.79 miles]

Sample ID: 452827 Sample Dates: 8/14/2017 - 9/11/2017

Nuclide	Activity	2 Sigma Error	MDA
Cs-134	<2.76E+00	0.00E+00	2.76E+00
Cs-137	<2.77E+00	0.00E+00	2.77E+00
BaLa-140	<7.26E+00	0.00E+00	7.26E+00
Be-7	<2.41E+01	0.00E+00	2.41E+01
K-40	5.52E+01	2.49E+01	3.09E+01

Sample ID: 455454 Sample Dates: 9/11/2017 - 10/9/2017

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<4.36E+00	0.00E+00	4.36E+00
Co-58	<4.28E+00	0.00E+00	4.28E+00
Fe-59	<7.78E+00	0.00E+00	7.78E+00
Co-60	<2.37E+00	0.00E+00	2.37E+00
Zn-65	<8.92E+00	0.00E+00	8.92E+00
Zr-95	<6.75E+00	0.00E+00	6.75E+00
Nb-95	<5.56E+00	0.00E+00	5.56E+00
I-131	<1.01E+01	0.00E+00	1.01E+01
Cs-134	<4.83E+00	0.00E+00	4.83E+00
Cs-137	<4.04E+00	0.00E+00	4.04E+00
BaLa-140	<1.15E+01	0.00E+00	1.15E+01
Be-7	<3.83E+01	0.00E+00	3.83E+01
K-40	3.70E+01	2.72E+01	3.50E+01

Sample ID: 462649 Sample Dates: 10/9/2017 - 11/6/2017

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<4.41E+00	0.00E+00	4.41E+00
Co-58	<4.24E+00	0.00E+00	4.24E+00
Fe-59	<8.67E+00	0.00E+00	8.67E+00
Co-60	<3.83E+00	0.00E+00	3.83E+00
Zn-65	<8.09E+00	0.00E+00	8.09E+00
Zr-95	<5.66E+00	0.00E+00	5.66E+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	<4.41E+00	0.00E+00	4.41E+00
Cs-137	<3.71E+00	0.00E+00	3.71E+00
BaLa-140	<8.67E+00	0.00E+00	8.67E+00
Be-7	7.83E+00	2.23E+01	3.94E+01
K-40	7.53E+01	3.31E+01	3.06E+01

Sample ID: 462379 Sample Dates: 8/14/2017 - 12/4/2017

Nuclide	Activity	2 Sigma Error	MDA
H3SW	1.09E+04	3.05E+02	1.89E+02

Sample ID: 464746 Sample Dates: 11/6/2017 - 12/4/2017

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.12E+00	0.00E+00	3.12E+00
Co-58	<2.99E+00	0.00E+00	2.99E+00
Fe-59	<6.46E+00	0.00E+00	6.46E+00
Co-60	<2.75E+00	0.00E+00	2.75E+00
Zn-65	<5.81E+00	0.00E+00	5.81E+00
Zr-95	<5.74E+00	0.00E+00	5.74E+00
Nb-95	<3.35E+00	0.00E+00	3.35E+00
I-131	<1.08E+01	0.00E+00	1.08E+01
Cs-134	<3.53E+00	0.00E+00	3.53E+00
Cs-137	<3.20E+00	0.00E+00	3.20E+00
BaLa-140	<5.76E+00	0.00E+00	5.76E+00
Be-7	<2.81E+01	0.00E+00	2.81E+01
K-40	2.67E+01	2.74E+01	4.37E+01

Sample ID: 466024 Sample Dates: 12/4/2017 - 1/2/2018

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.24E+00	0.00E+00	2.24E+00
Co-58	<3.21E+00	0.00E+00	3.21E+00
Fe-59	<5.45E+00	0.00E+00	5.45E+00
Co-60	<2.44E+00	0.00E+00	2.44E+00
Zn-65	<4.87E+00	0.00E+00	4.87E+00
Zr-95	<4.20E+00	0.00E+00	4.20E+00
Nb-95	<3.19E+00	0.00E+00	3.19E+00
I-131	<1.11E+01	0.00E+00	1.11E+01
Cs-134	<2.99E+00	0.00E+00	2.99E+00
Cs-137	<2.79E+00	0.00E+00	2.79E+00
BaLa-140	<6.99E+00	0.00E+00	6.99E+00
Be-7	<2.75E+01	0.00E+00	2.75E+01
K-40	3.18E+01	2.17E+01	3.18E+01

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

Sample Point 063.1 [INDICATOR - E @ 0.79 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
466024	12/4/2017 - 1/2/2018	H3SW	7.69E+03	2.60E+02	1.66E+02

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 020 [INDICATOR - N @ 0.16 miles] TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437250	12/13/2016 - 3/14/2017	mR/Std Qtr	21.70
445148	3/14/2017 - 6/13/2017	mR/Std Qtr	18.31
452179	6/13/2017 - 9/13/2017	mR/Std Qtr	13.42
464561	9/13/2017 - 12/12/2017	mR/Std Qtr	18.94

Sample Point 021 [INDICATOR - NNE @ 0.25 miles] TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437251	12/13/2016 - 3/14/2017	mR/Std Qtr	17.04
445149	3/14/2017 - 6/13/2017	mR/Std Qtr	13.43
452180	6/13/2017 - 9/13/2017	mR/Std Qtr	8.99
464562	9/13/2017 - 12/12/2017	mR/Std Qtr	14.17

Sample Point 022 [INDICATOR - NE @ 0.53 miles] TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437252	12/13/2016 - 3/14/2017	mR/Std Qtr	26.23
445150	3/14/2017 - 6/13/2017	mR/Std Qtr	22.18
452181	6/13/2017 - 9/13/2017	mR/Std Qtr	18.06
464563	9/13/2017 - 12/12/2017	mR/Std Qtr	23.38

Sample Point 023 [INDICATOR - ENE @ 0.93 miles] TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437253	12/13/2016 - 3/14/2017	mR/Std Qtr	26.62
445151	3/14/2017 - 6/13/2017	mR/Std Qtr	20.34
452182	6/13/2017 - 9/13/2017	mR/Std Qtr	16.43
464564	9/13/2017 - 12/12/2017	mR/Std Qtr	22.04

Sample Point 024 [INDICATOR - E @ 0.81 miles] TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437254	12/13/2016 - 3/14/2017	mR/Std Qtr	34.65
445152	3/14/2017 - 6/13/2017	mR/Std Qtr	26.86
452183	6/13/2017 - 9/13/2017	mR/Std Qtr	24.95
464565	9/13/2017 - 12/12/2017	mR/Std Qtr	30.14

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 025 [INDICATOR - ESE @ 0.42 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437255	12/13/2016 - 3/14/2017	mR/Std Qtr	21.79
445153	3/14/2017 - 6/13/2017	mR/Std Qtr	17.22
452184	6/13/2017 - 9/13/2017	mR/Std Qtr	12.29
464566	9/13/2017 - 12/12/2017	mR/Std Qtr	19.37

Sample Point 026 [INDICATOR - SE @ 0.34 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437256	12/13/2016 - 3/14/2017	mR/Std Qtr	20.00
445154	3/14/2017 - 6/13/2017	mR/Std Qtr	16.61
452185	6/13/2017 - 9/13/2017	mR/Std Qtr	12.34
464567	9/13/2017 - 12/12/2017	mR/Std Qtr	18.05

Sample Point 027 [INDICATOR - SSE @ 0.49 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437257	12/13/2016 - 3/14/2017	mR/Std Qtr	22.31
445155	3/14/2017 - 6/13/2017	mR/Std Qtr	18.53
452186	6/13/2017 - 9/13/2017	mR/Std Qtr	13.37
464568	9/13/2017 - 12/12/2017	mR/Std Qtr	19.41

Sample Point 028 [INDICATOR - S @ 0.46 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437258	12/13/2016 - 3/14/2017	mR/Std Qtr	18.76
445156	3/14/2017 - 6/13/2017	mR/Std Qtr	15.12
452187	6/13/2017 - 9/13/2017	mR/Std Qtr	11.21
464569	9/13/2017 - 12/12/2017	mR/Std Qtr	17.22

Sample Point 029 [INDICATOR - SSW @ 0.56 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437259	12/13/2016 - 3/14/2017	mR/Std Qtr	18.29
445157	3/14/2017 - 6/13/2017	mR/Std Qtr	14.35
452188	6/13/2017 - 9/13/2017	mR/Std Qtr	10.49
464570	9/13/2017 - 12/12/2017	mR/Std Qtr	16.05

Sample Point 030 [INDICATOR - SW @ 0.42 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437260	12/13/2016 - 3/14/2017	mR/Std Qtr	20.45
445158	3/14/2017 - 6/13/2017	mR/Std Qtr	18.04

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 030 [INDICATOR - SW @ 0.42 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
452189	6/13/2017 - 9/13/2017	mR/Std Qtr	13.57
464571	9/13/2017 - 12/12/2017	mR/Std Qtr	20.72

Sample Point 031 [INDICATOR - WSW @ 0.27 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437261	12/13/2016 - 3/14/2017	mR/Std Qtr	18.69
445159	3/14/2017 - 6/13/2017	mR/Std Qtr	15.90
452190	6/13/2017 - 9/13/2017	mR/Std Qtr	12.09
464572	9/13/2017 - 12/12/2017	mR/Std Qtr	16.78

Sample Point 032 [INDICATOR - WNW @ 0.19 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437262	12/13/2016 - 3/14/2017	mR/Std Qtr	23.14
445160	3/14/2017 - 6/13/2017	mR/Std Qtr	18.67
452191	6/13/2017 - 9/13/2017	mR/Std Qtr	14.54
464573	9/13/2017 - 12/12/2017	mR/Std Qtr	18.02

Sample Point 033 [INDICATOR - WNW @ 0.21 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437263	12/13/2016 - 3/14/2017	mR/Std Qtr	20.67
445161	3/14/2017 - 6/13/2017	mR/Std Qtr	16.19
452192	6/13/2017 - 9/13/2017	mR/Std Qtr	11.99
464574	9/13/2017 - 12/12/2017	mR/Std Qtr	17.22

Sample Point 034 [INDICATOR - NW @ 0.22 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437264	12/13/2016 - 3/14/2017	mR/Std Qtr	20.29
445162	3/14/2017 - 6/13/2017	mR/Std Qtr	16.66
452193	6/13/2017 - 9/13/2017	mR/Std Qtr	13.34
464575	9/13/2017 - 12/12/2017	mR/Std Qtr	17.46

Sample Point 035 [INDICATOR - NNW @ 0.17 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437265	12/13/2016 - 3/14/2017	mR/Std Qtr	27.70
445163	3/14/2017 - 6/13/2017	mR/Std Qtr	22.76
452194	6/13/2017 - 9/13/2017	mR/Std Qtr	17.37
464576	9/13/2017 - 12/12/2017	mR/Std Qtr	22.64

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 036 [INDICATOR - N @ 4.18 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
437266	12/13/2016 - 3/14/2017	mR/Std Qtr	30.84
445164	3/14/2017 - 6/13/2017	mR/Std Qtr	23.55
452195	6/13/2017 - 9/13/2017	mR/Std Qtr	21.75
464577	9/13/2017 - 12/12/2017	mR/Std Qtr	27.55

Sample Point 037 [INDICATOR - NNE @ 4.85 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
437267	12/13/2016 - 3/14/2017	mR/Std Qtr	24.76
445165	3/14/2017 - 6/13/2017	mR/Std Qtr	21.27
452196	6/13/2017 - 9/13/2017	mR/Std Qtr	12.94
464578	9/13/2017 - 12/12/2017	mR/Std Qtr	18.45

Sample Point 038 [INDICATOR - NE @ 4.24 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
437268	12/13/2016 - 3/14/2017	mR/Std Qtr	26.21
445166	3/14/2017 - 6/13/2017	mR/Std Qtr	21.76
452197	6/13/2017 - 9/13/2017	mR/Std Qtr	17.04
464579	9/13/2017 - 12/12/2017	mR/Std Qtr	22.9

Sample Point 039 [INDICATOR - ENE @ 4.02 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
437269	12/13/2016 - 3/14/2017	mR/Std Qtr	28.89
445167	3/14/2017 - 6/13/2017	mR/Std Qtr	23.91
452198	6/13/2017 - 9/13/2017	mR/Std Qtr	18.04
464580	9/13/2017 - 12/12/2017	mR/Std Qtr	23.52

Sample Point 040 [INDICATOR - E @ 4.74 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
437270	12/13/2016 - 3/14/2017	mR/Std Qtr	31.30
445168	3/14/2017 - 6/13/2017	mR/Std Qtr	25.16
452199	6/13/2017 - 9/13/2017	mR/Std Qtr	20.49
464581	9/13/2017 - 12/12/2017	mR/Std Qtr	25.51

Sample Point 041 [INDICATOR - ESE @ 4.25 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
437271	12/13/2016 - 3/14/2017	mR/Std Qtr	20.38
445169	3/14/2017 - 6/13/2017	mR/Std Qtr	16.80

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 041 [INDICATOR - ESE @ 4.25 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
452200	6/13/2017 - 9/13/2017	mR/Std Qtr	12.20
464582	9/13/2017 - 12/12/2017	mR/Std Qtr	18.72

Sample Point 042 [INDICATOR - SE @ 4.93 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
437272	12/13/2016 - 3/14/2017	mR/Std Qtr	28.51
445170	3/14/2017 - 6/13/2017	mR/Std Qtr	26.81
452201	6/13/2017 - 9/13/2017	mR/Std Qtr	19.95
464583	9/13/2017 - 12/12/2017	mR/Std Qtr	25.42

Sample Point 043 [INDICATOR - SSE @ 4.09 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
437273	12/13/2016 - 3/14/2017	mR/Std Qtr	27.36
445171	3/14/2017 - 6/13/2017	mR/Std Qtr	23.38
452202	6/13/2017 - 9/13/2017	mR/Std Qtr	19.33
464584	9/13/2017 - 12/12/2017	mR/Std Qtr	24.78

Sample Point 044 [INDICATOR - S @ 3.96 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
437274	12/13/2016 - 3/14/2017	mR/Std Qtr	20.93
445172	3/14/2017 - 6/13/2017	mR/Std Qtr	18.92
452203	6/13/2017 - 9/13/2017	mR/Std Qtr	14.49
464585	9/13/2017 - 12/12/2017	mR/Std Qtr	19.69

Sample Point 045 [INDICATOR - SSW @ 4.78 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
437275	12/13/2016 - 3/14/2017	mR/Std Qtr	19.55
445173	3/14/2017 - 6/13/2017	mR/Std Qtr	15.75
452204	6/13/2017 - 9/13/2017	mR/Std Qtr	11.95
464586	9/13/2017 - 12/12/2017	mR/Std Qtr	18.72

Sample Point 046 [INDICATOR - SW @ 4.61 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
437276	12/13/2016 - 3/14/2017	mR/Std Qtr	26.54
445174	3/14/2017 - 6/13/2017	mR/Std Qtr	22.45
452205	6/13/2017 - 9/13/2017	mR/Std Qtr	17.97
464587	9/13/2017 - 12/12/2017	mR/Std Qtr	23.11

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 047 [INDICATOR - WSW @ 3.58 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
437277	12/13/2016 - 3/14/2017	mR/Std Qtr	26.55
445175	3/14/2017 - 6/13/2017	mR/Std Qtr	21.93
452206	6/13/2017 - 9/13/2017	mR/Std Qtr	17.98
464588	9/13/2017 - 12/12/2017	mR/Std Qtr	24.08

Sample Point 048 [INDICATOR - W @ 3.64 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
437278	12/13/2016 - 3/14/2017	mR/Std Qtr	28.73
445176	3/14/2017 - 6/13/2017	mR/Std Qtr	25.19
452207	6/13/2017 - 9/13/2017	mR/Std Qtr	19.39
464589	9/13/2017 - 12/12/2017	mR/Std Qtr	26.13

Sample Point 049 [INDICATOR - WNW @ 3.6 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
437279	12/13/2016 - 3/14/2017	mR/Std Qtr	25.42
445177	3/14/2017 - 6/13/2017	mR/Std Qtr	20.86
452208	6/13/2017 - 9/13/2017	mR/Std Qtr	14.99
464590	9/13/2017 - 12/12/2017	mR/Std Qtr	23.02

Sample Point 050 [INDICATOR - NW @ 3.53 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
437280	12/13/2016 - 3/14/2017	mR/Std Qtr	22.04
445178	3/14/2017 - 6/13/2017	mR/Std Qtr	16.52
452209	6/13/2017 - 9/13/2017	mR/Std Qtr	12.66
464591	9/13/2017 - 12/12/2017	mR/Std Qtr	18.24

Sample Point 051 [INDICATOR - NNW @ 4.64 miles] — TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
437281	12/13/2016 - 3/14/2017	mR/Std Qtr	22.64
445179	3/14/2017 - 6/13/2017	mR/Std Qtr	18.37
452210	6/13/2017 - 9/13/2017	mR/Std Qtr	12.75
464592	9/13/2017 - 12/12/2017	mR/Std Qtr	18.58

Sample Point 052 [INDICATOR - ENE @ 12.4 miles] — TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
437282	12/13/2016 - 3/14/2017	mR/Std Qtr	29.01
445180	3/14/2017 - 6/13/2017	mR/Std Qtr	22.66

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 052 [INDICATOR - ENE @ 12.4 miles] TLD RING TLD_SPEC

Sample ID:	452211	Sample Dates: 6/13/2017 - 9/13/2017	Nuclide mR/Std Qtr	Activity 19.22
Sample ID:	464593	Sample Dates: 9/13/2017 - 12/12/2017	Nuclide mR/Std Qtr	Activity 22.99

Sample Point 053 [INDICATOR - E @ 11.7 miles] TLD RING TLD_SPEC

Sample ID:	437283	Sample Dates: 12/13/2016 - 3/14/2017	Nuclide mR/Std Qtr	Activity 30.13
Sample ID:	445181	Sample Dates: 3/14/2017 - 6/13/2017	Nuclide mR/Std Qtr	Activity 23.10
Sample ID:	452212	Sample Dates: 6/13/2017 - 9/13/2017	Nuclide mR/Std Qtr	Activity 17.11
Sample ID:	464594	Sample Dates: 9/13/2017 - 12/12/2017	Nuclide mR/Std Qtr	Activity 26.36

Sample Point 054 [INDICATOR - ESE @ 8.6 miles] TLD RING TLD_SPEC

Sample ID:	437284	Sample Dates: 12/13/2016 - 3/14/2017	Nuclide mR/Std Qtr	Activity 21.20
Sample ID:	445182	Sample Dates: 3/14/2017 - 6/13/2017	Nuclide mR/Std Qtr	Activity 18.02
Sample ID:	452213	Sample Dates: 6/13/2017 - 9/13/2017	Nuclide mR/Std Qtr	Activity 12.81
Sample ID:	464595	Sample Dates: 9/13/2017 - 12/12/2017	Nuclide mR/Std Qtr	Activity 19.75

Sample Point 055 [INDICATOR - SSE @ 9.27 miles] TLD RING TLD_SPEC

Sample ID:	437285	Sample Dates: 12/13/2016 - 3/14/2017	Nuclide mR/Std Qtr	Activity 18.44
Sample ID:	445183	Sample Dates: 3/14/2017 - 6/13/2017	Nuclide mR/Std Qtr	Activity 15.11
Sample ID:	452214	Sample Dates: 6/13/2017 - 9/13/2017	Nuclide mR/Std Qtr	Activity 10.86
Sample ID:	464596	Sample Dates: 9/13/2017 - 12/12/2017	Nuclide mR/Std Qtr	Activity 16.24

Sample Point 056 [INDICATOR - SSW @ 7.3 miles] TLD RING TLD_SPEC

Sample ID:	437286	Sample Dates: 12/13/2016 - 3/14/2017	Nuclide mR/Std Qtr	Activity 28.90
Sample ID:	445184	Sample Dates: 3/14/2017 - 6/13/2017	Nuclide mR/Std Qtr	Activity 23.23
Sample ID:	452215	Sample Dates: 6/13/2017 - 9/13/2017	Nuclide mR/Std Qtr	Activity 18.34
Sample ID:	464597	Sample Dates: 9/13/2017 - 12/12/2017	Nuclide mR/Std Qtr	Activity 24.41

Sample Point 057 [INDICATOR - SW @ 8.42 miles] TLD RING TLD_SPEC

Sample ID:	437287	Sample Dates: 12/13/2016 - 3/14/2017	Nuclide mR/Std Qtr	Activity 29.24
Sample ID:	445185	Sample Dates: 3/14/2017 - 6/13/2017	Nuclide mR/Std Qtr	Activity 23.02
Sample ID:	452216	Sample Dates: 6/13/2017 - 9/13/2017	Nuclide mR/Std Qtr	Activity 19.89
Sample ID:	464598	Sample Dates: 9/13/2017 - 12/12/2017	Nuclide mR/Std Qtr	Activity 26.51

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 058 [CONTROL - WSW @ 9.39 miles] — TLD RING TLD_CTRL

Sample ID:	Sample Dates:	Nuclide	Activity
437288	12/13/2016 - 3/14/2017	mR/Std Qtr	34.66
445186	3/14/2017 - 6/13/2017	mR/Std Qtr	28.61
452217	6/13/2017 - 9/13/2017	mR/Std Qtr	23.68
464599	9/13/2017 - 12/12/2017	mR/Std Qtr	31.78

Sample Point 059 [INDICATOR - NW @ 9.2 miles] — TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
437289	12/13/2016 - 3/14/2017	mR/Std Qtr	27.67
445187	3/14/2017 - 6/13/2017	mR/Std Qtr	23.39
452218	6/13/2017 - 9/13/2017	mR/Std Qtr	19.01
464600	9/13/2017 - 12/12/2017	mR/Std Qtr	25.55

Sample Point 076 [INDICATOR - W @ 0.19 miles] — TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
437290	12/13/2016 - 3/14/2017	mR/Std Qtr	31.13
445188	3/14/2017 - 6/13/2017	mR/Std Qtr	23.26
452219	6/13/2017 - 9/13/2017	mR/Std Qtr	18.17
464601	9/13/2017 - 12/12/2017	mR/Std Qtr	26.14

Sample Point 077 [INDICATOR - SW @ 1 miles] — TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
437291	12/13/2016 - 3/14/2017	mR/Std Qtr	21.41
445189	3/14/2017 - 6/13/2017	mR/Std Qtr	17.47
452220	6/13/2017 - 9/13/2017	mR/Std Qtr	12.13
464602	9/13/2017 - 12/12/2017	mR/Std Qtr	17.04

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles] — TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
437292	12/13/2016 - 3/14/2017	mR/Std Qtr	29.72
445190	3/14/2017 - 6/13/2017	mR/Std Qtr	26.07
452221	6/13/2017 - 9/13/2017	mR/Std Qtr	19.76
464603	9/13/2017 - 12/12/2017	mR/Std Qtr	24.74

Sample Point 081 [CONTROL - SE @ 9.33 miles] — TLD RING TLD_CTRL

Sample ID:	Sample Dates:	Nuclide	Activity
437293	12/13/2016 - 3/14/2017	mR/Std Qtr	25.99
445191	3/14/2017 - 6/13/2017	mR/Std Qtr	21.30

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 081 [CONTROL - SE @ 9.33 miles] — TLD RING TLD_CTRL

Sample ID:	452222	Sample Dates: 6/13/2017 - 9/13/2017	Nuclide mR/Std Qtr	Activity 17.92
Sample ID:	464604	Sample Dates: 9/13/2017 - 12/12/2017	Nuclide mR/Std Qtr	Activity 28.3

Sample Point 085 [INDICATOR - NNW @ 0.88 miles] — TLD RING TLD_SPEC

Sample ID:	437294	Sample Dates: 12/13/2016 - 3/14/2017	Nuclide mR/Std Qtr	Activity 24.22
Sample ID:	445192	Sample Dates: 3/14/2017 - 6/13/2017	Nuclide mR/Std Qtr	Activity 18.25
Sample ID:	452223	Sample Dates: 6/13/2017 - 9/13/2017	Nuclide mR/Std Qtr	Activity 15.20
Sample ID:	464605	Sample Dates: 9/13/2017 - 12/12/2017	Nuclide mR/Std Qtr	Activity 19.32

Sample Point 086 [INDICATOR - NW @ 0.83 miles] — TLD RING TLD_SPEC

Sample ID:	437295	Sample Dates: 12/13/2016 - 3/14/2017	Nuclide mR/Std Qtr	Activity 21.15
Sample ID:	445193	Sample Dates: 3/14/2017 - 6/13/2017	Nuclide mR/Std Qtr	Activity 16.63
Sample ID:	452224	Sample Dates: 6/13/2017 - 9/13/2017	Nuclide mR/Std Qtr	Activity 12.42
Sample ID:	464606	Sample Dates: 9/13/2017 - 12/12/2017	Nuclide mR/Std Qtr	Activity 16.84

Sample Point 087 [INDICATOR - WNW @ 1.33 miles] — TLD RING TLD_SPEC

Sample ID:	437296	Sample Dates: 12/13/2016 - 3/14/2017	Nuclide mR/Std Qtr	Activity 20.16
Sample ID:	445194	Sample Dates: 3/14/2017 - 6/13/2017	Nuclide mR/Std Qtr	Activity 16.41
Sample ID:	452225	Sample Dates: 6/13/2017 - 9/13/2017	Nuclide mR/Std Qtr	Activity 12.16
Sample ID:	464607	Sample Dates: 9/13/2017 - 12/12/2017	Nuclide mR/Std Qtr	Activity 18.59

Sample Point 088 [INDICATOR - SSW @ 1 miles] — TLD RING TLD_SPEC

Sample ID:	437297	Sample Dates: 12/13/2016 - 3/14/2017	Nuclide mR/Std Qtr	Activity 23.38
Sample ID:	445195	Sample Dates: 3/14/2017 - 6/13/2017	Nuclide mR/Std Qtr	Activity 18.74
Sample ID:	452226	Sample Dates: 6/13/2017 - 9/13/2017	Nuclide mR/Std Qtr	Activity 16.52
Sample ID:	464608	Sample Dates: 9/13/2017 - 12/12/2017	Nuclide mR/Std Qtr	Activity 21.43

Sample Point 089 [INDICATOR - S @ 1.19 miles] — TLD RING TLD_SPEC

Sample ID:	437298	Sample Dates: 12/13/2016 - 3/14/2017	Nuclide mR/Std Qtr	Activity 25.55
Sample ID:	445196	Sample Dates: 3/14/2017 - 6/13/2017	Nuclide mR/Std Qtr	Activity 20.57
Sample ID:	452227	Sample Dates: 6/13/2017 - 9/13/2017	Nuclide mR/Std Qtr	Activity 16.99
Sample ID:	464609	Sample Dates: 9/13/2017 - 12/12/2017	Nuclide mR/Std Qtr	Activity 23.24

Media Type: TLD Concentration (Activity): mR/Standard Quarter
Sample Point 090 [INDICATOR - SE @ 0.79 miles] TLD RING TLD_SPEC

Sample ID:	437299	Sample Dates: 12/13/2016 - 3/14/2017	Nuclide	Activity
			mR/Std Qtr	27.90
Sample ID:	445197	Sample Dates: 3/14/2017 - 6/13/2017	Nuclide	Activity
			mR/Std Qtr	21.97
Sample ID:	452228	Sample Dates: 6/13/2017 - 9/13/2017	Nuclide	Activity
			mR/Std Qtr	19.73
Sample ID:	464610	Sample Dates: 9/13/2017 - 12/12/2017	Nuclide	Activity
			mR/Std Qtr	25.86

Media Type: VEGETATION Concentration (Activity): pCi/kg wet
Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID:	432252	Sample Dates: 1/3/2017 - 1/3/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.72E+01	0.00E+00	2.72E+01
				Co-58	<3.14E+01	0.00E+00	3.14E+01
				Fe-59	<6.53E+01	0.00E+00	6.53E+01
				Co-60	<3.34E+01	0.00E+00	3.34E+01
				Zn-65	<6.91E+01	0.00E+00	6.91E+01
				Zr-95	<6.25E+01	0.00E+00	6.25E+01
				Nb-95	<4.26E+01	0.00E+00	4.26E+01
				I-131	<4.69E+01	0.00E+00	4.69E+01
				Cs-134	<4.32E+01	0.00E+00	4.32E+01
				Cs-137	<3.36E+01	0.00E+00	3.36E+01
				BaLa-140	<4.30E+01	0.00E+00	4.30E+01
				Be-7	1.27E+03	3.27E+02	3.20E+02
				K-40	2.41E+03	6.27E+02	5.58E+02
Sample ID:	435147	Sample Dates: 2/6/2017 - 2/6/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.35E+01	0.00E+00	3.35E+01
				Co-58	<3.48E+01	0.00E+00	3.48E+01
				Fe-59	<5.75E+01	0.00E+00	5.75E+01
				Co-60	<4.44E+01	0.00E+00	4.44E+01
				Zn-65	<5.26E+01	0.00E+00	5.26E+01
				Zr-95	<5.79E+01	0.00E+00	5.79E+01
				Nb-95	<3.51E+01	0.00E+00	3.51E+01
				I-131	<2.97E+01	0.00E+00	2.97E+01
				Cs-134	<3.43E+01	0.00E+00	3.43E+01
				Cs-137	<3.11E+01	0.00E+00	3.11E+01
				BaLa-140	<4.01E+01	0.00E+00	4.01E+01
				Be-7	1.41E+03	3.53E+02	3.70E+02
				K-40	2.37E+03	6.10E+02	5.15E+02
Sample ID:	437627	Sample Dates: 3/6/2017 - 3/6/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.93E+01	0.00E+00	3.93E+01
				Co-58	<3.31E+01	0.00E+00	3.31E+01
				Fe-59	<6.25E+01	0.00E+00	6.25E+01
				Co-60	<3.99E+01	0.00E+00	3.99E+01
				Zn-65	<7.48E+01	0.00E+00	7.48E+01
				Zr-95	<6.02E+01	0.00E+00	6.02E+01
				Nb-95	<3.53E+01	0.00E+00	3.53E+01
				I-131	<3.65E+01	0.00E+00	3.65E+01
				Cs-134	<4.25E+01	0.00E+00	4.25E+01
				Cs-137	<3.37E+01	0.00E+00	3.37E+01
				BaLa-140	<4.91E+01	0.00E+00	4.91E+01
				Be-7	1.31E+03	3.44E+02	3.48E+02
				K-40	2.43E+03	6.07E+02	3.83E+02
Sample ID:	440049	Sample Dates: 4/3/2017 - 4/3/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.00E+01	0.00E+00	2.00E+01
				Co-58	<1.99E+01	0.00E+00	1.99E+01
				Fe-59	<5.70E+01	0.00E+00	5.70E+01
				Co-60	<2.91E+01	0.00E+00	2.91E+01
				Zn-65	<5.54E+01	0.00E+00	5.54E+01
				Zr-95	<3.45E+01	0.00E+00	3.45E+01
				Nb-95	<2.11E+01	0.00E+00	2.11E+01
				I-131	<3.06E+01	0.00E+00	3.06E+01
				Cs-134	<3.39E+01	0.00E+00	3.39E+01

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID:	440049	Sample Dates: 4/3/2017 - 4/3/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Cs-137	<2.81E+01	0.00E+00	2.81E+01
				BaLa-140	<3.00E+01	0.00E+00	3.00E+01
				Be-7	2.94E+03	4.68E+02	3.17E+02
				K-40	3.88E+03	7.05E+02	2.70E+02
Sample ID:	442363	Sample Dates: 5/1/2017 - 5/1/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.79E+01	0.00E+00	3.79E+01
				Co-58	<3.21E+01	0.00E+00	3.21E+01
				Fe-59	<6.98E+01	0.00E+00	6.98E+01
				Co-60	<4.63E+01	0.00E+00	4.63E+01
				Zn-65	<7.20E+01	0.00E+00	7.20E+01
				Zr-95	<5.85E+01	0.00E+00	5.85E+01
				Nb-95	<3.15E+01	0.00E+00	3.15E+01
				I-131	<2.84E+01	0.00E+00	2.84E+01
				Cs-134	<3.18E+01	0.00E+00	3.18E+01
				Cs-137	<3.09E+01	0.00E+00	3.09E+01
				BaLa-140	<3.85E+01	0.00E+00	3.85E+01
				Be-7	3.74E+02	2.63E+02	3.99E+02
				K-40	3.54E+03	7.76E+02	6.19E+02
Sample ID:	445367	Sample Dates: 6/5/2017 - 6/5/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.05E+01	0.00E+00	3.05E+01
				Co-58	<2.09E+01	0.00E+00	2.09E+01
				Fe-59	<3.81E+01	0.00E+00	3.81E+01
				Co-60	<1.87E+01	0.00E+00	1.87E+01
				Zn-65	<5.30E+01	0.00E+00	5.30E+01
				Zr-95	<4.01E+01	0.00E+00	4.01E+01
				Nb-95	<3.76E+01	0.00E+00	3.76E+01
				I-131	<2.53E+01	0.00E+00	2.53E+01
				Cs-134	<2.83E+01	0.00E+00	2.83E+01
				Cs-137	<2.87E+01	0.00E+00	2.87E+01
				BaLa-140	<7.37E+00	0.00E+00	7.37E+00
				Be-7	5.81E+02	2.26E+02	3.01E+02
				K-40	3.68E+03	6.31E+02	2.30E+02
Sample ID:	447849	Sample Dates: 7/3/2017 - 7/3/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.70E+01	0.00E+00	2.70E+01
				Co-58	<2.44E+01	0.00E+00	2.44E+01
				Fe-59	<6.79E+01	0.00E+00	6.79E+01
				Co-60	<3.08E+01	0.00E+00	3.08E+01
				Zn-65	<6.53E+01	0.00E+00	6.53E+01
				Zr-95	<5.50E+01	0.00E+00	5.50E+01
				Nb-95	<3.40E+01	0.00E+00	3.40E+01
				I-131	<3.17E+01	0.00E+00	3.17E+01
				Cs-134	<3.65E+01	0.00E+00	3.65E+01
				Cs-137	<2.61E+01	0.00E+00	2.61E+01
				BaLa-140	<2.44E+01	0.00E+00	2.44E+01
				Be-7	2.12E+03	3.85E+02	2.96E+02
				K-40	4.40E+03	8.03E+02	5.78E+02
Sample ID:	450249	Sample Dates: 8/7/2017 - 8/7/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.55E+01	0.00E+00	3.55E+01
				Co-58	<3.01E+01	0.00E+00	3.01E+01
				Fe-59	<5.33E+01	0.00E+00	5.33E+01
				Co-60	<3.16E+01	0.00E+00	3.16E+01
				Zn-65	<5.94E+01	0.00E+00	5.94E+01
				Zr-95	<5.41E+01	0.00E+00	5.41E+01
				Nb-95	<2.80E+01	0.00E+00	2.80E+01
				I-131	<2.19E+01	0.00E+00	2.19E+01
				Cs-134	<3.25E+01	0.00E+00	3.25E+01
				Cs-137	<3.24E+01	0.00E+00	3.24E+01
				BaLa-140	<3.45E+01	0.00E+00	3.45E+01
				Be-7	1.68E+03	3.57E+02	3.43E+02
				K-40	4.30E+03	7.54E+02	3.71E+02
Sample ID:	452407	Sample Dates: 9/5/2017 - 9/5/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.56E+01	0.00E+00	2.56E+01
				Co-58	<2.01E+01	0.00E+00	2.01E+01

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID:	452407	Sample Dates: 9/5/2017 - 9/5/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Fe-59	<5.27E+01	0.00E+00	5.27E+01
				Co-60	<2.08E+01	0.00E+00	2.08E+01
				Zn-65	<5.51E+01	0.00E+00	5.51E+01
				Zr-95	<4.14E+01	0.00E+00	4.14E+01
				Nb-95	<2.48E+01	0.00E+00	2.48E+01
				I-131	<2.32E+01	0.00E+00	2.32E+01
				Cs-134	<4.56E+01	0.00E+00	4.56E+01
				Cs-137	<2.60E+01	0.00E+00	2.60E+01
				BaLa-140	<2.79E+01	0.00E+00	2.79E+01
				Be-7	1.64E+03	3.27E+02	2.75E+02
				K-40	3.35E+03	6.44E+02	3.89E+02
Sample ID:	455117	Sample Dates: 10/2/2017 - 10/2/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.80E+01	0.00E+00	2.80E+01
				Co-58	<2.95E+01	0.00E+00	2.95E+01
				Fe-59	<4.94E+01	0.00E+00	4.94E+01
				Co-60	<2.80E+01	0.00E+00	2.80E+01
				Zn-65	<4.88E+01	0.00E+00	4.88E+01
				Zr-95	<5.12E+01	0.00E+00	5.12E+01
				Nb-95	<3.15E+01	0.00E+00	3.15E+01
				I-131	<2.82E+01	0.00E+00	2.82E+01
				Cs-134	<3.72E+01	0.00E+00	3.72E+01
				Cs-137	<2.48E+01	0.00E+00	2.48E+01
				BaLa-140	<2.85E+01	0.00E+00	2.85E+01
				Be-7	1.10E+03	2.82E+02	3.29E+02
				K-40	3.28E+03	6.16E+02	4.64E+02
Sample ID:	462644	Sample Dates: 11/6/2017 - 11/6/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<4.13E+01	0.00E+00	4.13E+01
				Co-58	<4.79E+01	0.00E+00	4.79E+01
				Fe-59	<6.05E+01	0.00E+00	6.05E+01
				Co-60	<4.85E+01	0.00E+00	4.85E+01
				Zn-65	<8.90E+01	0.00E+00	8.90E+01
				Zr-95	<8.50E+01	0.00E+00	8.50E+01
				Nb-95	<5.00E+01	0.00E+00	5.00E+01
				I-131	<4.42E+01	0.00E+00	4.42E+01
				Cs-134	<4.79E+01	0.00E+00	4.79E+01
				Cs-137	<5.10E+01	0.00E+00	5.10E+01
				BaLa-140	<5.69E+01	0.00E+00	5.69E+01
				Be-7	3.35E+03	6.04E+02	5.54E+02
				K-40	4.76E+03	9.22E+02	5.57E+02
Sample ID:	464741	Sample Dates: 12/4/2017 - 12/4/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.96E+01	0.00E+00	2.96E+01
				Co-58	<3.10E+01	0.00E+00	3.10E+01
				Fe-59	<5.16E+01	0.00E+00	5.16E+01
				Co-60	<2.89E+01	0.00E+00	2.89E+01
				Zn-65	<5.90E+01	0.00E+00	5.90E+01
				Zr-95	<5.11E+01	0.00E+00	5.11E+01
				Nb-95	<3.36E+01	0.00E+00	3.36E+01
				I-131	<4.79E+01	0.00E+00	4.79E+01
				Cs-134	<3.44E+01	0.00E+00	3.44E+01
				Cs-137	<3.20E+01	0.00E+00	3.20E+01
				BaLa-140	<4.04E+01	0.00E+00	4.04E+01
				Be-7	1.34E+03	2.21E+02	2.98E+02
				K-40	5.16E+03	6.71E+02	4.44E+02

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	432253	Sample Dates: 1/3/2017 - 1/3/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.81E+01	0.00E+00	2.81E+01
				Co-58	<1.96E+01	0.00E+00	1.96E+01
				Fe-59	<5.28E+01	0.00E+00	5.28E+01
				Co-60	<1.54E+01	0.00E+00	1.54E+01
				Zn-65	<5.53E+01	0.00E+00	5.53E+01
				Zr-95	<5.06E+01	0.00E+00	5.06E+01
				Nb-95	<2.41E+01	0.00E+00	2.41E+01
				I-131	<3.04E+01	0.00E+00	3.04E+01

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	432253	Sample Dates: 1/3/2017 - 1/3/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<3.13E+01	0.00E+00	3.13E+01
				Cs-137	<2.41E+01	0.00E+00	2.41E+01
				BaLa-140	<2.68E+01	0.00E+00	2.68E+01
				Be-7	2.50E+03	4.11E+02	2.94E+02
				K-40	2.83E+03	5.64E+02	3.30E+02
Sample ID:	435148	Sample Dates: 2/6/2017 - 2/6/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.48E+01	0.00E+00	2.48E+01
				Co-58	<2.15E+01	0.00E+00	2.15E+01
				Fe-59	<2.86E+01	0.00E+00	2.86E+01
				Co-60	<2.39E+01	0.00E+00	2.39E+01
				Zn-65	<4.16E+01	0.00E+00	4.16E+01
				Zr-95	<3.90E+01	0.00E+00	3.90E+01
				Nb-95	<1.96E+01	0.00E+00	1.96E+01
				I-131	<2.53E+01	0.00E+00	2.53E+01
				Cs-134	<3.09E+01	0.00E+00	3.09E+01
				Cs-137	<2.10E+01	0.00E+00	2.10E+01
				BaLa-140	<3.05E+01	0.00E+00	3.05E+01
				Be-7	2.64E+03	4.06E+02	2.69E+02
				K-40	3.03E+03	5.71E+02	2.98E+02
Sample ID:	437628	Sample Dates: 3/6/2017 - 3/6/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<4.17E+01	0.00E+00	4.17E+01
				Co-58	<3.38E+01	0.00E+00	3.38E+01
				Fe-59	<6.39E+01	0.00E+00	6.39E+01
				Co-60	<2.29E+01	0.00E+00	2.29E+01
				Zn-65	<8.15E+01	0.00E+00	8.15E+01
				Zr-95	<5.21E+01	0.00E+00	5.21E+01
				Nb-95	<3.29E+01	0.00E+00	3.29E+01
				I-131	<4.10E+01	0.00E+00	4.10E+01
				Cs-134	<4.00E+01	0.00E+00	4.00E+01
				Cs-137	<3.45E+01	0.00E+00	3.45E+01
				BaLa-140	<1.13E+01	0.00E+00	1.13E+01
				Be-7	1.76E+03	4.03E+02	3.84E+02
				K-40	2.76E+03	7.10E+02	6.26E+02
Sample ID:	440050	Sample Dates: 4/3/2017 - 4/3/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.25E+01	0.00E+00	2.25E+01
				Co-58	<1.99E+01	0.00E+00	1.99E+01
				Fe-59	<4.86E+01	0.00E+00	4.86E+01
				Co-60	<2.24E+01	0.00E+00	2.24E+01
				Zn-65	<6.80E+01	0.00E+00	6.80E+01
				Zr-95	<4.08E+01	0.00E+00	4.08E+01
				Nb-95	<2.39E+01	0.00E+00	2.39E+01
				I-131	<2.30E+01	0.00E+00	2.30E+01
				Cs-134	<3.21E+01	0.00E+00	3.21E+01
				Cs-137	<2.93E+01	0.00E+00	2.93E+01
				BaLa-140	<2.55E+01	0.00E+00	2.55E+01
				Be-7	2.52E+03	4.03E+02	2.80E+02
				K-40	3.44E+03	6.38E+02	3.91E+02
Sample ID:	442364	Sample Dates: 5/1/2017 - 5/1/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.06E+01	0.00E+00	3.06E+01
				Co-58	<2.93E+01	0.00E+00	2.93E+01
				Fe-59	<7.07E+01	0.00E+00	7.07E+01
				Co-60	<4.22E+01	0.00E+00	4.22E+01
				Zn-65	<8.45E+01	0.00E+00	8.45E+01
				Zr-95	<5.58E+01	0.00E+00	5.58E+01
				Nb-95	<3.41E+01	0.00E+00	3.41E+01
				I-131	<3.70E+01	0.00E+00	3.70E+01
				Cs-134	<3.09E+01	0.00E+00	3.09E+01
				Cs-137	<3.99E+01	0.00E+00	3.99E+01
				BaLa-140	<2.77E+01	0.00E+00	2.77E+01
				Be-7	2.84E+02	2.18E+02	3.35E+02
				K-40	3.84E+03	7.78E+02	5.98E+02
Sample ID:	445368	Sample Dates: 6/5/2017 - 6/5/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.75E+01	0.00E+00	2.75E+01

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID: 445368 **Sample Dates: 6/5/2017 - 6/5/2017** **MIXEDBLV**

Nuclide	Activity	2 Sigma Error	MDA
Co-58	<3.52E+01	0.00E+00	3.52E+01
Fe-59	<6.29E+01	0.00E+00	6.29E+01
Co-60	<3.09E+01	0.00E+00	3.09E+01
Zn-65	<7.64E+01	0.00E+00	7.64E+01
Zr-95	<5.98E+01	0.00E+00	5.98E+01
Nb-95	<3.55E+01	0.00E+00	3.55E+01
I-131	<2.87E+01	0.00E+00	2.87E+01
Cs-134	<3.18E+01	0.00E+00	3.18E+01
Cs-137	<3.06E+01	0.00E+00	3.06E+01
BaLa-140	<2.99E+01	0.00E+00	2.99E+01
Be-7	6.98E+02	2.34E+02	2.90E+02
K-40	3.57E+03	6.51E+02	4.03E+02

Sample ID: 447850 **Sample Dates: 7/3/2017 - 7/3/2017** **MIXEDBLV**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.11E+01	0.00E+00	3.11E+01
Co-58	<3.12E+01	0.00E+00	3.12E+01
Fe-59	<7.95E+01	0.00E+00	7.95E+01
Co-60	<3.23E+01	0.00E+00	3.23E+01
Zn-65	<6.30E+01	0.00E+00	6.30E+01
Zr-95	<7.03E+01	0.00E+00	7.03E+01
Nb-95	<2.67E+01	0.00E+00	2.67E+01
I-131	<3.49E+01	0.00E+00	3.49E+01
Cs-134	<2.50E+01	0.00E+00	2.50E+01
Cs-137	<3.18E+01	0.00E+00	3.18E+01
BaLa-140	<3.94E+01	0.00E+00	3.94E+01
Be-7	6.69E+02	2.71E+02	3.41E+02
K-40	3.45E+03	7.41E+02	4.75E+02

Sample ID: 450250 **Sample Dates: 8/7/2017 - 8/7/2017** **MIXEDBLV**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.34E+01	0.00E+00	3.34E+01
Co-58	<4.48E+01	0.00E+00	4.48E+01
Fe-59	<5.96E+01	0.00E+00	5.96E+01
Co-60	<2.70E+01	0.00E+00	2.70E+01
Zn-65	<7.16E+01	0.00E+00	7.16E+01
Zr-95	<7.16E+01	0.00E+00	7.16E+01
Nb-95	<3.51E+01	0.00E+00	3.51E+01
I-131	<2.83E+01	0.00E+00	2.83E+01
Cs-134	<3.92E+01	0.00E+00	3.92E+01
Cs-137	<3.52E+01	0.00E+00	3.52E+01
BaLa-140	<4.15E+01	0.00E+00	4.15E+01
Be-7	6.09E+02	2.57E+02	3.32E+02
K-40	3.47E+03	6.95E+02	7.90E+01

Sample ID: 452408 **Sample Dates: 9/5/2017 - 9/5/2017** **MIXEDBLV**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<4.28E+01	0.00E+00	4.28E+01
Co-58	<3.73E+01	0.00E+00	3.73E+01
Fe-59	<6.15E+01	0.00E+00	6.15E+01
Co-60	<3.92E+01	0.00E+00	3.92E+01
Zn-65	<6.28E+01	0.00E+00	6.28E+01
Zr-95	<6.21E+01	0.00E+00	6.21E+01
Nb-95	<4.59E+01	0.00E+00	4.59E+01
I-131	<3.35E+01	0.00E+00	3.35E+01
Cs-134	<4.36E+01	0.00E+00	4.36E+01
Cs-137	<4.26E+01	0.00E+00	4.26E+01
BaLa-140	<4.30E+01	0.00E+00	4.30E+01
Be-7	1.09E+03	3.51E+02	4.33E+02
K-40	4.69E+03	8.60E+02	3.76E+02

Sample ID: 455118 **Sample Dates: 10/2/2017 - 10/2/2017** **MIXEDBLV**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.70E+01	0.00E+00	2.70E+01
Co-58	<2.60E+01	0.00E+00	2.60E+01
Fe-59	<3.82E+01	0.00E+00	3.82E+01
Co-60	<2.78E+01	0.00E+00	2.78E+01
Zn-65	<6.42E+01	0.00E+00	6.42E+01
Zr-95	<3.48E+01	0.00E+00	3.48E+01
Nb-95	<2.60E+01	0.00E+00	2.60E+01
I-131	<2.38E+01	0.00E+00	2.38E+01
Cs-134	<2.90E+01	0.00E+00	2.90E+01

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	455118	Sample Dates: 10/2/2017 - 10/2/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Cs-137	<2.14E+01	0.00E+00	2.14E+01
				BaLa-140	<3.58E+01	0.00E+00	3.58E+01
				Be-7	1.13E+03	2.57E+02	2.77E+02
				K-40	4.76E+03	6.90E+02	2.45E+02

Sample ID:	462645	Sample Dates: 11/6/2017 - 11/6/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.66E+01	0.00E+00	3.66E+01
				Co-58	<3.80E+01	0.00E+00	3.80E+01
				Fe-59	<8.20E+01	0.00E+00	8.20E+01
				Co-60	<4.75E+01	0.00E+00	4.75E+01
				Zn-65	<8.83E+01	0.00E+00	8.83E+01
				Zr-95	<6.59E+01	0.00E+00	6.59E+01
				Nb-95	<4.03E+01	0.00E+00	4.03E+01
				I-131	<3.94E+01	0.00E+00	3.94E+01
				Cs-134	<4.64E+01	0.00E+00	4.64E+01
				Cs-137	<3.83E+01	0.00E+00	3.83E+01
				BaLa-140	<6.73E+01	0.00E+00	6.73E+01
				Be-7	1.17E+03	1.92E+02	4.07E+02
				K-40	4.38E+03	8.39E+02	8.13E+02

Sample ID:	464742	Sample Dates: 12/4/2017 - 12/4/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.66E+01	0.00E+00	2.66E+01
				Co-58	<2.44E+01	0.00E+00	2.44E+01
				Fe-59	<5.23E+01	0.00E+00	5.23E+01
				Co-60	<3.08E+01	0.00E+00	3.08E+01
				Zn-65	<5.31E+01	0.00E+00	5.31E+01
				Zr-95	<4.68E+01	0.00E+00	4.68E+01
				Nb-95	<2.78E+01	0.00E+00	2.78E+01
				I-131	<3.51E+01	0.00E+00	3.51E+01
				Cs-134	<2.84E+01	0.00E+00	2.84E+01
				Cs-137	<2.63E+01	0.00E+00	2.63E+01
				BaLa-140	<4.35E+01	0.00E+00	4.35E+01
				Be-7	1.56E+03	1.62E+02	2.63E+02
				K-40	4.82E+03	6.25E+02	4.42E+02

Sample Point 081 [CONTROL - SE @ 9.33 miles]

Sample ID:	432254	Sample Dates: 1/3/2017 - 1/3/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.17E+01	0.00E+00	2.17E+01
				Co-58	<2.04E+01	0.00E+00	2.04E+01
				Fe-59	<5.22E+01	0.00E+00	5.22E+01
				Co-60	<2.22E+01	0.00E+00	2.22E+01
				Zn-65	<7.93E+01	0.00E+00	7.93E+01
				Zr-95	<3.55E+01	0.00E+00	3.55E+01
				Nb-95	<3.23E+01	0.00E+00	3.23E+01
				I-131	<3.58E+01	0.00E+00	3.58E+01
				Cs-134	<2.42E+01	0.00E+00	2.42E+01
				Cs-137	<2.88E+01	0.00E+00	2.88E+01
				BaLa-140	<4.28E+01	0.00E+00	4.28E+01
				Be-7	9.13E+02	2.52E+02	2.50E+02
				K-40	<3.39E+02	0.00E+00	3.39E+02

Sample ID:	435149	Sample Dates: 2/6/2017 - 2/6/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.18E+01	0.00E+00	2.18E+01
				Co-58	<2.50E+01	0.00E+00	2.50E+01
				Fe-59	<3.92E+01	0.00E+00	3.92E+01
				Co-60	<2.27E+01	0.00E+00	2.27E+01
				Zn-65	<3.95E+01	0.00E+00	3.95E+01
				Zr-95	<5.01E+01	0.00E+00	5.01E+01
				Nb-95	<1.66E+01	0.00E+00	1.66E+01
				I-131	<2.05E+01	0.00E+00	2.05E+01
				Cs-134	<3.65E+01	0.00E+00	3.65E+01
				Cs-137	<2.45E+01	0.00E+00	2.45E+01
				BaLa-140	<2.00E+01	0.00E+00	2.00E+01
				Be-7	9.75E+02	2.72E+02	3.15E+02
				K-40	4.62E+03	7.27E+02	5.74E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 081 [CONTROL - SE @ 9.33 miles]

Sample ID: 437629 **Sample Dates: 3/6/2017 - 3/6/2017** **MIXEDBLV**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.90E+01	0.00E+00	1.90E+01
Co-58	<1.47E+01	0.00E+00	1.47E+01
Fe-59	<3.13E+01	0.00E+00	3.13E+01
Co-60	<2.29E+01	0.00E+00	2.29E+01
Zn-65	<3.48E+01	0.00E+00	3.48E+01
Zr-95	<2.88E+01	0.00E+00	2.88E+01
Nb-95	<1.33E+01	0.00E+00	1.33E+01
I-131	<1.36E+01	0.00E+00	1.36E+01
Cs-134	<1.96E+01	0.00E+00	1.96E+01
Cs-137	<1.61E+01	0.00E+00	1.61E+01
BaLa-140	<1.91E+01	0.00E+00	1.91E+01
Be-7	4.08E+02	1.56E+02	1.99E+02
K-40	4.66E+03	6.69E+02	2.94E+02

Sample ID: 440051 **Sample Dates: 4/3/2017 - 4/3/2017** **MIXEDBLV**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.18E+01	0.00E+00	3.18E+01
Co-58	<2.71E+01	0.00E+00	2.71E+01
Fe-59	<4.88E+01	0.00E+00	4.88E+01
Co-60	<3.35E+01	0.00E+00	3.35E+01
Zn-65	<6.57E+01	0.00E+00	6.57E+01
Zr-95	<4.70E+01	0.00E+00	4.70E+01
Nb-95	<2.07E+01	0.00E+00	2.07E+01
I-131	<2.45E+01	0.00E+00	2.45E+01
Cs-134	<3.45E+01	0.00E+00	3.45E+01
Cs-137	<3.08E+01	0.00E+00	3.08E+01
BaLa-140	<2.94E+01	0.00E+00	2.94E+01
Be-7	1.74E+03	3.54E+02	3.21E+02
K-40	3.75E+03	7.21E+02	5.15E+02

Sample ID: 442365 **Sample Dates: 5/1/2017 - 5/1/2017** **MIXEDBLV**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.12E+01	0.00E+00	3.12E+01
Co-58	<2.86E+01	0.00E+00	2.86E+01
Fe-59	<6.59E+01	0.00E+00	6.59E+01
Co-60	<2.81E+01	0.00E+00	2.81E+01
Zn-65	<6.84E+01	0.00E+00	6.84E+01
Zr-95	<5.20E+01	0.00E+00	5.20E+01
Nb-95	<3.97E+01	0.00E+00	3.97E+01
I-131	<2.77E+01	0.00E+00	2.77E+01
Cs-134	<3.63E+01	0.00E+00	3.63E+01
Cs-137	<3.58E+01	0.00E+00	3.58E+01
BaLa-140	<2.74E+01	0.00E+00	2.74E+01
Be-7	6.99E+02	2.67E+02	3.43E+02
K-40	3.75E+03	7.29E+02	4.19E+02

Sample ID: 445369 **Sample Dates: 6/5/2017 - 6/5/2017** **MIXEDBLV**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.01E+01	0.00E+00	2.01E+01
Co-58	<2.12E+01	0.00E+00	2.12E+01
Fe-59	<4.01E+01	0.00E+00	4.01E+01
Co-60	<2.55E+01	0.00E+00	2.55E+01
Zn-65	<5.91E+01	0.00E+00	5.91E+01
Zr-95	<4.36E+01	0.00E+00	4.36E+01
Nb-95	<2.06E+01	0.00E+00	2.06E+01
I-131	<2.56E+01	0.00E+00	2.56E+01
Cs-134	<2.50E+01	0.00E+00	2.50E+01
Cs-137	<2.61E+01	0.00E+00	2.61E+01
BaLa-140	<2.82E+01	0.00E+00	2.82E+01
Be-7	1.07E+03	2.35E+02	1.92E+02
K-40	4.09E+03	6.79E+02	3.66E+02

Sample ID: 447851 **Sample Dates: 7/3/2017 - 7/3/2017** **MIXEDBLV**

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.31E+01	0.00E+00	2.31E+01
Co-58	<2.09E+01	0.00E+00	2.09E+01
Fe-59	<5.58E+01	0.00E+00	5.58E+01
Co-60	<1.87E+01	0.00E+00	1.87E+01
Zn-65	<5.28E+01	0.00E+00	5.28E+01
Zr-95	<4.38E+01	0.00E+00	4.38E+01
Nb-95	<2.28E+01	0.00E+00	2.28E+01
I-131	<2.20E+01	0.00E+00	2.20E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 081 [CONTROL - SE @ 9.33 miles]

Sample ID:	447851	Sample Dates: 7/3/2017 - 7/3/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<2.92E+01	0.00E+00	2.92E+01
				Cs-137	<3.08E+01	0.00E+00	3.08E+01
				BaLa-140	<2.65E+01	0.00E+00	2.65E+01
				Be-7	1.69E+03	3.26E+02	2.86E+02
				K-40	4.73E+03	7.38E+02	2.94E+02
Sample ID:	450251	Sample Dates: 8/7/2017 - 8/7/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.16E+01	0.00E+00	2.16E+01
				Co-58	<2.31E+01	0.00E+00	2.31E+01
				Fe-59	<4.93E+01	0.00E+00	4.93E+01
				Co-60	<4.01E+01	0.00E+00	4.01E+01
				Zn-65	<5.91E+01	0.00E+00	5.91E+01
				Zr-95	<2.64E+01	0.00E+00	2.64E+01
				Nb-95	<2.24E+01	0.00E+00	2.24E+01
				I-131	<2.01E+01	0.00E+00	2.01E+01
				Cs-134	<3.22E+01	0.00E+00	3.22E+01
				Cs-137	<2.53E+01	0.00E+00	2.53E+01
				BaLa-140	<2.36E+01	0.00E+00	2.36E+01
				Be-7	1.74E+03	3.59E+02	3.31E+02
				K-40	4.61E+03	8.11E+02	5.03E+02
Sample ID:	452409	Sample Dates: 9/5/2017 - 9/5/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.85E+01	0.00E+00	2.85E+01
				Co-58	<2.27E+01	0.00E+00	2.27E+01
				Fe-59	<4.89E+01	0.00E+00	4.89E+01
				Co-60	<3.86E+01	0.00E+00	3.86E+01
				Zn-65	<5.05E+01	0.00E+00	5.05E+01
				Zr-95	<3.43E+01	0.00E+00	3.43E+01
				Nb-95	<3.04E+01	0.00E+00	3.04E+01
				I-131	<2.58E+01	0.00E+00	2.58E+01
				Cs-134	<3.52E+01	0.00E+00	3.52E+01
				Cs-137	<2.76E+01	0.00E+00	2.76E+01
				BaLa-140	<2.76E+01	0.00E+00	2.76E+01
				Be-7	2.27E+03	4.06E+02	3.52E+02
				K-40	4.30E+03	7.39E+02	3.94E+02
Sample ID:	455119	Sample Dates: 10/2/2017 - 10/2/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<1.88E+01	0.00E+00	1.88E+01
				Co-58	<1.61E+01	0.00E+00	1.61E+01
				Fe-59	<3.47E+01	0.00E+00	3.47E+01
				Co-60	<2.18E+01	0.00E+00	2.18E+01
				Zn-65	<3.37E+01	0.00E+00	3.37E+01
				Zr-95	<3.68E+01	0.00E+00	3.68E+01
				Nb-95	<1.94E+01	0.00E+00	1.94E+01
				I-131	<1.64E+01	0.00E+00	1.64E+01
				Cs-134	<2.40E+01	0.00E+00	2.40E+01
				Cs-137	<1.93E+01	0.00E+00	1.93E+01
				BaLa-140	<2.17E+01	0.00E+00	2.17E+01
				Be-7	1.88E+03	2.90E+02	2.35E+02
				K-40	3.49E+03	5.27E+02	3.52E+02
Sample ID:	462646	Sample Dates: 11/6/2017 - 11/6/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<4.17E+01	0.00E+00	4.17E+01
				Co-58	<3.26E+01	0.00E+00	3.26E+01
				Fe-59	<7.26E+01	0.00E+00	7.26E+01
				Co-60	<4.63E+01	0.00E+00	4.63E+01
				Zn-65	<9.33E+01	0.00E+00	9.33E+01
				Zr-95	<6.61E+01	0.00E+00	6.61E+01
				Nb-95	<4.38E+01	0.00E+00	4.38E+01
				I-131	<4.31E+01	0.00E+00	4.31E+01
				Cs-134	<4.72E+01	0.00E+00	4.72E+01
				Cs-137	<4.46E+01	0.00E+00	4.46E+01
				BaLa-140	<4.09E+01	0.00E+00	4.09E+01
				Be-7	1.14E+03	3.18E+02	4.19E+02
				K-40	9.87E+03	1.22E+03	6.59E+02
Sample ID:	464743	Sample Dates: 12/4/2017 - 12/4/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.44E+01	0.00E+00	2.44E+01

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

Sample Point 081 [CONTROL - SE @ 9.33 miles]

Sample ID:	464743	Sample Dates: 12/4/2017 - 12/4/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Co-58	<2.30E+01	0.00E+00	2.30E+01
				Fe-59	<4.92E+01	0.00E+00	4.92E+01
				Co-60	<2.48E+01	0.00E+00	2.48E+01
				Zn-65	<5.31E+01	0.00E+00	5.31E+01
				Zr-95	<4.55E+01	0.00E+00	4.55E+01
				Nb-95	<2.87E+01	0.00E+00	2.87E+01
				I-131	<3.96E+01	0.00E+00	3.96E+01
				Cs-134	<2.62E+01	0.00E+00	2.62E+01
				Cs-137	<2.84E+01	0.00E+00	2.84E+01
				BaLa-140	<3.59E+01	0.00E+00	3.59E+01
				Be-7	1.15E+03	2.65E+02	3.49E+02
				K-40	4.79E+03	6.41E+02	4.77E+02

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID:	432255	Sample Dates: 1/3/2017 - 1/3/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.31E+01	0.00E+00	2.31E+01
				Co-58	<1.64E+01	0.00E+00	1.64E+01
				Fe-59	<3.84E+01	0.00E+00	3.84E+01
				Co-60	<3.20E+01	0.00E+00	3.20E+01
				Zn-65	<3.14E+01	0.00E+00	3.14E+01
				Zr-95	<4.30E+01	0.00E+00	4.30E+01
				Nb-95	<2.77E+01	0.00E+00	2.77E+01
				I-131	<3.78E+01	0.00E+00	3.78E+01
				Cs-134	<2.88E+01	0.00E+00	2.88E+01
				Cs-137	<2.22E+01	0.00E+00	2.22E+01
				BaLa-140	<2.35E+01	0.00E+00	2.35E+01
				Be-7	3.38E+03	4.74E+02	2.63E+02
				K-40	2.94E+03	5.56E+02	3.18E+02
Sample ID:	435150	Sample Dates: 2/6/2017 - 2/6/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.00E+01	0.00E+00	3.00E+01
				Co-58	<2.08E+01	0.00E+00	2.08E+01
				Fe-59	<4.75E+01	0.00E+00	4.75E+01
				Co-60	<2.35E+01	0.00E+00	2.35E+01
				Zn-65	<6.01E+01	0.00E+00	6.01E+01
				Zr-95	<4.98E+01	0.00E+00	4.98E+01
				Nb-95	<2.14E+01	0.00E+00	2.14E+01
				I-131	<2.09E+01	0.00E+00	2.09E+01
				Cs-134	<3.15E+01	0.00E+00	3.15E+01
				Cs-137	<2.91E+01	0.00E+00	2.91E+01
				BaLa-140	<3.01E+01	0.00E+00	3.01E+01
				Be-7	3.47E+03	4.61E+02	2.23E+02
				K-40	7.12E+02	2.83E+02	3.59E+02
Sample ID:	437630	Sample Dates: 3/6/2017 - 3/6/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.28E+01	0.00E+00	3.28E+01
				Co-58	<3.66E+01	0.00E+00	3.66E+01
				Fe-59	<6.07E+01	0.00E+00	6.07E+01
				Co-60	<4.13E+01	0.00E+00	4.13E+01
				Zn-65	<7.98E+01	0.00E+00	7.98E+01
				Zr-95	<6.55E+01	0.00E+00	6.55E+01
				Nb-95	<2.57E+01	0.00E+00	2.57E+01
				I-131	<3.57E+01	0.00E+00	3.57E+01
				Cs-134	<3.68E+01	0.00E+00	3.68E+01
				Cs-137	<3.55E+01	0.00E+00	3.55E+01
				BaLa-140	<2.71E+01	0.00E+00	2.71E+01
				Be-7	2.76E+03	4.95E+02	4.25E+02
				K-40	3.57E+03	7.95E+02	7.21E+02
Sample ID:	440052	Sample Dates: 4/3/2017 - 4/3/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<1.98E+01	0.00E+00	1.98E+01
				Co-58	<2.62E+01	0.00E+00	2.62E+01
				Fe-59	<2.53E+01	0.00E+00	2.53E+01
				Co-60	<1.61E+01	0.00E+00	1.61E+01
				Zn-65	<4.12E+01	0.00E+00	4.12E+01
				Zr-95	<4.35E+01	0.00E+00	4.35E+01
				Nb-95	<2.85E+01	0.00E+00	2.85E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID:	440052	Sample Dates: 4/3/2017 - 4/3/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				I-131	<2.65E+01	0.00E+00	2.65E+01
				Cs-134	<3.41E+01	0.00E+00	3.41E+01
				Cs-137	<2.76E+01	0.00E+00	2.76E+01
				BaLa-140	<3.51E+01	0.00E+00	3.51E+01
				Be-7	3.65E+03	5.22E+02	3.24E+02
				K-40	4.48E+03	7.46E+02	3.63E+02
Sample ID:	442366	Sample Dates: 5/1/2017 - 5/1/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.09E+01	0.00E+00	3.09E+01
				Co-58	<3.11E+01	0.00E+00	3.11E+01
				Fe-59	<6.31E+01	0.00E+00	6.31E+01
				Co-60	<2.96E+01	0.00E+00	2.96E+01
				Zn-65	<7.62E+01	0.00E+00	7.62E+01
				Zr-95	<5.08E+01	0.00E+00	5.08E+01
				Nb-95	<2.69E+01	0.00E+00	2.69E+01
				I-131	<3.29E+01	0.00E+00	3.29E+01
				Cs-134	<3.55E+01	0.00E+00	3.55E+01
				Cs-137	<3.14E+01	0.00E+00	3.14E+01
				BaLa-140	<4.99E+01	0.00E+00	4.99E+01
				Be-7	6.59E+02	2.26E+02	2.77E+02
				K-40	2.84E+03	5.92E+02	4.45E+02
Sample ID:	445370	Sample Dates: 6/5/2017 - 6/5/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.74E+01	0.00E+00	2.74E+01
				Co-58	<2.43E+01	0.00E+00	2.43E+01
				Fe-59	<4.75E+01	0.00E+00	4.75E+01
				Co-60	<3.30E+01	0.00E+00	3.30E+01
				Zn-65	<5.27E+01	0.00E+00	5.27E+01
				Zr-95	<4.22E+01	0.00E+00	4.22E+01
				Nb-95	<3.38E+01	0.00E+00	3.38E+01
				I-131	<2.89E+01	0.00E+00	2.89E+01
				Cs-134	<4.25E+01	0.00E+00	4.25E+01
				Cs-137	<2.66E+01	0.00E+00	2.66E+01
				BaLa-140	<3.67E+01	0.00E+00	3.67E+01
				Be-7	5.34E+02	2.61E+02	3.69E+02
				K-40	2.72E+03	5.88E+02	3.16E+02
Sample ID:	447852	Sample Dates: 7/3/2017 - 7/3/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.72E+01	0.00E+00	3.72E+01
				Co-58	<2.98E+01	0.00E+00	2.98E+01
				Fe-59	<7.23E+01	0.00E+00	7.23E+01
				Co-60	<2.65E+01	0.00E+00	2.65E+01
				Zn-65	<3.68E+01	0.00E+00	3.68E+01
				Zr-95	<6.24E+01	0.00E+00	6.24E+01
				Nb-95	<3.53E+01	0.00E+00	3.53E+01
				I-131	<3.52E+01	0.00E+00	3.52E+01
				Cs-134	<3.12E+01	0.00E+00	3.12E+01
				Cs-137	<3.18E+01	0.00E+00	3.18E+01
				BaLa-140	<3.75E+01	0.00E+00	3.75E+01
				Be-7	1.39E+03	3.56E+02	3.72E+02
				K-40	3.22E+03	6.82E+02	3.62E+02
Sample ID:	450252	Sample Dates: 8/7/2017 - 8/7/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.55E+01	0.00E+00	3.55E+01
				Co-58	<2.72E+01	0.00E+00	2.72E+01
				Fe-59	<5.84E+01	0.00E+00	5.84E+01
				Co-60	<1.95E+01	0.00E+00	1.95E+01
				Zn-65	<7.32E+01	0.00E+00	7.32E+01
				Zr-95	<4.72E+01	0.00E+00	4.72E+01
				Nb-95	<3.43E+01	0.00E+00	3.43E+01
				I-131	<2.70E+01	0.00E+00	2.70E+01
				Cs-134	<3.24E+01	0.00E+00	3.24E+01
				Cs-137	<3.20E+01	0.00E+00	3.20E+01
				BaLa-140	<2.58E+01	0.00E+00	2.58E+01
				Be-7	8.18E+02	2.74E+02	3.30E+02
				K-40	3.01E+03	6.49E+02	4.22E+02

OCONEE Radiological Environmental Monitoring Analysis Report - 2017 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID:	452410	Sample Dates: 9/5/2017 - 9/5/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.80E+01	0.00E+00	2.80E+01
				Co-58	<1.85E+01	0.00E+00	1.85E+01
				Fe-59	<4.96E+01	0.00E+00	4.96E+01
				Co-60	<2.94E+01	0.00E+00	2.94E+01
				Zn-65	<2.88E+01	0.00E+00	2.88E+01
				Zr-95	<4.00E+01	0.00E+00	4.00E+01
				Nb-95	<2.71E+01	0.00E+00	2.71E+01
				I-131	<2.92E+01	0.00E+00	2.92E+01
				Cs-134	<3.14E+01	0.00E+00	3.14E+01
				Cs-137	<2.49E+01	0.00E+00	2.49E+01
				BaLa-140	<3.60E+01	0.00E+00	3.60E+01
				Be-7	2.31E+03	3.99E+02	3.15E+02
				K-40	2.13E+03	5.19E+02	4.24E+02
Sample ID:	455120	Sample Dates: 10/2/2017 - 10/2/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.88E+01	0.00E+00	2.88E+01
				Co-58	<2.90E+01	0.00E+00	2.90E+01
				Fe-59	<7.39E+01	0.00E+00	7.39E+01
				Co-60	<2.17E+01	0.00E+00	2.17E+01
				Zn-65	<5.88E+01	0.00E+00	5.88E+01
				Zr-95	<4.88E+01	0.00E+00	4.88E+01
				Nb-95	<2.93E+01	0.00E+00	2.93E+01
				I-131	<3.38E+01	0.00E+00	3.38E+01
				Cs-134	<3.41E+01	0.00E+00	3.41E+01
				Cs-137	3.94E+01	2.98E+01	4.60E+01
				BaLa-140	<3.10E+01	0.00E+00	3.10E+01
				Be-7	1.32E+03	3.32E+02	3.94E+02
				K-40	3.76E+03	7.00E+02	5.55E+02
Sample ID:	462647	Sample Dates: 11/6/2017 - 11/6/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.85E+01	0.00E+00	3.85E+01
				Co-58	<3.32E+01	0.00E+00	3.32E+01
				Fe-59	<5.92E+01	0.00E+00	5.92E+01
				Co-60	<3.89E+01	0.00E+00	3.89E+01
				Zn-65	<7.67E+01	0.00E+00	7.67E+01
				Zr-95	<6.79E+01	0.00E+00	6.79E+01
				Nb-95	<4.12E+01	0.00E+00	4.12E+01
				I-131	<4.04E+01	0.00E+00	4.04E+01
				Cs-134	<4.64E+01	0.00E+00	4.64E+01
				Cs-137	<4.16E+01	0.00E+00	4.16E+01
				BaLa-140	<5.02E+01	0.00E+00	5.02E+01
				Be-7	5.23E+03	6.78E+02	4.74E+02
				K-40	4.52E+03	7.92E+02	6.15E+02
Sample ID:	464744	Sample Dates: 12/4/2017 - 12/4/2017	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.04E+01	0.00E+00	3.04E+01
				Co-58	<3.02E+01	0.00E+00	3.02E+01
				Fe-59	<5.41E+01	0.00E+00	5.41E+01
				Co-60	<3.16E+01	0.00E+00	3.16E+01
				Zn-65	<6.16E+01	0.00E+00	6.16E+01
				Zr-95	<5.73E+01	0.00E+00	5.73E+01
				Nb-95	<2.97E+01	0.00E+00	2.97E+01
				I-131	<4.68E+01	0.00E+00	4.68E+01
				Cs-134	<3.07E+01	0.00E+00	3.07E+01
				Cs-137	<3.30E+01	0.00E+00	3.30E+01
				BaLa-140	<4.77E+01	0.00E+00	4.77E+01
				Be-7	2.85E+03	6.73E+02	3.07E+02
				K-40	5.14E+03	1.11E+03	3.01E+02

APPENDIX F

ERRATA TO PREVIOUS REPORTS

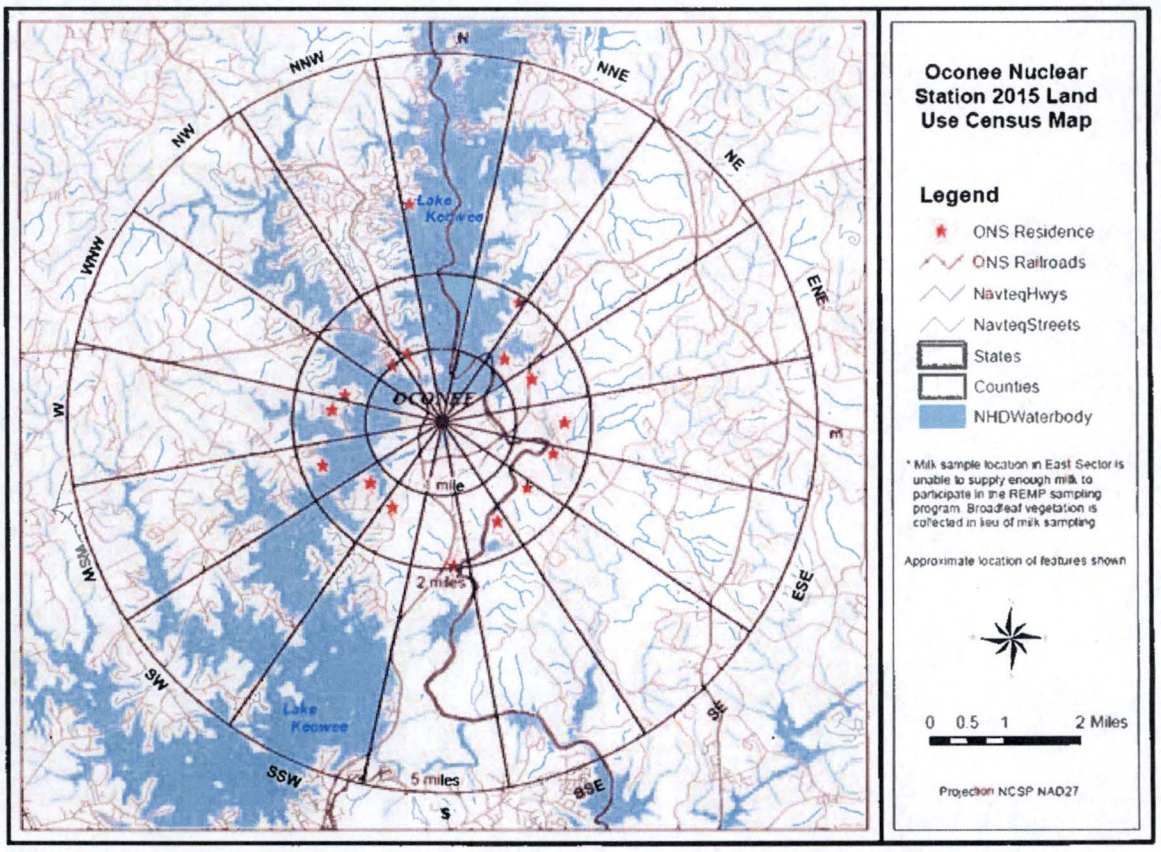
APPENDIX F

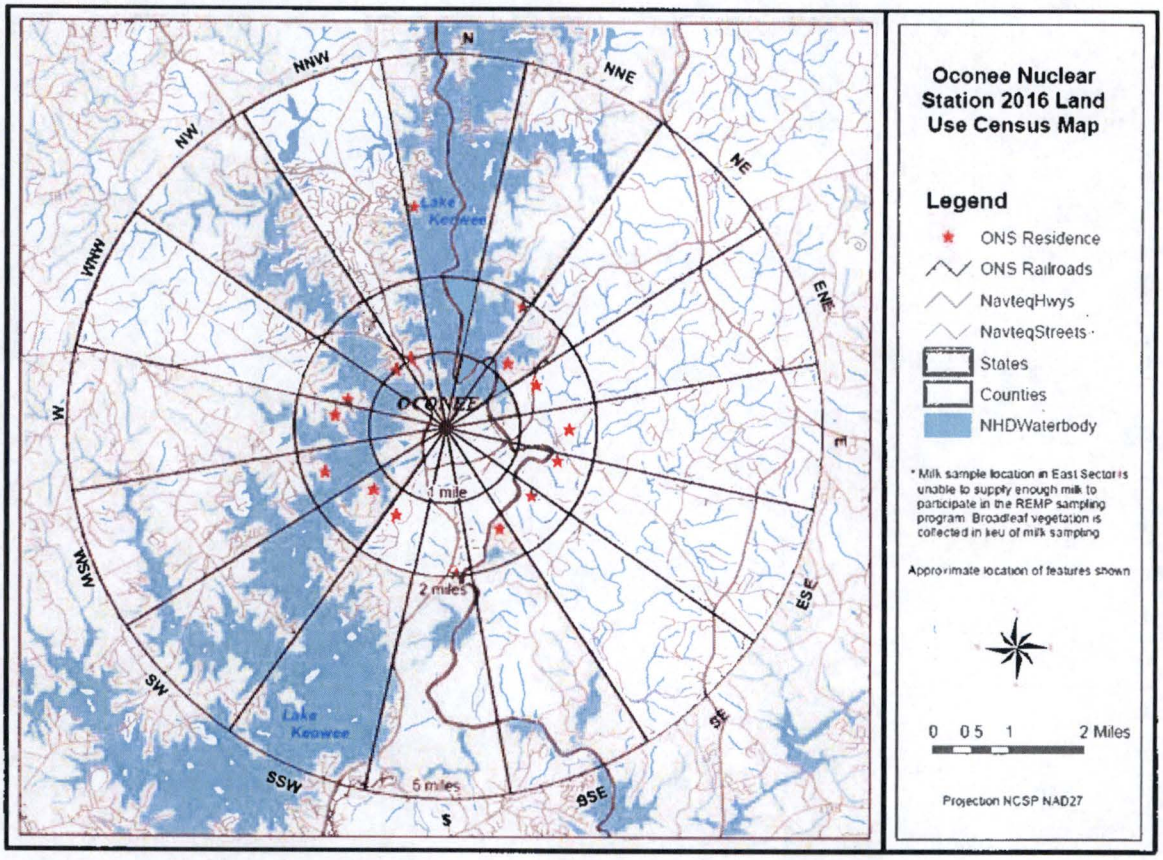
ERRATA TO THE 2017 AREOR

Oconee AREOR: 2015, 2016

During the creation of the 2017 Oconee Land Use Census (LUC) map, it was determined the sector grid was off by 1.2 degrees. The 1.2 degree variance associated with the 2017 map indicated in the Oconee 2017 AREOR (Figure 3.9) was mitigated prior to generating the 2017 map. The 1.2 degree variance did not show a clear visual representation of the nearest residences on the map. The 1.2 degree variance did not cause the misidentification of the nearest residence in any sector, because the compass rose was used in the field to determine the proper sector. The 2015 and 2016 Oconee AREOR LUC maps did indicate the 1.2 degree variance. The land use census data table (Table 3.9) was not affected.

The visual representation of the attributes closest to the sector lines were the only way these maps were affected. The map vendor indicated the variance was attributable to the differences in some land elevations in the piedmont regions of North and South Carolina. The 1.2 degree variance was corrected on the 2015 and 2016 Oconee Land Use Census maps which are indicated below (NCR # 02163452).




N
NNW
NNE
NW
NE
WNW
ENE
W
E
WSW
ESE
SW
SE
SSW
SSE
S
Lake Keowee
OCONEE
1 mile
2 miles
5 miles
Lake Keowee
Oconee Nuclear Station 2016 Land Use Census Map
Legend
ONS Residence
ONS Railroads
NavteqHwys
NavteqStreets
States
Counties
NHDWaterbody
* Milk sample location in East Sector is unable to supply enough milk to participate in the REMP sampling program. Broadleaf vegetation is collected in lieu of milk sampling
Approximate location of features shown
0 0.5 1 2 Miles
Projection NCSP NAD27